AN EXAMINATION OF FACTORS THAT INFLUENCE ENTREPRENEURIAL INTENTION OF HIGH SCHOOL STUDENTS IN KENYA

BY

GETHAIGA KIBUKA

DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Human Resource Education in the Graduate College of the University of Illinois at Urbana-Champaign, 2011

Urbana, Illinois

Doctoral Committee:

Professor Scott Johnson, Chair
Professor Katherine Ryan
Professor James Anderson
Professor Robert Nelson
Abstract

Considerable research has been carried out on entrepreneurship in efforts to understand its incidence in order to influence and maximize its benefits. Essentially, researchers and policy makers have sought to understand the link between individuals and business creation: Why some people start businesses while others do not. The research indicates that personality traits, individual background factors and association of entrepreneurship with career choice and small business enterprises, cannot sufficiently explain entrepreneurship. It is recognized that entrepreneurship is an intentional process and based on Ajzen’s Theory of Planned Behavior, the most defining characteristic of entrepreneurship is the intention to start a business.

The purpose of this study was, therefore, to examine factors that influence entrepreneurial intention in high school students in Kenya. Specifically, the study aimed at determining if there were relationships between the perceptions of desirability, and feasibility of entrepreneurship with entrepreneurial intention of the students, identifying any difference in these perceptions with students of different backgrounds, and developing a model to predict entrepreneurship in the students. The study, therefore, tested how well Ajzen’s Theory of Planned Behavior applied in the Kenyan situation.

A questionnaire was developed and administered to 969 final year high school students at a critical important point in their career decision making. Participants were selected using a combined convenience and random sampling technique, considering gender, rural/urban location, cost, and accessibility. Survey was the major method of data collection. Data analysis methods included descriptive statistics, correlation, ANOVA, factor analysis, effect size, and regression analysis.
The findings of this study corroborate results from past studies. Attitudes are found to influence intention, and the attitudes to be moderated by individual background factors. Perceived personal desirability of entrepreneurship was found to have the greatest influence on entrepreneurial intention and perceived feasibility the lowest. The study findings also showed that perceived social desirability and feasibility of entrepreneurship contributed to perception of personal desirability, and that the background factors, including gender and prior experience, influenced entrepreneurial intention both directly and indirectly. In addition, based on the literature reviewed, the study finds that entrepreneurship promotion requires reduction of the high small business mortality rate and creation of both entrepreneurs and entrepreneurial opportunities (Kruger, 2000; Shane & Venkataraman, 2000). These findings have theoretical and practical implications for researchers, policy makers, teachers, and other entrepreneurship practitioners in Kenya.
Dedicated to my wife Sheila Waruguru,
and my children Fiona, Karimi, Ndegwa and Kabi
For your sacrifice, love and support.

To my parents Loise Nyokabi and Harun Kibuka
Who laid my foundation and
impressed upon me the value of education
and virtues of prayer, hard work, and determination;
in integrity and pursuit of excellence.

But when all is said and done,
the only perfect person
is the one
who realizes that nobody is perfect.
Acknowledgements

I want to thank the many people who contributed to the success of this study. Without your support and encouragement, this study may not have been possible.

First, my gratitude goes to Professor Scott Johnson, who stepped in as the Dissertation Director upon the retirement of my academic supervisor, Dr. James Allen Leach. Your support, guidance, and assistance are invaluable and directly responsible for the dissertation completion.

In the same breath, I would like to thank the members of my committee, Dr. Catherine Ryan, and Dr. James Anderson. Each of you has contributed a great deal to this study as well as my learning and preparation for a career in academics.

My gratitude goes to the HRE staff especially Laura Ketchum and Elaine Iliff for their kindness and technical support during my studies. Together with them, I would like to convey my gratitude to Dr. Raymond Price and Dr. Paul Magelli who engaged me at the Technology Entrepreneur Center, School of Engineering, and the Center for Entrepreneurial Leadership, School of Business, respectively, during my period of study, where I gained considerable exposure to the field of entrepreneurship. Through your support I participated in the annual entrepreneurship conferences and joined membership of the United States Association for Small Business and Entrepreneurs (USASBE), the National Foundation for Teaching Entrepreneurship (NFTE) and the International Council of Small Business (ICSB), with immense benefits.

I would also wish to acknowledge my great indebtedness to the schools’ administration who allowed me to carry out this research in their institutions, and to their students who took time to complete my questionnaires.
My deepest gratitude goes to my family - my mother, brothers, and sisters - and my friends too, for enduring my long absence, and their prayers, understanding, unwavering support, and sacrifice in the course of this work. May God bless you all.

Finally, I would like to thank Dr. Robert Nelson, who got me started on this incredibly rewarding journey of prayer, hard work and determination (phd), and served as a member of my committee, and for his interest and contribution to the development of entrepreneurship and education in Kenya and the developing world, in general.

God bless you all, and Glory be to His Name.
# Table of Contents

Definition of Terms ........................................................................................................ ix

Chapter 1 Introduction .................................................................................................... 1
  Background to the Study ............................................................................................. 6
  Statement of the Problem .......................................................................................... 9
  Purpose of the Study ................................................................................................ 10
  Key Research Questions ........................................................................................... 11
  Theoretical Framework ............................................................................................. 12
  Significance of the Study ......................................................................................... 14
  Limitations of the Study ......................................................................................... 16
  Chapter Summary ...................................................................................................... 18

Chapter 2 Literature Review ......................................................................................... 20
  Entrepreneurship and Economic Development ...................................................... 22
  The Different Meanings Attached to Entrepreneurship ........................................... 24
  Entrepreneurship and Intention .............................................................................. 46
  Small Business Enterprises Survival and Growth .................................................... 50
  Summary .................................................................................................................. 63
  Creation of Entrepreneurial Opportunities ............................................................... 63
  Endeavors to Promote Entrepreneurship Among the Youth in Kenya .................... 65
  Chapter Summary ...................................................................................................... 72

Chapter 3 Methods ..................................................................................................... 74
  Research Design ...................................................................................................... 74
  Sampling .................................................................................................................... 75
  Adolescents’ Beliefs and Schools’ and Students’ Characteristics ................................ 79
  Instrumentation ...................................................................................................... 82
  Procedures ................................................................................................................. 86

Chapter 4 Research Findings ....................................................................................... 91
  Distribution of the Respondents’ Background Characteristics ............................... 93
  Distribution of Respondents’ Entrepreneurial Attitudes ......................................... 95
  Findings on the Study: Key Research Questions 1-3 ............................................. 97
  Factor Analysis and Effect Size .............................................................................. 111
  Model Determination ............................................................................................. 112
  Chapter Summary .................................................................................................... 118

Chapter 5 Discussion, Conclusion, and Recommendations ................................... 121
  Discussion ............................................................................................................... 123
  Implications ............................................................................................................ 134
  Conclusions and Recommendations ...................................................................... 147
Suggestions for Further Research .................................................................152
References.............................................................................................................154
Appendix A Figures and Tables ........................................................................181
Appendix B Survey Questionnaire .................................................................187
Vita ........................................................................................................................191
Definition of Terms

1. **Small business enterprises:** Enterprises employing between 1-50 workers (ILO, 1972). Includes **micro enterprises:** firms employing 1-2 workers (GOK, 2005), and informal enterprises: small enterprises operating outside government regulations, including registration and reporting, and not using modern technology, referred to as “Jua Kali” in Kenya.(ILO, 1972).

2. **Entrepreneurship:** Associated with new business creation (Gartner, 1989). In this study, it includes small, medium or micro, formal or informal business enterprises, created or acquired in other ways and is considered the same as self-employment.

3. **Entrepreneurial intention:** One’s intention to start or own a business.

4. **Perceived personal desirability of entrepreneurship:** The extent to which an individual considers going into business favorable or unfavorable to him or to her personally (Kolvereid, 1996).

5. **Perceived social desirability of entrepreneurship:** An individual’s view of what important people in his or her life or the community, think about his or her starting a business or going into self-employment.

6. **Perceived feasibility of entrepreneurship:** The degree to which one feels personally capable of starting a business (Shapero, 1982).

7. **Education, general or academic education:** A relatively open-ended, long-term process that provides a state of mind in which further development can and should occur.

8. **Vocational education training:** A form of education in which people are provided with skills for specific careers or occupations. While it traditionally involved practical skills which allow individuals to engage in careers which involve manual or practical abilities, and trained through apprenticeship, it currently covers other areas such as tourism, funeral, hair dressing and training in schools and institutions.

9. **Enterprise education:** Education whose goal is to promote creativity, innovation and self-employment, that may include a) Developing those personal attributes and generally applicable skills that form the basis of an entrepreneurial mindset and behavior; b) Raising students’ awareness of self-employment and entrepreneurship as possible career option; c) Work on practical enterprise projects and activities, d) Providing specific business skills and knowledge of how to start and successfully run a company (EU, 2009).
Chapter 1

Introduction

Entrepreneurship, associated commonly with business creation (Gartner, 1989), plays an important part in economic growth and development. Since the beginning of the 18th Century, economists, researchers, and policy makers have acknowledged the vital role that entrepreneurship plays in the overall growth and development of economies, and individual welfare. Among other researchers, Schumpeter (1934) observes that entrepreneurship helps to rejuvenate economies, provide more superior product offerings, introduce better and more effective methods of production, and is the dynamic force that moves economies forward. From a micro perspective, Acs, Desai, and Hessels (2008) observe that entrepreneurship provides opportunities for marginalized groups to join the mainstream of the economy and, according to Naughton (1987) and Katz (1993), entrepreneurs are more satisfied about their jobs than wage employees.

Interest in entrepreneurship particularly stems from its’ association with job creation. Birch (1973) found that small business enterprises created a majority of the jobs in the US. Kirchhoff (1994), and Haltiwanger and Krizan (1999) further, found that small start-up firms created the majority of net new jobs. Birch’s finding has been challenged, largely on grounds of methodology (Armington & Odle, 1982; Kirchhoff & Greene, 1995; Van Stel & Storey, 2004) but evidence continues to show that small, essentially new, business firms are the major source of job creation in many countries across the globe (Kolvereid & Isaksen, 2006).
Due to its identified benefits, considerable efforts have been made to promote entrepreneurship, especially to counter rising unemployment and poverty, in both developing and developed countries. However, these efforts are hampered by lack of a common understanding on what entrepreneurship is: The link between individuals and business creation — why some people start businesses while others do not. It is not clear what causes entrepreneurship. Different researchers perceive entrepreneurship differently and ascribe the phenomenon to variety of factors, drawing different conclusions on the incidence of entrepreneurship, and how it can be enhanced and harnessed for development and creation of employment. The research in entrepreneurship can be categorized into three phases: pre-Gartner, after Gartner (1989), and after Shapero (1982).

In the early research (pre-Gartner), entrepreneurship research focused on personality traits. According to this research approach, referred to as “traits theory” (Gartner, 1989), entrepreneurs are individuals endowed with unique personality characteristics or traits that predispose them to business creation. Since traits are innate, from this approach, one is, hence, either born an entrepreneur, or not (Gartner, 1989), and by implication, all that is required to enable individuals to start businesses is to equip them with the necessary skills to start and run successful enterprises. Traits associated with entrepreneurship include achievement, motivation, propensity to take risk, innovation, and autonomy, or the desire for independence.

A different view (post-Gartner) considers individual background characteristics to be the link between entrepreneurs and business creation. According to this research approach, labeled “behavioral theory” (Gartner, 1989), individuals
become entrepreneurs, not because of personality traits, but because their background factors equip them with the requisite orientation and skills to enable them venture into business. Individual background factors considered to influence entrepreneurial behavior include: gender, age, education, prior experience, and the presence of role models.

The behavioral approach fundamentally differs from the traits theory in its view of entrepreneurship as a process. Gartner (1989), one of the key proponents of this behavioral theory in entrepreneurship, posits that the difference between entrepreneurs and non-entrepreneurs is not the traits but that entrepreneurs start businesses, while non-entrepreneurs do not. Shane and Venkataraman (2000) further disaggregate business creation, and hence entrepreneurship, into identifying opportunities, evaluating the opportunities, and mobilizing the necessary resources to undertake the business. Accordingly, the researchers argue that entrepreneurship is the nexus of enterprising individuals and entrepreneurial opportunities — situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production, and which may involve creating a new business or improving the position of an existing one (Christensen, Madsen & Peterson, 1989).

From another perspective, researchers, theorists, and policy makers seek to explain entrepreneurship as a career choice. Going into entrepreneurship is viewed as a career (Katz, 1994b; Kolvereid, 1996). However, the researchers posit that traditional career choice theories (Holland, 1997; Parsons, 1989; Super, 1980) cannot adequately explain entrepreneurial careers. These career theories seek to explain an
individual’s entry into an organization and his or her movement up the organizational ladder; whereas entrepreneurs start at the top of their organizations, growing a hierarchy beneath them, (Dyer, 1994).

In one of the few career models suited for entrepreneurial vocations, Schein (1990) attributes entrepreneurship to career anchors: self-perceived talents, motives, and values, which serve to guide, constrain, stabilize, and integrate the person's career. He identifies key entrepreneurial career anchors to include autonomy and entrepreneurship or creativity (Katz, 1994). However, autonomy and creativity are personality traits, which as already observed have weak links to entrepreneurship (Gartner, 1989). Besides, career anchors only emerge with time and work experience (Dyer, 1994) and may not be identifiable in young people.

Researchers and policymakers also associate entrepreneurship with small business enterprises. They argue that most businesses start and stay small (Bates & Nucci, 1989; Bhide, 2000; Haltiwanger & Krizan, 1999; Reynolds, 1987), small enterprises have entrepreneurial attributes (Birch, 1979, 1987; Kirchhoff & Phillips, 1988; Schumpeter, 1934), and that entrepreneurship is the domain of small enterprises (Baumol, 1993; Dyer, 1988; Stewart, Watson, Carland & Carland, 1999). Therefore, to understand how to influence entrepreneurship, it is necessary to have a clear perception of small business enterprises; what they are or what they are not, and how they occur.

However, as for entrepreneurship, there is no agreement on what is a small enterprise or the enterprises’ relationship with entrepreneurship. This is mainly because small business enterprises are defined differently in different countries.
(Davidsson, 1989) and based on the criteria used that may include size in capital, turnover, and employment, among others (Ayyagari, 2007). Researchers are also not agreed on whether all small enterprises are entrepreneurial or if there are some that are not (Carland & Carland, 1992; Gartner, 1989; Woo, Cooper, & Dunkelberg, 1991). Besides, the suggestion that some small businesses’ creation is motivated by autonomy and independence (Woo et al., 1991), as in the career theories, identifies the enterprises with personality traits and their observed weakness as indicators of entrepreneurship. The link of small enterprises with entrepreneurship is therefore, porous and inconclusive to explain entrepreneurial behavior. Nonetheless, despite the different views, small enterprises are associated with entrepreneurship and when it occurs in larger scale organizations, it is described as intrapreneurship, identified with lower risk, more resources, and the benefits of teamwork (Frank, 2007).

Research on the association of entrepreneurship with personality traits, behavior, career choice, and small business enterprises, has contributed considerably to the understanding of entrepreneurship (Gartner, 1990). However, according to Krueger (1996), this research approach tends to overlook the intentional nature of entrepreneurial activity. Somebody after all has to decide to start a business (Krueger, 1996) and based on Ajzen Theory of Planned Behavior, the most defining characteristic of entrepreneurship is the intention to start a business, and in order to identify and support entrepreneurs, it is necessary to understand how people make this decision. Bygrave (1993) also observes that to be able to direct or influence entrepreneurship, it is necessary to successfully predict it, and personality traits have proved to be poor predictors of entrepreneurial behavior. It is not possible to tell who
is likely to become an entrepreneur based on the personality attributes or background factors (Baumol, 1993; Brockhaus, 1990; Cole, 1969; Gartner, 1989; Krueger, Reilly & Carsrud, 2000). More contemporary research efforts in entrepreneurship (Post-Shapero) has therefore, turned to intention models based on the Theory of Planned Behavior (Ajzen, 1991) which are considered to have greater promise.

Ajzen (1991) posits that any planned behavior is best predicted from the intention to perform that behavior, and the intention to perform the given behavior is influenced by the desirability and feasibility of the behavior, and individual background factors. Arguing that entrepreneurship is a planned behavior, Shapero (1982) posits that business creation is best predicted from the intention to start a business. Further, according to Shapero, this intention is influenced by perceived desirability and feasibility of entrepreneurship and individual background factors. This model is a better predictor of entrepreneurship (Krueger et al., 2000) and has been used in this study.

**Background to the Study**

Kenya has a severe youth unemployment problem. According to the Household Survey (GOK, 2008b), 12.7% of the 14.6 million-labor force is unemployed. An estimated 55% of the unemployed are in the rural areas, 45% in the urban areas; and 55.3% are female and 44.7% male (GOK, 2008b). Half of the unemployed (51.6%) are youths aged 15-24. It is worth pointing out that youths below 30 comprise 73% of Kenya’s population.

The soaring unemployment is mainly attributed to declining job opportunities in the formal sector, and inadequate skills for self-employment. From the 1980’s,
employment in the formal sector has stagnated or declined due to the impact of globalization and the public sector reform, which reduced public sector employment. Between 1991 and 2008, employment in the civil service declined from 657,400 to 638,000 and employment in the formal private sector has grown from 1,107,300 to 1,305,500 creating 198,200 jobs- a 17% job growth.

Meanwhile, emphasis has been on self-employment in the small and medium enterprise sector. The small business sector has grown by 28.4% from 6,233,800 to 8,002,700 employees (a growth rate of 28.4%), and is projected to continue to generate the bulk of the employment (Vision, 2030). It is therefore expected that the 500,000 targeted annual job growth (GOK, 2009) will mainly be in self-employment (ILO, 2005). This emphasis on the small business sector resonates with the trend worldwide, where knowledge-based economy, information communication technology, the service sector, and increased individual independence, have led to the predominance of self-employment and the small business sector as the main creator of jobs.

In efforts to promote self-employment, since independence, the government has pursued endeavors to support small business creation. This includes the establishment of institutions such as ICDC (Industrial and Commercial Development Corporation) and KIE (Kenya Industrial Estates), to facilitate small business development (Sessional Paper 10, 1963); rural based business creation (Sessional Paper, 1 1986); the formulation of comprehensive small business development policies (Sessional Paper 2, 1995; 2005). Vision 2030, and various five-year National
Development Plans, annual Economic Surveys, and *ad hoc* reports also support the SME sector.

In addition, in 1984, the government changed the system of education from the 7-4-2-4 (7 years of primary, 4 years secondary, 2 years pre-university, and 4 years university) system, inherited from the colonial period, to an 8-4-4 (8 years primary, 4 years secondary, and 4 years, university) structure. The government further added vocational and technical subjects in primary and secondary schools’ curriculum, and rationalized technical and vocational training in TIVET (Technical, Industrial, Vocational, and Entrepreneurship Training) institutions, to promote self-employment. Subsequently, in a review of the curriculum in 1992, and 2004 the government changed the system of education, in order to align it with the country’s needs and has, since 2005 revised the Business Studies syllabus and introduced life Skills Education into the Secondary school education curriculum (KIE, 2010).

From these changes in education, currently the TIVET institutions in Kenya comprises an integrated system with two Polytechnic University Colleges and five National Polytechnics offering diplomas and higher national diplomas to high school leavers, nineteen Technical Training Institutes, sixteen Institutes of Technology, and four Vocational and Skills Training Institutions also offering diplomas to high school leavers, and in addition, there are 650 Youth Polytechnics offering craft courses, to both primary and high school leavers. The system also includes 930 vocational training institutes under various private sector, religious, and non-government organizations (Ministry of Education (MOE), 2009).
However, the changes in the education system and the promulgation of various policy instruments have not succeeded as envisaged and have not met the country’s needs (KIE, 2010a). Particularly, as hypothesized by Foster (1965), despite training youths in order to go into self-employment, a large number continue to seek paid employment, and many of them remain unemployed (Kilemi, 2002; King, 1996; Kinyanjui, 2007). Therefore, to get entrepreneurship to play its envisaged role in job creation in self-employment, there is need for a better understanding of its incidence in school leavers.

**Statement of the Problem**

Unemployment is a major problem in Kenya and an estimated 500,000 youths leaving school yearly cannot find employment (GOK, 2008b). This problem has gradually crept up the education ladder: While in the 1960s it affected primary and secondary school leavers in the 1970s and 1980s, it now affects persons with university level of education (GOK, 2008b).

Over 50% of Kenya’s population lives below the poverty line, which is defined as ‘living on less than one dollar a day’ (GOK, 1999). Unemployment fuels poverty. In addition, unemployed youths are a potential social and political problem. Many unemployed youths drift into crime and other social ills (GOK, 1986). The resultant higher crime rates discourage investors, and have a cost in the quality of life. Besides, the unemployed youths are a big loss in human capital, with high opportunity cost in view of health, water, physical infrastructure, and other competing national social and economic development needs.
Entrepreneurship plays a crucial role in the country’s development and employment generation. In the past, the government’s education policies have aimed at promoting self-employment for alternative job creation in formal employment. However, these efforts have not worked as expected. Despite the technical education and skills training, a large number of youths who cannot find jobs do not go into self-employment and remain unemployed. Besides, the various efforts to promote entrepreneurship would expectedly be premised on personality and entrepreneurial psychology literatures whose explanation of business creation is inconclusive and there is, therefore, a need to re-examine present strategies to promote self-employment among the youth leaving schools in Kenya.

**Purpose of the Study**

The purpose of this study was to examine factors that influence entrepreneurial intention of high school students in Kenya based on Ajzen’s Theory of Planned Behavior. Specifically, the study aimed at establishing if there are significant relationships between perceptions of personal and social desirability and feasibility of entrepreneurship with entrepreneurial intention, and whether there are significant differences in these perceptions for students with different background factors. Implicitly, the study also was to determine if Ajzen’s (1991) theory applies in the Kenyan context.

The study involved a survey of 969 final year students in eight boarding secondary schools in Kenya. Four of the schools were girls’ while four were boys’. Out of the eight, two were urban schools while six were rural schools (See Figure 1). The survey used a questionnaire completed by the students at their schools.
Key Research Questions

The following research questions guided this study:

1. Is there any relationship between the perceptions of (i) personal desirability, (ii) social desirability, and (iii) feasibility of entrepreneurship, and intention in high school students in Kenya to go into self-employment?

2. Is there any difference in the perceptions of (i) personal desirability (ii) social desirability (iii) feasibility, of entrepreneurship and entrepreneurial intention in high school students with different backgrounds in Kenya?

3. Is Ajzen’s Theory of Planned Behavior supported in the study model on “Factors that influence entrepreneurial intention in high school students in Kenya?” The background factors considered include:
   - Gender
   - Rural /urban domain
   - Parental role models
   - Past employment experience
   - Past business startup experience
   - Entrepreneurship education

By examining the relationship between the perceptions of desirability and feasibility of entrepreneurship and the intention to go into self-employment, and between these perceptions and individual background factors of high school students in Kenya, this study is expected to provide a better understanding of the students’ entry into self-employment. This would help to develop appropriate policies and entrepreneurship training programs. No similar research was found to have been carried out in Kenya, and this study draws on findings from different parts of the world. Intentions and the attitudes behind them appear consistent across cultures (McGrath & Macmillan, 1992).
**Theoretical Framework**

The theoretical framework for this study is Ajzen’s (1991) Theory of Planned Behavior, as adapted in Shapero’s Entrepreneurial Event (1982), Krueger et al. (2000), and Davidsson (1995) models. According to Ajzen (1991), Figure 1, intention to perform a planned behavior precedes, and is the best predictor of, the performance of that behavior. The intention to perform a planned behavior is, itself, posited to be moderated by an individual’s attitudes towards performing the target behavior. These attitudes include an individual’s personal disposition in respect to the subject act, (attitude toward the act); community view of the performance of the subject act, (the subjective norm); and the individual’s self-assessed ability to take control of the performance of the subject act, (perceived behavioral control). These attitudes are themselves posited to mediate individual background characteristics.

Arguing that no one starts a business by accident and that starting a business is a planned behavior, Shapero (1982), Figure 2, asserts that entrepreneurship is preceded by, and can be best predicted from, the intention to start a business. Further, in keeping with Ajzen (1991), Shapero posits that the intention to start a business is preceded by the perceived desirability and feasibility of entrepreneurship, and propensity to act. Kruger (1982) disaggregates Shapero’s perception of desirability of entrepreneurship into perceived personal and social desirability. Therefore, according to Shapero (1982), and Krueger et al. (2000), entrepreneurial intention is influenced by an individual’s perceived personal and social desirability, and feasibility of entrepreneurship, and these attitudes are influenced by the individual’s background factors. Personal desirability is the extent to which the individual regards self-
employment as suitable for him/her, equivalent to attitude. Social desirability is the extent to which an individual considers important people in the society to favor entrepreneurship, equivalent to subjective norm and perceived feasibility is the extent to which the individual sees entrepreneurship as doable, equivalent to perceived behavioral control.

Davidsson (1995) (Figure A3) enhances Shapero’s model with explicit inclusion of the background factors of gender, age, parental background, availability of role models, education, and prior experience. According to Davidsson, entrepreneurial intention is influenced by an individual’s conviction, the notion that entrepreneurship career is a suitable alternative for him/her. Further, Davidsson argues that conviction is influenced by general attitudes including change orientation, competitiveness, achievement motivation, and autonomy; and domain attitudes that include payoff, social contribution and know-how. In the model, payoff is similar to perceived personal desirability of entrepreneurship, social contribution is similar to perceived social desirability, and knowhow is similar to perceived feasibility. The attitudes are influenced by the personal background factors.

Drawing from Shapero (1982), Krueger et al. (2000), and Davidsson (1995), this study-model (Figure A4), hypothesizes the students’ intention to go into self-employment to be preceded by their perceived personal and social desirability and feasibility of entrepreneurship. Further, the study posits these perceptions to be influenced by the students’ individual background factors that include gender, vicarious experience, past experience, parental influence, and the location of the school in rural/urban environment.
Some researchers distinguish self-employment from entrepreneurship based on basis of new business creation (Gartner, 1989). While entrepreneurship is associated with new businesses, self-employment is associated with taking over of already existing enterprises. McGrath and King (1995) also describe self-employment to comprise entrepreneurship self-employment and subsistence self-employment. At the upper reaches of micro business enterprises are individuals self-employed as micro entrepreneurs, while at lower echelons are individuals in subsistence self-employment often termed as casual poor, disadvantaged groups or populations that are simply surviving rather than developing through self-employment.

This study is about being self-employed, irrespective of whether the enterprise is a new creation, or has been acquired in other ways, or in subsistence or the larger micro-enterprises. Movement also does take place between the two levels and there are many examples of individuals who have emerged from subsistence employment to become dramatically successful entrepreneurs. McGrath and King (1995), and King (1996) observe that subsistence can often be a stage towards a more enterprise-oriented modality. Therefore, in the study, the concept of entrepreneurship is interpreted in the broadest sense to include modern enterprises of up to 50 people, including independent workers in the informal sector of the economy. Entrepreneurship and self-employment are used interchangeably.

**Significance of the Study**

This study is deemed significant for a number of reasons. First, as observed by Krueger et al. (2000), the linking of entrepreneurial behavior with attitudes and individual background factors give a better understanding of how entrepreneurship
occurs, and specific suggestions of how it can be influenced. The results might be used by policy makers and trainers to identify the technical, financial, and other training needs of entrepreneurs.

Secondly, the study adds knowledge in an area that is relatively young and still emerging. Entrepreneurship is yet in a formative stage with its theoretical foundation still needing empirical validation. Shapero’s (1982) Entrepreneurial Event Model, and even the seminal Ajzen’s (1971) Theory of Planned Behavior, are theoretical propositions and still subject to empirical support (Krueger, 2000). Intention researchers have also not yet considered the influence that entrepreneurship education has on people's self-efficacy beliefs, their perceptions, and intentions, and entrepreneurship education should be included in intention models as an exposure item (Peterman & Kennedy, 2003).

Krueger (2000), in addition, observes that most of the research in intention-based models, as is the case with research in entrepreneurship in general, has been carried out in the developed countries. Since the social and economic environment in developed countries is different from the developing countries, a study in a developing country is significant.

The study of entrepreneurship intention among high school graduates is itself, significant. Souitaris, Zerbinati, and Al-laham (2007) observe that while today’s students are tomorrow’s entrepreneurs, there is little understanding of the factors that affect students’ intentions of becoming entrepreneurs and the relationship between entrepreneurship education and students’ entrepreneurial attitudes and intention. By
empirically testing a model to examine the antecedents of entrepreneurial intention among high school students, this study contributes to redressing this knowledge gap.

Further, this study provides entrepreneurship knowledge for a group at the optimum stage. Shapero (1982) argues that inertia guides human action and there needs to occur a displacing event to push or pull an individual to change course. Shapero specifically sees getting ‘out of school’ as such a transition event whereby the person is open to differing life paths and career options. Super (1957) also identifies this age as critical in the formation of self-concept, attitudes, interests; general understanding of the world of work, and making tentative choices and skills development about careers. Filion (1994) and Gasse (1985) observe that the ideal stage to acquire basic knowledge about entrepreneurship and to foster a positive attitude towards entrepreneurship is during childhood and adolescence years. However, Gorman, Hanlon, and King (1997) observe that the bulk of research within the area of entrepreneurship education has focused on college education, leaving a gap in the literature pertaining to pre-university entrepreneurship and enterprise programs.

The study’s focus on high school students is also of significance because, at the average age of 18 years, the students are almost financially independent and self-employment may be a valuable option for them.

Limitations of the Study

Despite its significance, as outlined in the preceding paragraphs, this study has number of limitations. The study was limited to students in eight provincial boarding schools in four provinces of Kenya. Four of the schools were male while four were
female; and two were urban, while four were rural schools. Kenya has over 6,487 high schools. The school categories comprise day schools, boarding schools, national, district, and rural and urban schools, boys’ and girls’ schools and public and private schools. A study covering more categories of schools in more regions of the country would elicit a more comprehensive picture of entrepreneurial intention among high school students in Kenya. Data were also collected by self-reporting approach and it is possible that some respondents will have exaggerated or under-reported their information on the degree of entrepreneurial attitudes and intention.

These limitations occurred due to budgetary constraints, logistics of accessing some of the areas, and established methods of data collection. Covering more regions and schools categories was constrained by cost considerations. Some of the regions are also in remote parts of the country and the schools would be difficult to reach. Sampling and self-reporting are also accepted methods of data collection.

These limitations were considered in the design of the survey. The effects of non-inclusion of the many different categories of schools, was minimized by selecting provincial, boarding schools, which have the characteristics of district, day, and national schools. In addition, random sampling of the girls’ provincial boarding schools was designed to reduce bias while the four regions where the sampled schools were located represent a majority (61%) of the country’s population, and 75% of enrolled students, nationally.

To mitigate the likely bias in self-reporting, the researcher used an anonymous questionnaire research-design. It is assumed that respondents are more likely tell the truth where their responses cannot be traced back to them (Kasomo, 2007). The
anonymity of the questionnaires was also a requirement of the University of Illinois Human Subjects Research Office. Further, to encourage the students to tell the truth to guard against biased responses, the researcher explained that there were no preferred responses, and that one could skip any question he or she, did not feel inclined to answer. It is expected that these measures served to minimize effect of the study limitations.

**Chapter Summary**

Kenya has experienced growing youth unemployment, and efforts to reduce the problem have not succeeded. Despite training in technical and vocational skills, a large number of youths, do not go into self-employment as expected, and continue to pursue scarcely available jobs, many of the youths remaining unemployed. More current thinking based on Ajzen (1991) Theory of Planned Behavior, is held to have greater promise in understanding how entrepreneurship occurs and hence how to influence it. The purpose of this study was to examine the factors that influence entrepreneurial intention of high school students in Kenya, based on Ajzen (1991) theory.

Chapter One is the introduction to this study. The Chapter describes the study background, problem significance, limitations, and the key research questions. Chapter Two presents a review of the literature related to the subject under investigation. It includes small business growth and creation of entrepreneurial opportunities. Chapter Three explains how the study was conducted. It includes a description of the study design, sampling, instrumentation, and data collection and analysis procedures. Chapter Four presents the results and discussions from the data
analysis, and Chapter Five includes conclusions, recommendations, and suggestions for future research.
Chapter 2

Literature Review

Entrepreneurship, commonly associated with business creation (Gartner, 1989) contributes to economic development especially in job creation (Birch, 1979). Consequently, researchers and policy makers have made efforts to promote its growth as a strategy to deal with rising unemployment and poverty in many different parts of the world. However, the efforts to promote entrepreneurship are hampered by lack of a common understanding of the link between individuals and business creation. Different researchers interpret entrepreneurship differently drawing varied, and at times, conflicting conclusions on how to enhance and harness it for development. Principal views attribute entrepreneurship to personality traits, individual background factors, career choice, or small business creation.

Research based on the above interpretations of entrepreneurship has contributed considerably to the understanding of self-employment. However, the findings on the association of these factors with entrepreneurship have been ambiguous and inconclusive; and these approaches cannot adequately account for entrepreneurship. Much more critical, Bygrave (1993) argues that to influence or promote entrepreneurship, it is necessary to be able to predict it and these factors have been found to be poor predictors of entrepreneurial behavior. It is not possible to tell who is likely to become an entrepreneur based on personality traits, individual background factors, the career choice theory, or entrepreneurship association with small business enterprises (Gartner, 1989; Shane & Venkataraman, 2000). More
contemporary research on entrepreneurship has therefore, turned to intention models, based on Ajzen Theory of Planned Behavior.

Ajzen (1991) stipulates that any planned behavior is best predicted from the intention to perform that behavior, and that the intention to perform the subject behavior is influenced by attitudes toward performing the given act and individual background factors. Shapero (1982) argues that entrepreneurship is a planned behavior and posits that it can best predicted form the intention to start a business. Further, Shapero posits that the intention to create a business is influenced by the entrepreneurial attitudes and individual background characteristics. Krueger et al. (2000), among others argue that this holds promise in predicting entrepreneurial behavior and has been used in this study.

This Chapter looks at literature on research and theoretical efforts to understand and explain entrepreneurship. The Chapter starts with a review of literature on perceived role of entrepreneurship in economic development. This is followed by review of literature on the different meanings attached to entrepreneurship, including association of entrepreneurship with personality traits, individual background factors, entrepreneurship as a career choice, and its association with small business enterprises. Part Five looks at literature on predicting entrepreneurship, based on intention models.

Besides, many enterprises die early (Timmons, 1990) and based on the principle of Social Learning Theory (Krumboltz, Mitchell, & Jones, 1976; Mitchell & Krumboltz, 1984), the high business failure rate could discourage potential entrepreneurs and should be stemmed (Scherer, Adams, Carley and Wiebe 1989. Also,
predicting who might be more likely to start a business is only a partial view of the process of entrepreneurship, and an expanded view of entrepreneurship should comprise the entire entrepreneurial experience; including behaviors necessary in the operation of the firm, its performance, (success, or failure), and the psychological and non-psychological outcomes, resulting from firm ownership (Naffziger, Hornsby, and Kuratko 1994). In addition, according to Beesly and Hamilton (1984) initiatives intended to stimulate new business creation must anticipate turbulence and that small firm’s policy, should aim more at reducing death rates among the firms. Based on these premise, the sixth part of the Chapter reviews literature on common issues relating to small business mortality or promoting small business survival and growth. The last section examines literature on the endeavors to promote entrepreneurship in Kenya, and enhancing entrepreneurship among high school students in the country.

**Entrepreneurship and Economic Development**

Since the 18th Century, economists, researchers, and policymakers have shown interest in entrepreneurship due to its contribution in national production and welfare of individuals (Cantillon, 1781; Knight, 1921; Schumpeter, 1934). Schumpeter’s definition of entrepreneurs as innovators, who introduce new products, methods, markets, sources of supply, and organizational forms, or a combination of these, underscores entrepreneurship as the engine of economic growth. At the micro level, researchers and policy makers observe that entrepreneurship serves as a channel for income generation, personal development, and is especially an effective vehicle by which low income and marginalized groups including women, minorities, and
individuals who otherwise would not have been employed, enter the economic and social mainstream (Acs & Audtresh, 1999; Katz 1993).

It is observed that small enterprises contribute to the development of regions not considered attractive by large firms, and the smaller the firm, the more likely it is to hire local labor (EU, 2008). Besides, Naughton (1987) found that self-employed people are generally more satisfied with their jobs than wage employees, with women entrepreneurs more satisfied than their male counterparts (Cooper & Artz, 1995). Similarly, Beyene (2002) contends that countries that have made economic breakthrough demonstrate, beyond a doubt, that enhancement of entrepreneurship is the *sine qua non* of development.

Interest in entrepreneurship particularly stems from its association with job creation. Birch (1979), in a landmark study, found out that small business enterprises were the main creators of jobs in the US. According to Birch, 82% of new jobs were created in enterprises with less than 20 employees. Kirchhoff (1994), and Haltiwanger and Krizan (1999) further found that small *start-up* firms created the majority of new jobs. Though Birch’s findings have been challenged, largely on account of reliability of the Dan and Bradstreet data used and methodology (Armington & Odle, 1982; Williams, 1993), evidence continues to show that small, essentially new firms create most of the jobs in different parts of the world (Picot et al., 1994; Small Business Administration (SBA), 2008). In the developing countries, researchers and policy makers posit small business enterprises to be especially an important tool for economic development. Against the ubiquitous shortages of capital, managerial resources, and skilled labor, in many cases, the enterprises are the largest...
employer; employing people with limited formal education, utilize scattered raw materials, and create investment at relatively low cost and, as a result, the enterprises encourage savings, contribute in reducing income disparities, and provide opportunities for innovation and skills training, for future industrial expansion (Nelson, 1986).

From its benefits, governments, administrators, and policy makers seek to promote entrepreneurship, particularly to counter rising unemployment and poverty. However, the efforts to promote entrepreneurship are hampered by a lack of common understanding of the link between individuals and business creation — why some people start businesses while others do not — arising from the different meanings applied due to the complex nature and the different approaches taken.

**The Different Meanings Attached to Entrepreneurship**

Entrepreneurship is a complex, multidimensional phenomenon with several possible different meanings. Different researchers describe it differently and ascribe it to different factors. Gartner (1989), for example, defines it simply as creation of businesses, while, in a Delphi process, Garner (1990) filters eight recurring themes in definition of entrepreneurship including personality traits, innovation, organization creation, creating value, profit, growth, uniqueness, and the owner-manager. Bygrave (1989) defines it as a "process of becoming rather than a state of being" while Krueger (1994) defines it as “the pursuit of an opportunity irrespective of existing resources.” Debate also continues on whether the enterprise firm should be new or could be acquisition of an already existing firm (Baumol, 1993; Schumpeter, 1934; Woo et al., 1991), how long entrepreneurship lasts in the life of an enterprise
(Gartner, 1989), and the difference between entrepreneurship and intrapreneurship: corporate entrepreneurship (Cunningham & Lischeron, 1991; Frank, 2007). Vesper (1980) suggests that entrepreneurial characteristics lie on a continuum, implying infinite matrices of entrepreneurs, and Gartner (1990) even suggests that individual researchers should be left to define what they mean by the term, in their work.

Defining entrepreneurship is further compounded by researcher’s use of different tools. Entrepreneurship research borrows from sociology, economics, and psychology, and each researcher brings a different perspective to the task. According to Brazeal and Herbert (1998), similar to the fable of the six blind men who went to see an elephant, different researchers describe entrepreneurship from their different perspective and each believes he or she is the one who is right.

Due to its intricate nature, and the different research perspectives adopted, different researchers interpret entrepreneurship differently and attribute it to a variety of causes. This is including personality traits, entrepreneurship as engendered by individual background factors, entrepreneurship as a career choice, and as associated with small business enterprises.

**Entrepreneurship and personality traits.**

Early research associated entrepreneurship with personality characteristics or traits. According to this research stream defined as the “traits theory” (Gartner, 1989), individuals who become entrepreneurs are endowed with special personality traits or characteristics that predispose them to business creation. Hence, based on this research stream, one is either “born” an entrepreneur, or not, and personality traits are regarded as the link between individuals and business creation. Traits associated with
entrepreneurship include achievement motivation, risk-taking propensity, preference for innovation, and desire for independence.

Research findings on the association of these traits with entrepreneurship, show mixed results. While some researchers find evidence of the link between traits with entrepreneurship, others find weak, or no link, and the association of personality traits with entrepreneurship is inconclusive.

**Achievement motivation**

Achievement motivation is one of the personality traits strongly associated with entrepreneurship. Researchers and theorists argue that achievement motivation underlies the commitment and perseverance necessary for the entrepreneurial endeavor. They hypothesize that a high need for achievement, characterized by the desire to perform well in order to attain a feeling of accomplishment, influences choice of careers in self-employment and entrepreneurs are posited to be higher in achievement motivation than managers, and the general population.

McClelland (1961), one of the pioneering supporters of the achievement motivation theory in entrepreneurship, identified the need for achievement as the primary factor in entrepreneurship. According to McClelland, the high need for achievement predisposes a person to seek out an entrepreneurial position to attain more achievement satisfaction than could be derived from other types of positions. In empirical research, McClelland found that successful entrepreneurs expressed preference for challenge and acceptance of personal responsibility for outcomes and innovativeness, characteristics considered surrogates for achievement motivation. Consistent with McClelland (1961), Collins, Hanges, and Locke (2004) found
achievement motivation significantly correlated with entrepreneurial career choice and performance. Entrepreneurs are also found to be more achievement oriented than managers (Begley & Boyd, 1987) and more than the general population (Hornaday & Aboud, 1971; Hornaday & Bunker, 1970; Komives, 1972).

However, other researchers argue that achievement motivation is not associated with entrepreneurship and cannot be used to differentiate entrepreneurs from non-entrepreneurs. Borland (1974), Hull et al. (1980), and Schwartz (1976) found that achievement motivation was not a significant factor in entrepreneurship. Cromie and Johns (1983), Mescon and Montanari (1981), and Singh and De Noble (2000) found no difference in motivation between entrepreneurs and managers. On conceptual and methodological issues, Fineman (1977) observes that several measures used to measure motivation could not be assumed to measure the same construct, and that the studies did not actually link the need for achievement with the founding or ownership of a business.

Researchers also report differences in the achievement motivation between males and females. Scherer, Brodzinski, and Wiebe (1990) found that males are more often motivated by a desire to be an entrepreneur or not work for someone else (Swayne & Tucker, 1973), while for females the dominant impetus is a desire to create employment that allows flexibility to balance work and family (Brush, 1990).

The association of achievement motivation with entrepreneurship is therefore ambiguous and inconclusive. Nonetheless, researchers generally associate achievement motivation with entrepreneurship. Shaver and Scott (1991) contend that achievement motivation remains the traits theory’s best candidate in the attempt to
account for new venture creation and Stewart and Roth (2009) consider that achievement motivation has potential in explaining entrepreneurship, but suggest continued study in this area.

**Risk-taking propensity**

Risk-taking propensity: an individual’s orientation toward taking chances in a decision-making scenario (Sexton & Bowman, 1985) is viewed as a key distinguishing factor between entrepreneurs and non-entrepreneurs, including managers. According to this view, going into business involves risk, as a business is likely to fail, and entrepreneurs are more risk oriented than non-entrepreneurs. However, other researchers differ on the link, and the association is inconclusive.

Cantillon (1781), credited with the first use of the term “entrepreneurship” which originates from the French word “entreprendre,” meaning to undertake, associated entrepreneurs — whom he defined as traders — with risk-taking. Cantillon posited risk-taking as the fundamental role and distinguishing characteristic of entrepreneurs (Kilby, 1971). Knight (1921) distinguished the risk taken by entrepreneurs as uncertainty, which unlike financial risk, could not be known or insured, and hence entrepreneurs carried a heavier burden. Liles (1974) also argued that, in becoming an entrepreneur, an individual risks financial well-being, career opportunities, family relations, and psychic well-being and the personal financial obligations that the entrepreneur makes also means risk of psychological well being. Kihlstrom and Laffont (1979) observe that the degree of risk aversion influences one’s entrepreneurial decision, that more risk-averse individuals are self-selected into paid employment while more risk tolerant individuals become entrepreneurs. In

However, other researchers argue against the association of risk-taking with entrepreneurship and contend that entrepreneurs are not risk takers. Schumpeter (1934) argued that entrepreneurs were not risk-takers as risk was inherent in ownership, and entrepreneurs were not necessarily owners. Masters and Meier (1988) posit that entrepreneurs are not significantly different from managers in their propensity for risk-taking. Similarly, Peacock (1986) argued that risk-taking propensity has no bearing on entrepreneurial success. In empirical study, Brockhaus (1980) also found no statistical difference in the risk preference patterns of a group of entrepreneurs and a group of managers, and hence cast doubt on the validity of the risk-taking propensity as an entrepreneurial characteristic.

The association of risk taking propensity with entrepreneurship is therefore not conclusive. Nevertheless, despite the divergent opinions, there is a general acceptance that risk taking is associated with entrepreneurship as a large number of enterprises fail (Timmons, 1990). Brockhaus (1990) also observes that not enough is known about the link between risk taking and entrepreneurship, and that more research would help clarify the importance of a variable widely accepted as an entrepreneurial characteristic.
Simon, Houghton, and Aquino (1999) in efforts to explain why individuals go into business, argue that entrepreneurs venture not due to high risk taking propensity, but due to low risk-perception. According to Simon et al., entrepreneurs perceive less risk than non-entrepreneurs due to a number of factors that include (a) overconfidence, or the failure to know the limits of one’s knowledge; (b) belief in the law of small numbers, an individual’s use of a limited number of informational inputs to draw firm conclusions; and (c) illusion of control, or an individual’s overemphasis on the extent to which his/her skill can increase performance in situations where chance plays a large part, and skill is not necessarily the deciding factor. Sexton and Smilor (1986) and Bhide (2000) also found entrepreneurs to be moderate risk takers — heads lose, tails do not lose too much (Bhide, 2000)

_Innovation_

Innovation is often presented as synonymous with entrepreneurship and one of its key distinguishing attributes. Nonetheless, as with achievement motivation and risk taking propensity, researchers differ on the association of innovation with entrepreneurship. While some find a strong association, others find a weak or no association.

Schumpeter’s (1934) definition of innovation as ” the introduction of new goods, new methods of production, opening of new markets, opening of new sources of supply and industrial reorganization, or a combination of these” underscores the link with entrepreneurship. The assertion that innovation is the single constitutive entrepreneurial function separating acts of entrepreneurship from more common managerial activities and that innovation was fundamental to entrepreneurship and
that one behaves as an entrepreneur only when carrying out innovations, reinforces this view.

Consistent with Schumpeter (1934), Drucker (1985) and Olson (1985) regard creativity and innovation as conditions inherent in the role of entrepreneurship. Carland (1991), Carland et al. (1984), and Timmons (1990), sought to distinguish entrepreneurial and non-entrepreneurial small businesses based on innovation. Against this, Baumol (1993) argued that, based on Schumpeter (1934), even small businesses without new innovations, are still entrepreneurial.

However, empirical support for association of innovation and entrepreneurship is scanty and the association is inconclusive. Edmiston (2007) observes that there is little convincing evidence to suggest that small businesses have an edge over larger businesses in innovation. Gartner (1989) and Stewart et al. (1998) also observe that relatively few studies have empirically investigated the proposed relationship and that the association requires further research.

**Autonomy**

Autonomy, the degree to which a job provides substantial freedom, independence, and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out (Hackman & Oldham, 1976), is associated with entrepreneurship. Some researchers argue that autonomy is one of the fundamental drivers of self-employment. However other researchers express different views and the association of autonomy with entrepreneurship is inconclusive.
Bradley and Roberts (2004), Shane and Venkataraman (2000), and Stevenson and Jarillo (1990) note that the desire to create new ventures, or to be self-employed may be rooted in the expectation that it will provide greater autonomy than organizational employment, and Kolvereid (1996) notes that autonomy is one reason for preferring self-employment to organizational employment. Research also shows that the higher level of job satisfaction experienced by the self-employed is attributable to the level of autonomy experienced in entrepreneurship (Schjoedt, 2009).

Other researchers question the association of autonomy with entrepreneurship. Parasuraman et al. (1996) argue that entrepreneurs are constrained by deadlines, customer requests, meetings, obligations, or business-related travel and do not enjoy unlimited autonomy. Schjoedt (2009) observes that unlike the self-employed with established businesses, many times entrepreneurs need to build a customer base, which restricts their autonomy. The assertion is therefore inconclusive. According to Schjoedt (2009), upon reflection on the entrepreneurial work, it is not clear if entrepreneurs experience a high degree of autonomy that results in a high level of job satisfaction, as shown for the self-employed. Duffy and Stevenson (1984) also note that entrepreneurs are not necessarily self-employed. The association of autonomy with entrepreneurship is therefore not conclusive.

**Critique against traits-approach in general**

Besides the observations about individual personality traits, researchers note other constraints on the association of traits with entrepreneurship. Gartner (1989) observes that personality traits are static and that the association of traits with
entrepreneurship would suggest entrepreneurship is an endless state, a situation that, according to Garner, would not be convincing to many researchers. Gartner also argues that the traits associated with entrepreneurship are too many and almost limitless, that they apply equally to all successful people including farmers, teachers, managers, etc., and therefore cannot distinguish between entrepreneurs and non-entrepreneurs. Further, Gartner observes that the traits considered entrepreneurial are identified by studying individuals who have been in business, and it is difficult to tell which preceded the other: whether traits led the individuals to go into business, or the individuals developed the traits because of their having been in business. These observations further reinforce the weakness of association of personality traits with entrepreneurship, and using traits to explain entrepreneurship.

**Entrepreneurship and individual background factors.**

An alternative view to the traits’ approach is the theory that entrepreneurship is due to individual background factors. According to this research approach, as submitted by Gartner (1989), Shane and Venkataraman (2000), among others, individuals become entrepreneurs because their backgrounds equip them with the necessary skills to create businesses. In a fundamental departure from the traits theory, this approach focuses on entrepreneurship as a process. According to Gartner (1989) the difference between entrepreneurs and non-entrepreneurs is that entrepreneurs create businesses while non-entrepreneurs do not, and therefore, the focus of research in entrepreneurship should be what individuals do to enable organizations to come into existence rather than on the traits and characteristics of these individuals (Gartner, 1985; 1989; &1990).
Supporting the process view, Shane and Venkataraman (2000), disaggregated business creation into identifying business opportunities, evaluating the opportunities, and mobilizing necessary resources. Accordingly, Shane and Venkataraman (2000) define entrepreneurship as the scholarly examination of how, by whom and with what effects, opportunities to create future goods and services are discovered, evaluated, and exploited; and posits that entrepreneurship is the nexus of enterprising individuals and entrepreneurial opportunities. Further, Shane and Venkataraman (2000) define entrepreneurial opportunities to include those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production, which may involve creating a new business or improving the position of an existing one, in both cases resulting in new profit potential.

Individual background factors considered to influence entrepreneurship include gender, age, education, presence of role models, family background, and prior experience. However, as for the personality traits, research findings on the link between individual background and business creation are ambiguous and inconclusive.

**Gender**

Gender is associated with entrepreneurship as research literature shows that a majority of entrepreneurs are male (Acs, Arenius, Hay, & Minniti, 2005). There is however, no clear understanding or agreement on the cause of this male predominance among entrepreneurs. While some researchers attribute the predominance to differences between genders to characteristics associated with
entrepreneurship, others contend there are no such differences and the male predominance cannot be due to this.

Powell and Ansic (1997), Barber and Odean (2001), Jianakoplos and Bernasek (1998), and Sexton and Bowman-Upton (1986) for example posit that males have higher risk-taking propensity, and thus more entrepreneurial orientation, than females. Brush (1992), Buttner and Moore (1997), Holmquist and Sundin (1988), Parasuraman et al. (1996) and Scherer, Brodzinski, and Wiebe (1990) also found that males seek self-employment for more entrepreneurial reasons, such as autonomy and profit, whereas for women, the dominant impetus is a desire to create employment that allows flexibility to balance work and family and would thus be considered less entrepreneurial thus linking gender with entrepreneurial orientation. Crant (1996), Wilson, Marlino, and Kickul (2004) and Zhao, Seibert, and Hills (2005) found that males have higher entrepreneurial intentions than females. The researchers therefore argue that males are more likely than females to go into self-employment.

In contrast, Kristiansen and Indarti (2004) found no difference between males and females in entrepreneurial intentions and argue against the gender entrepreneurship link. Sexton and Bowman (1986, 1990) also note that in the course of several years’ research the only significant gender-based trait differences are that female business owners reflect a lower risk-taking propensity and energy level.

Gupta et al. (2009) argues that the male predominance is not due to difference in gender, but gender stereotyping. According to Gupta, et al., fewer women go into business because the world of business is characterized as male (and hence anti-female) and women who go into business view themselves as having male
characteristics. Davidsson (1995) similarly attributes female under-representation in entrepreneurship, not to gender *per se*, but to lack of role models, suggesting a vicious circle: women entrepreneurs are few because women entrepreneurs are few.

The cause of the male predominance in entrepreneurship, and the association of entrepreneurship with gender is therefore unclear and still subject to debate. Nonetheless, though its cause is not fully understood (Verheul, 2005; Zhao, Seibert, & Hills, 2005), the male predominance in entrepreneurship has notable implications. Kolvereid and Isaksen (2006) and Gupta at el. (2009) argue that the disparity could prejudice support for female entrepreneurs since the entrepreneur mode is masculine. Gakure (2003) observes that in the Kenyan society, even successful women entrepreneurs are viewed negatively because society does not expect women to succeed on their own without male assistance. The World Bank (1995) notes that the failure of women to go into entrepreneurship also hurts development and increased female participation would help achieve higher growth rates.

**Education**

Researchers differ on the association of education with entrepreneurship. While some researchers argue that education supports entrepreneurship, others argue that there is no relationship, or even that education retards entrepreneurship.

Davidsson (1995) argues that people with more education are likely to have higher aspirations in general, more self-confidence in managing growth and a better ability to spot growth opportunities. Bandura (1986) and Brockhaus (1987) observe that education moderates risk, and Vesper (1990), Karolly and Zissimopoulos (2004), found entrepreneurs to be more educated than the average worker. In Kenya,
McCormick (2001) found female entrepreneurs without education in the micro-enterprises, those with high school education in medium sized, and those with degrees in enterprises with more than ten employees, indicating that education had some bearing on entrepreneurship.

Chamard (1989) and Plaschka and Welsch (1990) argue that general education suppresses creativity and entrepreneurship. Kourilsky (1995) observes that education promotes a "take-a-job" mentality and Stewart et al. (1998), Carland et al. (1984), and Woo et al. (1991) found that entrepreneurs exhibited a significantly lower education level when compared with managers. Jacobowitz and Vilder (1982) hypothesized that entrepreneurs are less well educated than the general population.

Despite these opposing views, education, is intuitively strongly associated with entrepreneurship. Bates (1995) and Bowen and Hisrich (1986) observe that people who start businesses have a higher level of education than people who do not. Soutaris et al. (2007) however, observes that there is little understanding of the factors that affect especially students’ intentions of becoming entrepreneurs and the relationship between entrepreneurship education and students’ entrepreneurship needs further research.

**Age**

Age is generally associated with entrepreneurship, but while some researchers posit that entrepreneurship is a game for the young, others argue that it rises with age, and the association is inconclusive. According to Le´vesque and Minniti (2006), empirical evidence shows that younger individuals are more likely to start a new firm than older ones. Reynolds et al. (2002) also indicate that younger individuals are
more likely to start a new firm than older ones. However, Karolly and Zissimopoulos (2004) find self-employment rates to be consistently higher among older workers than in the workforce. Fuch (1982) argues that the relationship between age and entrepreneurial orientation is curvilinear: peaking at about 40 years of age, and rising again after age 65.

Despite the lack of consensus, Levesque and Minniti (2006) observe that it is an empirical fact that new firm creation tends to be a young man’s game. From the association of risk taking, innovation, energy, and motivation with business creation, it can also be deduced that entrepreneurship is a game for the young and governments are, therefore, increasingly targeting enterprise policies at young people (Hytti & O’Gorman, 2004). Levesque and Minniti (2006) however, observes that literature on the economic implications of age is scanty and that there is more need for research in this area.

An interesting phenomenon is the increasing business creation among retirees and older people. Singh and De Noble (2003) observe that many individuals leave career employment before the retirement age, and return to the labor market for a period in bridge-employment, before complete retirement. According to Singh and De Noble, such people are suited to go into self-employment due to their experience, savings, and social networks and are the next generation of entrepreneurs.

**Role models**

Scherer et al. (1989) observe that role modeling occurs when social behavior is informally observed, and then adopted by a learner who has learned by example rather than by direct experience. The notion that entrepreneurship can be learned from
others is based on Bandura Social Learning Theory (1986). According to Bandura, social behavior is informally observed and then adopted by a learner who has learned by example, rather than by direct experience. The basic premise is that an individual is more likely to express a preference for a particular occupation or career if that individual has observed a model successfully perform activities associated with that career, success being defined as to what extent the model draws satisfaction from the task (Scherer et al., 1989).

Studies show that there is a strong connection between the presence of entrepreneurial role models and the emergence of entrepreneurs. According to Mathews and Moser (1996), apart from the overrepresentation of males, the most consistent result in entrepreneurship research is a correlation with role models. Davidsson (1995) also suggests that lack of role models is one reason for the low number of women entrepreneurs in society.

One special case of role modeling is parental influence. Davidsson (1995) observes that children of self-employed parents are over-represented among those having a business, or trying to start a business and the typical entrepreneur has a self-employed parent (Katz, 1992); Shapero (1991). Role models are gender specific: Sons are more likely to learn from their fathers, while daughters are more likely to learn from their mothers (OECD, 2004). Sherer et al. (1989) also assert that parents are especially likely to be role models since they are a major source of socialization for the child, while Gunnarson (2003) observes that parents influence is either as motivators or role models, or as providers of resources.
However, the influence of role models does not command universal support. Brockhaus and Horwitz (1986) observe that many entrepreneurs have entrepreneurial parents, but entrepreneurs' children do not disproportionately become entrepreneurs themselves. Scherer et al. (1989) observes that some children of entrepreneurs do not go into self-employment, while individuals without parental role models develop an interest in an entrepreneurial career. Krueger (1993a; 1993b) and Scott and Twomey (1988) also found no support for the argument that the parents influence the outcome of the start up. Empirical support is also lacking due to weak testable basis on how this influence takes place and the effect of role models is not well understood (Gupta et al., 2009).

**Prior experience**

Researchers indicate that people with prior experience are more likely to start businesses and also more likely to succeed in the business. Prior experience is therefore associated with entrepreneurship. Davidsson (1995) observes that there is an overrepresentation of people with prior experience among business owners. Starr (1990) observes that people who have previously started a business are more likely to start a new business and Cooper, Woo, and Dunkelberg (1981) found that people are more likely to exploit opportunities if they have developed useful information for entrepreneurship from their previous employment.

Prior experience is also associated with entrepreneurship as a source of business ideas. Scott and Twomey (1988) found that 30% of students with work experience said they had a business idea, as opposed to less than 10% of those who had never worked. Bacus and Human (1994) found that some individuals started
businesses that virtually recreated their prior experience. Shapero (2000) also observes that entrepreneurs who have failed are more likely to succeed and Vesper (1980) observes that entrepreneurs who have started one organization seem to be more successful and more efficient in the startup of their second and third organizations, implying influence of prior experience.

Other researchers indicate that work experiences and training can influence career choice (Brockhaus & Nord, 1979; Chambers, Hart, & Denison, 1988; Lamont, 1972; Roberts, 1969). However, it is argued that this influence is not from the prior experience *per se*, but from the interpretation and reaction (Robinson et al., 1991), and the influence of prior experience on entrepreneurship is unclear.

**Critique against background-factors approach in general**

In addition to reservations about individual background factors, researchers note that in general, it is not a given set of demographic and individual characteristics that determine entrepreneurship, but the reaction to circumstances, and this could vary among individuals with the same stable characteristics (Rychlak, 1981). Robinson (1991) also observes that some researchers seem to use demographic characteristics as surrogates for personality characteristics. Besides, knowledge of one's birth order, education level, or parental heritage cannot determine who will or will not be an entrepreneur, and yields conflicting results in predicting entrepreneurship (Bowen & Hisrich, 1986; Deivasenapathy, 1986; Hisrich, 1990; Kolvereid, 1996). These observations further weaken claims of link between individual background factors and entrepreneurship.
Personality traits and individual background factors: A combined approach.

While neither can, by itself, fully explain entrepreneurship, both personality traits and background-factors theories contribute to its incidence. While one explains about the person of the entrepreneur, the other deals with the process of business. It is not possible to distinguish the dancer from the dance (Yeats, 1956). Researchers, (Gartner 1989; Carland, Hoy, & Carland, 1988) among others, therefore, urge that both aspects are a necessary part to be pursued in the endeavor to understand entrepreneurship.

Entrepreneurship as a career choice.

In the endeavor to explain entrepreneurship, researchers have also invoked career choice theory. Entrepreneurship is considered a career: An entrepreneur going through life at work is pursuing a career (Katz, 1994b; Kolvereid, 1996). However, some researchers argue that traditional career choice theories cannot explain entrepreneurial careers. Dyer (1994), for example, observes that traditional career choice theories (Holland, 1997; Parsons, 1989; Super, 1980) deal with how individuals enter organizational careers and the challenges they face as they ascend the hierarchical ladder, while entrepreneurs start at the top of their organizations and build hierarchy below them. The researchers therefore argue that these traditional theories cannot adequately explain entrepreneurship, and urge for alternative approaches.

One of the theories considered suitable for entrepreneurial careers, as it deals with self-employed individuals (Katz, 1994), is Schein’s (1990) career anchor model. Schein defines a career as one's calling in life, encompassing a person's occupation,
work, and other life roles over his or her life. This definition covers a person’s total life, and is consistent with entrepreneurship, as self-employed often merge their personal life and family with the venture (Katz, 1994).

Schein attributes self-employment to career anchors: pattern of self-perceived talents, motives, and values, which serve to guide, constrain, stabilize, and integrate the person's career and according to Schein, the career anchors most relevant to self-employment are creativity and autonomy, or the desire for independence. Schein’s model also applies the constructs of hierarchy, functionality, and core; to explain respectively the entrepreneur’s authority, type of activity performed, and movement toward or away from one’s core profession, as one progresses in his or her career.

Other researchers support Schein’s model. Katz (1994) adds the constructs of “employment duration,” “job multiplicity,” and “self-employment emergence” to recognize that persons are self-employed for different lengths of time, that some people may hold other positions while self-employed, and that actual entry into self-employment is characterized by the intention to be self-employed. Dyer (1994) incorporates sub-theories of career choice, career socialization, orientation, and progression, to explain, respectively, how a person enters an entrepreneurial career, progresses from entry to exit, and the various conflicts encountered.

Nonetheless, while Schein's career-anchors model helps better understand entrepreneurial careers (Dyer, 1994), the two career anchors of autonomy and creativity are personality traits and may suffer the already observed weakness of traits theory, particularly the low predictive power. Besides, Feldman and Bolino (2000) and Katz (1994) argue that career anchors emerge only with work experience and
cannot be identified in students, and suggest the model needs further research. The career theory link with entrepreneurship therefore needs further clarification.

**Entrepreneurship and small business enterprises.**

Researchers and policy makers also associate small business enterprises with entrepreneurship. Bates and Nucci (1989), Bhide (2000), and Reynolds (1987) observe that most enterprises start and stay small. Birch (1979, 1987), Kirchhoff and Phillips (1988), and Schumpeter (1934) further argue that small business enterprises are associated with entrepreneurship as the enterprises have entrepreneurial attributes: That they grow faster, are more innovative, and respond more quickly and flexibly than large enterprises to sudden shocks. Other researchers view entrepreneurship to be the domain of small business enterprises. Dyer (2002), for example, observes that the conditions under which small businesses operate including psychological as well as financial, ownership, total final responsibility, personal assets at risk, and necessity for holistic management, among others, provide stimuli for entrepreneurship. Therefore, to understand entrepreneurship, and how to promote it, it is necessary to have a clear perception of what small enterprises are and how they occur. Achtenhagen, Naldi, and Melin (2010) also observe that for entrepreneurship as an academic field to grow, the proximity to practitioners is pivotal.

However, as in entrepreneurship, there is no one accepted definition of small enterprise. Different researchers define small business differently based on the nature of business activities, the purpose of the definition, level of development where the enterprise is located, and the criteria applied. Davidsson (1989) observes that a small enterprise in a developed country like the US may not be considered a small business.
in a developing country such as Kenya. Ayyagari (2007) describes the criteria used to include, employment, sales, technology but observes that the most used is “employment.”

Based on the number of employees, in developing countries, small enterprises are defined as firms employing up to 50 workers (ILO, 1965). The small business enterprises are a heterogeneous group and vary in different ways and even this classification varies. In South Africa, for example, the categorization includes survivalist enterprises, people who are forced into self-employment due to lack of jobs, micro enterprises, small and medium enterprises and large enterprises (Beyenne, 2005), and micro-enterprises are further classified into small micro and very small enterprises with 1-2 employees. In Kenya, the small enterprises are defined as firms with 1-50 employees (Gemini, 1999; ILO, 1965). The enterprises include micro enterprises with less than 10 employees, small enterprises with 10-50 employees and medium enterprises with 50 -100 employees. According to Gemini (1999), the majority, (99%) are between 1-10 employees, and the rest of the enterprises are micro enterprises with the bulk of them informal and family owned. Small business enterprises will, therefore, mean different things to different people and depending on the object of the classification.

Researchers also differ on whether all small enterprises are entrepreneurial or some are not. Stewart et al. (1998) distinguishes between entrepreneurial firms and small business enterprises, based on profit and growth. According to the researcher, while entrepreneurial firms are driven by profit and growth, small-business owners focus on providing family income and view the venture as an extension of their
personalities. Woo et al. (1991) differentiates between craftsmen and entrepreneurs. While the former are driven by the desire for autonomy, and the later by desire to create organizations, and both create enterprises with different growth potential, Carland et al. (1984) distinguish between entrepreneurship oriented and small business oriented business people, based on individual's goals and objectives, perceptions, personality and management practices. According to Carland et al. (1984) the entrepreneurial-oriented set up opportunistic enterprises likely to grow while the other set up small business. Gartner (1990) observes that this distinction is confusing and difficult to operationalize. Baumol (2000) also argues that the view contradicts Schumpeter’s definition of entrepreneurship that includes not only new innovations, but other combinations including going to new markets, as entrepreneurial.

The relationship between small business enterprises and entrepreneurship is therefore weak and inconclusive to explain how entrepreneurial behavior occurs. Nonetheless, despite the different views, small enterprises are commonly associated with entrepreneurship. Cunningham and Lischeron (1991) and Frank (2007) observe that while entrepreneurial attributes of risk-taking, innovation, and autonomy, can be exercised in organizations of different shapes and sizes, when practiced in large enterprises it is described as “intrapreneurship,” with less resource constraint, lower risk, and benefit of established systems and team work.

**Entrepreneurship and Intention**

Research in personality traits and individual background factors has made considerable contribution to the understanding of entrepreneurship (Gartner, 1989;
1990). However, Krueger (1996) observes, this research approach tends to overlook the intention and nature of the entrepreneurial activity. According to Krueger entrepreneurship is an intentional process and somebody after all has to decide to start a business and to identify and support entrepreneurs. It is necessary to understand how people make this decision. Bygrave (1993) and Shane and Venkataraman (2000) also observe that to influence entrepreneurship, it is necessary to be able to predict it, and traits and behavioral factors have been found to be poor predictors of entrepreneurial behavior. Therefore, research interest in entrepreneurship has turned to intentions-based models rooted in Ajzen Theory of Planned Behavior. Modeling entrepreneurship based on personality traits and background factors has been viewed as a “black box” model with little understanding of how the process takes place. According to Krueger et al. (2000), by identifying how intentions are formed, the intention model cracks the cognitive black box and presents practical ways of how entrepreneurship can be learnt and taught.

**Ajzen’s theory of planned behavior**

Ajzen (1991) postulates that any planned behavior is preceded by, and can be best predicted from, the intention to perform that behavior. The intention to perform the given planned behavior is, itself, posited to be moderated by three key attitudes: (a) attitude towards the target act: an individual’s personal disposition in respect to the subject act; (b) the subjective norm: community view of the performance of the subject act; whether favorable or unfavorable, and (c) perceived behavioral control: the individual’s self-assed ability to take control of the performance of the subject act.
Further, according to Ajzen’s (1991) model, these entrepreneurial attitudes are influenced by an individual’s expected values: perceived benefits from performing the act; normative beliefs: the individual’s view of society opinions; and perceived self-efficacy: an individual’s belief or self-assessed ability to successfully carry out the intended behavior.

**Shapero’s entrepreneurial event model**

Based on Ajzen Theory, Shapero (1982) argues that entrepreneurship can be predicted from the intention to start a business. According to Shapero, no one starts a business by accident, and starting a business is therefore a planned behavior, which can be predicted by intention. Further, in conformity with Ajzen (1991), Shapero hypothesizes that the intention to start a business is influenced by an individual’s perception of personal desirability of starting a business, perceived feasibility, and propensity to act: the personal disposition to act on one’s decisions, and that the three perceptions are themselves influenced by the individual expected outcomes and self-efficacy. Perceived desirability of starting a business is similar to Ajzen’s perceived benefits from performing the act; perceived feasibility is similar to Ajzen’s individual belief or self-assessed ability to, successfully, carry out the intended behavior (Krueger & Brazeal, 1994).

Krueger, Reilly, and Carsrud (2000) and Davidsson (1995) support Shapero (1982). Krueger et al. (2000) hypothesized that intention predicts behavior and that intention is moderated by individual attitudes and background factors. However, Krueger et al. disaggregates Shapero’s desirability of entrepreneurship into perceived personal and social desirability, and uses perception of feasibility of entrepreneurship:
the degree to which one feels personally capable of starting a business, for proactive personality.

Davidsson (1995) also posits that intention precedes and can predict entrepreneurship, and that intention is moderated by attitudes and attitudes by individual background factors. However, in Davidsson’s model (Figure A3) entrepreneurial attitudes influence intention through conviction: the belief that entrepreneurship is a suitable career, conceptually similar to perceived self-efficacy (Krueger et al., 2000). According to Davidsson, conviction predicts 40% of entrepreneurial behavior, and is, itself held to be influenced by an individual’s general attitudes such as motivation, and by entrepreneurship-specific domain attitudes, such as preference for self-employment. Davidsson (1995) also substitutes specific individual background factors including gender, vicarious experience, education, and age for expected outcome and self-efficacy.

Therefore, based on Ajzen’s (1991) Theory of Planned Behavior, Shapero (1982), Krueger et al. (2000), and Davidsson (1995) entrepreneurship can be predicted by the intention to start a business. Further, the intention is itself influenced by the perceptions of personal and social desirability, and feasibility of entrepreneurship, and these attitudes are influenced by an individual background domain and entrepreneurship specific factors.

Based on these theoretical underpinnings, the primary hypothesis for this study is that entrepreneurship among high school students in Kenya can be predicted from the students’ intention to start a business. This intention is influenced by the student’s perceptions of personal and social desirability and feasibility of
entrepreneurship; and these perceptions are influenced by the student’s background factors including gender, rural/urban environment, availability of role models and prior experience in small business ownership, employment and training.

Research also finds that a large number of enterprises fail in their early stage (Bhide, 2000; Dawitt, 1983; Timmons, 1990). Based on Bandura’s Social Learning Theory, people learn from observing others and the high mortality rate could therefore discourage potential entrepreneurs and needs to be reduced in the efforts to promote entrepreneurship (Scherer et al. 1989). Naffziger et al. (1994) also observes that predicting who might be more likely to start a business is only part of the equation, and an expanded view of entrepreneurship should include the entirety of the entrepreneurial experience, business creation, operation, and performance. Besides, Beesly and Hamilton (1984), argue that initiatives to stimulate entrepreneurship must anticipate turbulence, and small firms’ policy should be aimed more at reducing death rate among the firms. The next section, therefore, reviews literature on reducing business failure, or its flip side, supporting small business survival and growth.

**Small Business Enterprises Survival and Growth**

Researchers and operators attribute the high small business failure rate to a variety of factors necessary to be addressed to attain enterprise survival and growth. Larson & Clute, 1979) in an empirical study attributes failure to personal decision-based characteristics of the owner including lack of insight, inflexibility, emphasis on technical skills; and managerial deficiencies, such as lack of management skills and appropriate managerial training, and financial shortcomings, including no accounting background, cash flow analysis, financial records. Star and Massel (1981) tie the
failure rates to the type of business, and observe that failure rates are higher for firms that are smaller, located in rural areas, sell low priced merchandise, and operate as sole proprietorships.

Rogoff, Lee, and Suh (2004) describe internal problems such as management; and external problems, including infrastructure and government regulations. They observe that business owners tend to emphasize the external problems, which can be blamed on other people or outside forces. Other determinants of failure include strategic errors such as diversifying into unrelated business areas, lack of planning, weak financial skills, poor management reporting, and over optimism (Timmons, 1994).

However, one core problem for small business enterprises is the “liability of newness,” the notion that new enterprises are more susceptible, than established ones, to an early demise (Stinchcombe, 1965). Other often cited problems include inadequate finance and poor management. Researchers differ on the extent to which these problems can be reduced to enhance business survival and growth.

The liability of newness

Stinchcombe (1965) introduced the concept of “liability of newness,” the higher likelihood that newer enterprises are more likely to fail than more established or growing ones. According to Stinchcombe, the liability of newness was due to “novelties” or new firm’s ignorance of the market, the extent to which the new firm is unknown; production technology, the extent to which the owners are familiar with the production technology used; and management, the extent to which the owners lack requisite management skills. Shepherd et al., also observes that the liability of
newness depends on the extent of novelty and the number of dimensions and degree of novelty in each dimension, and Aldrich and Auster (1986) contend that because new firms tend to start relatively small, the liability of newness may as well be a liability of smallness. Carroll (1989) in a study of industrial firms found strong support for the liability of newness.

Researchers, however, differ on the extent to which the liability of newness can be reduced to minimize small business mortality and while some researchers question the notion of liability of newness or contend that it cannot be reduced, other researchers assert the liability of newness can be reduced. Duncan and Handler (1994) and Bates and Nucci (1989), for example, argue that small business mortality risk is predicated on a wrong premise, that small business failure rate is high. According to the researchers, firms discontinue for a variety of reasons. Besides not generating adequate return, the owner may retire, sell his or her business, or simply terminate operations after the firm has fulfilled its objectives. Therefore, more enterprises are discontinued, than fail. The researchers also contend that when serious businesses are distinguished from individuals who simply want to sell their labor, the mortality rate is not massive and survival rates are high. Hannan and Freeman (1989) posit that enterprises enter a Darwinian path in which they cannot adopt, and firms that start badly are bound to perish. According to these researchers, the liability of newness is not supported, or cannot be reduced.

However, the view that the liability of newness is caused by ignorance suggests, a priori, and Shepherd et al. (2000) argues, that the liability can be reduced by availing of information. Information causes decay of novelty (Shepherd et al.).
Parkhe (1991) also posits that longevity of organizations can be increased by organizational learning, and Miner and Haunschild (1995) further argue that organizations learn from each other as a population, supporting the view that the small business risk can be reduced by provision of information.

Other suggested risk reduction strategies include advertising and promotion, education and training, poaching experienced and educated staff from other firms, and forging links with established firms (Shepherd et al., 2000). Hannan and Freeman’s (1989) suggestion of a Darwinian path — where enterprises that start badly are bound to fail—, also points to the vital role of opportunity identification and adequate financing which, lay the basis of a sound business (Bhave, 1994; Lumpkin, Hills, & Shrader, 2001).

**Small business financing constraints**

How business start-ups are financed is also one of the most fundamental questions of enterprise research, and the cause of enterprise survival and growth. Cassar et al. (1994) observe that financial capital is one of the necessary resources required for enterprises to form and subsequently operate; and that capital decisions, the use of debt and equity at start-up, have important implications for the operations of the business, risk of failure, firm performance, and the potential for the business to expand. Similarly, according to Cooper et al. (1994), the level of capitalization may influence such aspects as a firm’s ability to buy time, undertake more ambitious strategies, change courses of actions, and meet the financing demands imposed by growth, reflect better training and more extensive planning and contribute to survival and growth.
However, whereas it is a vital component, some researchers argue that small businesses suffer finance gaps because they are unable to raise funds from formal bank organizations, and that, as a result, many enterprises fail. The researchers posit that small businesses are unable to raise funds from the formal banking sector due to asymmetry of information between the finance sources and users. According to the researchers, while the financing agencies have superior information of the whole sector, the business owners have vital information about themselves that the lender can only get at a cost, and this cost leads to a rise in the transaction rate while risk-averse lenders also limit loan amounts available, leading to the finance gap.

Dodge and Robbins (1992) found that a large number of their respondents cited finance as a problem. This included financial planning (42%), comprised of undercapitalization and locating financial sources; lack of accounting systems and record keeping (32%), and poor cash flow (26%). Oliveira and Fortunato (2006) found that smaller and younger firms have higher growth-cash flow sensitivities than larger and more mature firms. The researchers argue that this was consistent with the suggestion that financial constraints on firm growth may be relatively more severe for small and young firms. Cassar (2004); Cooper et al. (1994); and Davila et al. (2003) also quote inadequate financing as a problem.

Other researchers counter the small enterprises financing gap hypothesis. They argue that small business enterprises raise funds through unconventional “bootstrapping” methods — creative ways to meet the need for resources without relying on long-term or external finance — to close any gaps from formal sector borrowing. According to Ebben and Johnson (2006) this may consist of measures
such as accelerating receipts, delaying payments, or obtaining personal loans from the owners; social mode measures including loans from family and friends. Nelson (1986) also observes that most of the funds for starting small enterprises is generated internally through savings and borrowing from friends and relatives.

In empirical studies, small business managers are found to use bootstrapping methods to meet their business finance requirements (Freer et al., 1995; Harrison & Mason, 1997; Winborg & Landstrom 1997; Winborg & Landstrom 2002). Schwienbacher (2007) further describes a “wait until sufficient funds are raised” and “just do it” small business financing strategies similar respectively to formal and bootstrapping strategies. While in the wait and see approach the entrepreneur does not start a project until enough funds are raised to complete it, the just do it approach suggests the use of entrepreneur’s own savings to achieve some intermediate milestone before contacting outside investors such as venture capitalists. Schwienbacher (2007) shows that the latter is better where the venture is highly profitable, the likelihood of achieving the milestone is high, the venture capital market is large, and the amount needed to achieve the milestone is small. Schwienbacher (2007), further observes that, life-style entrepreneurs use the just do it approach more than the profit maximizing types who normally prefer to the wait and see financing strategies. Diomande (1990) also observes that entrepreneurs, particularly those in developing countries, often have to start their businesses with desperately limited resources and have developed a variety of unconventional approaches of raising finance.
In Kenya, 69.1% of SME’s credit comes from informal sources that include owners personal savings, family, and ROSCAS (rotating savings and credit associations) group savings and other credit schemes that give credit to their members on a rotating basis (CBS, 1999). Bootstrapping may therefore be an important source of funds for small businesses.

Other researchers argue that bootstrapping and formal sources are complementary. Berger and Udell (1998) observe that different capital structures are optimal at different points in the cycle and larger firms may rely more on external finance. Ebben and Johnson (2006) observe that different types of financing are utilized at different periods in the life of a small firm, and Verheul and Thurik (2001) observe that, based on Myer’s Pecking-Order hypothesis, financing of business projects will be undertaken first by using internal resources, then debt, and finally, external equity. Watson and Wilson (2002) and Cassar (2002) also observe that consistent with the theoretical arguments, the larger the start-up, the greater the proportion of debt. Cassar (2002) observes that enterprises that can access institutional finance are more likely to grow while Timmons (1990) and Sahlman (1990) point out that firms attracting outside capital investment have higher success rates.

Therefore, while small and medium enterprise owners face constraints in raising formal finance, bootstrapping strategies can address that finance gap to reduce business failure and the two approaches are complimentary. Shepherd (2000) however, observes that formal financing sources dominate present business training,
and that due to its identified role, “just do it,” and bootstrapping strategies should be incorporated in small business and entrepreneurship training.

**Business-growth management**

Reduction of the liability of newness helps enterprises survive (Shepherd et al., 2000). However, besides survival, to promote entrepreneurship, it is necessary for enterprises to grow (Scherer, et al., 1989). Enterprises that die have never experienced growth or success. They simply held out through bad times as long as possible (Carrol, 1983). Reduction of the mortality rate, therefore, requires business growth.

Poor management constitutes one of the novelties under the “liability of newness” (Shepherd et al., 2006). However, management related problems are also a major cause of business failure on their own. Kelley (1973) and Kelley and Michela (1980) observe that small business enterprises suffer from poor management because their owners have inadequate management skills, and the enterprises have inadequate resources to hire or workload to justify expensive professional management. Further though, in the attribution theory, individuals are likely to blame external rather than internal causes for their failure Siropolis (1986) points out that approximately 55% of all new ventures fail during the first three years, primarily due to managerial shortcomings. Fayol (1916; 1950) defined management as comprising the functions of planning, organizing, staffing, budgeting, coordinating, and controlling. In Kenya, Nelson and Muroki (1997) found a negative correlation between time spent managing and the determining factor of success, and a majority of the enterprises in Kenya fail as owners do not exercise management.
Some researchers argue that one way business owners can improve management, and chance to avoid early enterprise demise, is by knowing the stage at which a business is. According to the researchers, as they grow, enterprises pass through a set of sequential stages; and the stages are characterized by common problems and challenges. Thus, by assessing at what stage a firm is at, it is possible to understand existing problems and anticipate future challenges, and hence plan how to grow the business to the next stage (Terpstra & Olson, 1993).

The general business growth model comprises three stages of startup, growth and maturity (Figure 1).

![Small business general growth model](image)

*Figure 1. Small business general growth model.*

However, researchers differ in their business growth models. Greiner describes five periods of business growth. According to Greiner, firms grow through
periods of evolution and revolution with stable growth interspersed by crises. Accordingly, Greiner delineates stages of stable growth comprising of phases of growth through creativity, direction, delegation, coordination, and collaboration, associated respectively, with crises or problems of leadership, autonomy, control, and red tape.

Churchill and Lewis (1983), in a theoretical and empirical study considered more suited for small enterprises, describes five stages of growth comprising of existence, survival, success, take-off and resource maturity. According to Churchill and Lewis, as they grow, besides size, enterprises change in diversity and complexity in various aspects of management including managerial style, organizational structure, extent of formal systems major strategic goals, and owner involvement. Consequently, Churchill and Lewis (1983) delineate the different stages with an index of these attributes, and associate different stages with the problems of cash flow, breakeven and profit growth; and need for increased formal communication, delegation and professional management input for the enterprise to continue to grow. Notably, Churchill and Lewis include existence during which the main problem is obtaining customers and delivering the products and proving the venture relevant in small business enterprises. Kazanjian (1988) adds a pre-start up or conception and development in a conception, commercialization, growth, and stabilization model. In the conception stage, during which the owner is focused on idea and prototype development and selling the idea to financiers, main constraints are likely to be credibility and information and possible solutions including research and networks.

Still other researchers describe different stages. Mount et al. (1993), posit that
small businesses, characteristically owner-managed, change from owner-operated, owner-managed, to functional management stages as they grow. Steinmetz (1969) describes stages of direct supervision, supervised supervision, and indirect control.

Researchers also differ on the theory of stages of business development, and while some support the proposition, others argue that the stages of business growth cannot be identified, that they cannot predict the problems, and that the theory has no empirical support and should be discarded. Kazanjian (1988) observes that most of the literature on growth stages describes change in organizations as a response to change in their internal problems, that the determinants of stages are at best implied, no inevitable linear sequence of the stages and that the work is conceptual with little empirical basis. Bhide (2000) argues that while the growth stages theory accurately reflects the gradual nature of the firm evolution, the theory inappropriately assumes that firms conform to a uniform predictable path of growth, and oversimplifies the nature of the entrepreneur’s role. According to Bhide, the stages are not predictable, and the delegation role of the entrepreneur is more complex than the simple let go injunction.

Levie and Lichtenstein (2010) observe that stage models are built on growth imperative, while many of the enterprises do not grow and growth is more the exception rather than the rule. In a review of 104 stage models published in the management literature between 1960 and 2006, Levie and Lichtenstein (2010) found no consensus on what constitutes a stage, how many stages exist, or why stages change. According to the researchers, the stages range from three to eleven, with a majority between 3 and 5. However, no empirical evidence to support the theory was
found. Mount et al. (1993) also argue that not all small enterprises pass through all five phases; that some firms start in a more evolved phase, and that some remain within a particular phase, either by design or by virtue of barriers to further development and Flamholtz (1990) contends that the transitions are not distinct phases.

However, against this, in empirical research, Kazanjian (1988) finds partial support for the stages of development. According to the researcher, managers described their experiences and the history of their growth in terms of stages without the researcher referring to the construct. Further, some of the problems seem to have been more dominant than others at times and, reports that a sequential pattern of dominance seemed to exist. The particular problems faced at a given time also appeared to be strongly associated with a venture's position in a particular stage of growth. Levie and Lichtenstein (2010) further observe that consistently, across multiple industries and ages of firms, up to 60% of all small firms fit somewhere along this sequence of organizing states as they grow. The researchers in addition note that given the lack of conceptual consensus amplified by the lack of empirical evidence, one would expect stages modeling to have petered, but this has not happened. Henricks (1997) also observes that even with all their limits, business-growth models can be helpful in providing snapshots of the problems likely to fill an entrepreneur’s viewfinder, and Levie and Lichtenstein (2010) cautions against throwing away the baby with the bath water. Thus while there is no consensus on the number of stages, the general indication is that enterprises grow along a certain path. A synthesis of the various growth stages Figures A5 & A6, indicate that firms change
from owner operated, owner managed to professional management (Mount et al., 1993) or direct supervision, supervised supervision to indirect control (Steinmetz, 1969). As an enterprise grows in sales and or employees, the organization also changes from simple to complex, management from informal to formal. Problem and management focus also change with cash flow and marketing being critical in the early stage and management and administration, in the later phases. Focus changes from survival to breakeven and profitability, and growth strategies from direction to delegation.

Thus, whereas there is no consensus on the set of stages, the different models can be synthesized into a general pattern. Overall, research indicates that task delegation and specialization play a critical role in enterprises’ growth to advanced stages (Bhide, 1999), and the small business owner will have to become a capable ‘supervisor of supervisors (Steinmetz, 1969), or move from the comfort of proven operating skills to the realm of acquiring and exercising management skills (Mount et al., 1993). Bhide (2000) also observes that startups pass through various stages provided the entrepreneur is willing to delegate to subordinates.

In Kenya, the bulk of small enterprises are firms with less than ten workers. There is a dearth of enterprises with 10-50 employees, referred to as “the missing middle” (Nelson & Muroki, 1996). Nelson and Muroki partly attribute this to the limited delegation due to lack of competent subordinates. In this context, Ardichvili, Harmon, Cardozo, Reynolds, and Williams (1998) observe that delegation is a systematic process. According to the researchers, first to be delegated are accounting and production, followed by personnel, with start-up teams retaining the marketing
and marketing-related functions, whereas general and financial planning are delegated last.

**Summary**

A large number of small businesses die in their early age. Some researchers argue that based on the Social Leaning Theory (Bandura, 1951), the high mortality rate could discourage entrepreneurs. In order to avoid this, therefore, successful promotion of entrepreneurship requires reduction of the small business mortality rate. According to different researchers, the major causes of the mortality rate include: the liability of newness— the higher probability that new enterprises are more likely to die, than established ones; inadequate finance, and poor management.

In order to enhance the survival rate, it is necessary to address these constraints. The liability of newness, which could be viewed as predominantly a marketing problem, could be moderated by provision of information. Small business financing should incorporate both formal sources and internal sources in bootstrapping, while knowing the stage at which a business is and increased delegation can help address the management problems. In Kenya, this could enhance critical business growth into the missing middle.

**Creation of Entrepreneurial Opportunities**

Researchers also debate the appropriate strategies for promoting job creation in a situation of high unemployment as obtains in Kenya, based on different assumptions about the relationship between entrepreneurship and unemployment. Entrepreneurship is the nexus enterprising individuals and entrepreneurial opportunities (Shane & Venkataraman, 2000) and the promotion of entrepreneurship
should include creation of enterprising persons and entrepreneurial opportunities. Krueger (1994), and Shapero, (1982) also observe that promotion of entrepreneurship requires potential entrepreneurs and entrepreneurial potential — a "nutrient-rich" environment or "seedbed" that provides credible information, credible role models, and emotional/ psychological support as well as entrepreneurial opportunities.

Based on an assumption an assumption of a positive relationship between unemployment and entrepreneurship, unemployment leads to self-employment as unemployed individuals are forced into self-employment (Thurick et al.,2008). This approach referred to as “unemployment push” calls for equipping individuals to enable them become entrepreneurs and results in many small enterprises, mice (Bhide, 2000) that may not grow but yield employment by their sheer numbers. On the other hand, under an assumption of negative relationship, entrepreneurship leads to reduction of unemployment, as opportunities attract unemployed people into self-employment (Thurick et al., 2008). This approach, referred to as “entrepreneurial”, calls for stimulating growth to generate opportunities to attract the unemployed people, and results in growth oriented enterprises that create jobs by growth. In empirical research, Staber and Bogenhold (1993), found evidence of a positive link, Blanchflower (2000) found a negative link. However, Thurick et al. (2008) found evidence of both refugee and entrepreneurial effects.

Krueger (2000) Runyan, Droge, and Swinney (2008) observe that both approaches are necessary, and complement each other. While the “employment push” is short-term and addresses creation of entrepreneurs — the supply side of entrepreneurship—, the entrepreneurial is long-term and addresses the demand side —
creating opportunities. Thurick et al. (2008) however observes that many
governments are attracted to the refugee approach due to the short tem attributes.

**Endeavors to Promote Entrepreneurship Among the Youth in Kenya**

Small business enterprises play an important part in economic growth and
employment creation in Kenya. The International Labor Organization mission (ILO, 1972) identified small business enterprises as a potential solution to Kenya’s
unemployment and poverty. The report found that most of the jobs were created in
self-employment, in several micro enterprises, with 1-2 employees, which ILO
termed the “informal sector.” ILO (1962), defined the informal sector as comprising
enterprises operating outside the government regulations, and characterized by ease
of entry, use of indigenous resources, family ownership, and labor-intensive
operations. Contrary to Lewis (1954), ILO also found the informal sector a dynamic
and permanent feature of the economy. Lewis hypothesized that informal-sector firms
were a temporary feature of the market, and were likely to disappear as the formal
sector grew and absorbed the excess labor force.

Other studies and reports highlight the important role of the small business
sector in job creation in Kenya. The National Baseline surveys in 1993, 1995, and
1999 found that small business enterprises contribute to significant employment
creation in the economy and were an important channel by which women and youth
participated in the national economy. According to the latest Gemini Survey (1999),
small business sector comprised 1.3 million firms employing an estimated 2.4 million
people, 52.6% male employees, and 47.4% female employees. More recently, the
Vision 2030 report shows continued growth with the sector accounting for 75% of
total employment, and 18% of the country’s GDP. Subsequent to the vital role of small business enterprises, the Government has over the time introduced various policy initiatives and programs to promote entrepreneurship to address the rising youth unemployment.

**Policy measures**

In the Sessional Paper No.10 on African Socialism and its application in Kenya, the first policy blue print for independent Kenya, emphasizes the small business development in the national development strategy. The Sessional Paper argues for the unemployed in the rural areas to be provided with advice and financial support to efficiently exercise entrepreneurial activities. In Sessional Paper No.1 of 1986 on Economic Management for Renewed Growth, the government undertakes to promote development in small-scale manufacturing and commercial activities in the informal sector, rural areas through provision of credit and technical and vocational training to provide need-driven courses. The government also undertakes to review legal and regulatory measures constraining small business development and proposed streamlining of teaching technical education in polytechnics and other technical institutes. Sessional Paper on Economic Recovery Strategy for growth and Employment Creation 2003-2007, gives the same emphasized enterprise growth and recognizes the need to establish and maintain a conducive environment for the graduation of MSEs into medium sized enterprises that have more capacity to produce high quality goods and create sustainable employment opportunities.

In the Sessional Paper No. 2 of 1992 on Development of Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction (GOK,
2005), revised in 2002, the government sought to create appropriate legal and regulatory framework, and coordination and facilitative measures to promote growth of the sector. It also emphasizes growth to create manufacturing firms employing 10-50 persons, which represents the “missing middle” in Kenya’s small business sector. The sessional paper recommends creation of indigenous role models through awards for outstanding ideas and innovations, exemplary performance; credit, and nonfinancial services including technical training, counseling, consulting, market, and extension program design. Specific support to women entrepreneurs, including information, access to credit, promotion of appropriate role models, information dissemination and creation of an enterprise culture should be given.

In Vision 2030, the country’s blue print for long-term development to propel Kenya to middle-income country status by year 2030, the government emphasizes the critical role entrepreneurship and small business development is expected to play in creating a sustainable industrial base. It is, however, noted that the sector suffers a mismatch between the level of human resource skills imparted by the education system as a whole and the requirements of the market, which need to be corrected. It is suggested that this would be accomplished through specialized skills training at different levels in community polytechnics, technical institutions, and vocational and entrepreneurial training; creation of an economic and institutional regime that provides incentives for the efficient use of existing knowledge; creation of new knowledge and flourishing of entrepreneurship, and educated and skilled “entrepreneurial” population that can create, share and use knowledge well for sustained competitiveness.
Other policy documents including the five-year development plans, annual economic surveys indicate continues support for small business development for job creation and poverty alleviation through self-employment.

**Vocationalisation of education**

In addition to the policy initiatives, in 1984, the government changed the country’s system of education from the 7-4-4-2 system (7-years primary, 4-years secondary, and 4-years university, with 2 years pre-university) inherited from the colonial period, to an 8-4-4 system (8-years’ primary, 4-years’ secondary, and 4-years’ university). The change also included introduction of vocational and technical subjects in both primary and secondary schools, and strengthening teaching in technical and vocational schools. The vocational subjects were offered as electives and were not compulsory (Kilemi, 2000). It was intended that the vocationalisation of the education would better equip and orientate the students toward self-employment, and this applied equally in other developing countries. In the human capital theory, general education creates general human capital transferable across life and from job to job and for future development while, vocational education creates specific human capital, tailored to specific situations and more suited for the labor market in employment or self-employment (Becker, 1964).

Historically, the traditional setting for vocational training has been at the work place, mainly in apprenticeship programs, and different researchers hold different views on the ability to create employment, through vocationalization of education. While some researchers argue that academic curriculum is the cause of rising unemployment, and that vocational skills prepare recipients for employment with an
alternative in self-employment, other researchers contend that vocationalization of education has no bearing to unemployment, that educational institutions are inappropriate for vocational education, and that vocational training should be confined to its traditional home, at the work place, or offered in dedicated institutions. Vocational training is also posited to be constrained by the high cost of required workshops, tools, and materials, as compared to the costs of equipping general education facilities (Kilemi, 2000).

Balogh (1962) and Dumont (1966), early leading proponents for vocationalizing education, argued that academic education creates scorn and turns away recipients from manual labor while it does not offer employable skills, and is the main cause of unemployment. According to the researchers, diversifying the curriculum to include vocational courses, would equip school graduates at different levels of the education system with basic skills for employment, or self-employment, and hence help reduce unemployment. Stanley and MacCann (2009) argue that the need to align supply from the education system with the demand for skills in the economy indicates that vocational and employment related skills should also be available within the school curriculum and the challenge is to incorporate the industry-specific VET into the curriculum without it being seen as less desirable than traditional subjects. Wayne (2008) and Stevenson (2005) also advocate for vocational training in schools.

Foster (1965), in what is termed “the fallacy of vocational education,” argued that unemployment among the educated is the result of rapid educational expansion against an economy that was not expanding rapidly enough to create the number of
new jobs needed to accommodate the thousands of school graduates each year. Accordingly, Foster argues that the unemployment problem cannot be solved by vocationalizing education, and the unemployment solution requires stimulating economic growth and aggregate demand. Blaug (1972) argued that it was impossible to foresee accurately the requirements for specific skills in an economy two or three years ahead and that vocational training must necessarily impart general skills, at which point it ceases to be vocational in the sense that term is usually used. Bukhari (1968) found that the more specific the skills provided by the educational system, the less the likelihood of these skills being relevant to the actual job-related needs of the employment system.

Despite the opposing views, vocationalizing education has continued to be favored. Abrokwa (1966) observes that, despite the unresolved debate, vocational education has continued to be pursued in the various educational reforms attempted by the developing nations, as evinced by efforts in India, Sri Lanka, the Philippines, Zimbabwe, Nigeria, Kenya, and Ghana. The growing popularity of vocational training is attributed to its political appeal (Stevenson, 2005), and its ability to provide ‘second chance’ for those ‘failed’ by school education (Helme, 2007). The appeal is also driven by the changing workplace requirements and need for flexible skills. As observed by Hager and Laurent (1990) human capital is the sum total of skills including vocational and general education, and the gap between training and development has narrowed, with the terms being used interchangeably. Besides, in some situations where self-employment is an imperative and employment opportunities scarce, vocationalisation of education may be the only option to impart
necessary entrepreneurship skills. As such, Psacharopoulos (1987), observes that the question is no longer to vocationalize or not, but the balance between education and vocational courses.

In the increasing vocationalisation, different countries have followed different paths. Kerre and Kwende (1995) observe that, in many developing countries, vocational education is offered as a separate system, either in its own separate institutions, offered alongside general education in the same institutions but still on a separate trajectory, or in an integrated one, where vocational education is a requirement for all learners at certain levels and an option at higher levels. According to the researcher, the integrated approach offers the widest opportunities possible for learners to pursue either general or vocational education, and minimizes the demarcation between the two as learners experience the interrelationships between theory and practice. The researchers further observe that it is feasible to focus on general aspects of education at the lower level with an increasing amount of vocationalization or training as the learner moves to higher levels. However, King (1993) found no evidence for a single preferred site for training. In Kenya, technical and vocational education, while moving towards the integrated system (MOE, 2008), comprises the diversified general and vocational education primary and secondary schools, and various public and private vocational and technical training institutions.

However, the change in education system has not succeeded as expected. Channeling youths into self-employment is a major government policy objective, in view of the lack of employment in the formal sector, and the change in education has not led youths into self-employment, as envisaged. Kinyanjui (2007), in a survey of
youth polytechnic graduates, found that a large number do not go into self-employment. In the period under study 1994-2001, 30.6% entered the labor market as employees, 42.2% were self-employed, and 22.2% were unemployed. This unemployment rate was higher than the national 12.7% average unemployment rate. Kinyanjui (2007) also notes that there are no significant differences between the graduates who were employed, self-employed, or unemployed, suggesting no significant pro-self employment orientation for the Youths’ Polytechnic training.

A summative evaluation of the 8-4-4 system of education (KIE, 2010a) while not specifically referring to self-employment, points out that, with regard to aspects that relate to innovation and the application of technology, the curriculum is visibly deficient as the majority of its products do not exhibit those attributes, after school. The report also notes that there has been a concentration on imparting theoretical skills at the expense of practical skills and desired attitudes and values. According the report, the acquisition of practical skills has been further undermined by inadequate facilities which has particularly affected the learning of science and technical subjects whose instruction requires a practical approach. It is therefore, necessary to explore other ways to better orientate youths towards self-employment, which this study aims at by looking at factors that influence entrepreneurial intention of high school students in Kenya.

**Chapter Summary**

Personality traits, individual background factors, career choice theory, and small business enterprises association with entrepreneurship have been invoked in efforts to explain entrepreneurial behavior. However, research on the association of
these factors with entrepreneurship has been inconclusive. Business creation is also an intentional process and the most definitive characteristic of entrepreneurship is the intention to start a business. Besides, influencing entrepreneurship requires ability to predict it, and personality characteristics are poor predictors of entrepreneurial behavior. Research in entrepreneurship has therefore, turned to intention models based on Ajzen’s theory of Planned Behavior, and considered to have greater promise.

Efforts to promote entrepreneurship in Kenya through vocationalisation of education have also not succeeded as expected. Despite the training, many youths continue to seek paid employment, many of them remaining unemployed. This study seeks to find out the factors that influence entrepreneurial orientation of high school students in Kenya. Promoting entrepreneurship also requires small business growth, and creation of entrepreneurial opportunities. The literature review therefore, also included an examination of ways of enhancing small business survival and growth, and creation of entrepreneurial opportunities. The next Chapter details how this study was carried out.
Chapter 3

Methods

The previous chapter presented the background literature to this study. It shows that past efforts to explain entrepreneurship, based on behavioral and traits-based theories, have not been successful, and that this study uses an intentions-based model, which is considered to have greater promise. This chapter describes the procedures used in this study-design and implementation. The procedures are divided into: research design, instrumentation, sampling, pilot testing and data collection; and analysis.

Research Design

Perceptions of desirability and feasibility of entrepreneurship and individual background factors have been posited to influence entrepreneurial intention — one’s plan to start or own a business (Ajzen, 1991; Davidsson, 1995; Shapero, 1982). The main aim of the researcher was, therefore, to generate and expand knowledge about entrepreneurial intention of high school students in Kenya. The aim was to be accomplished by this correlation study. Correlation describes, in quantitative terms, the degree to which two or more terms are related (Kasomo, 2007). This study examined the relationship between respondents’ perceptions of personal and social desirability, and feasibility of entrepreneurship, with intention to own a business.

The study then sought to find out whether there were significant differences in the perceptions of personal desirability, social desirability, and feasibility of entrepreneurship for respondents with different background characteristics.
Background factors considered include gender, availability of parental and other role models, rural or urban domicile, and past experience in small business employment, ownership, and training.

By determining the relationship between the perceptions of desirability and feasibility of entrepreneurship with entrepreneurial intention; and the influence of individual background factors on this perception, the study also tested the applicability of Ajzen’s Theory of Planned Behavior as adopted by Shapero (1982), Krueger (2000), and Davidsson (1995), in the Kenyan context.

The study was carried out with high school students. Data were collected in eight schools from four out of the eight provinces in the country. The data were collected using questionnaires completed by the respondents at their schools. Participating schools were picked, using a combination of stratified random and purposive sampling, from provincial boarding schools in the four purposively selected regions of the country. The schools were picked because they drew students from all parts of the country.

**Sampling**

GOK (2008) estimates Kenya’s population at 30 million people comprising of 49.4% male and 50.6% female. According to the household survey, three quarters of the population lives in the rural areas (GOK, 2008). The school system comprises 6487 secondary schools, with an enrollment of 1.03 million students. Average gender ratio between 2003-3008 was 53% male and 47% female (GOK, 2008). The school system comprises 6487 secondary schools, with an enrollment of 1.03 million students. Average gender ratio between 2003 and 2008 was 53% male and 47%
female (GOK, 2008). According to the latest 2009 population census results released in August 2010, Kenya’s population is estimated at 38.6 million people, comprising of 49.7% male and 50.3% female. Based on the census, 67.7% of the population is in rural and 32.3% urban areas.

The sample aimed at capturing male, female, rural/urban, students, and in keeping with the national population distribution and secondary school enrollment characteristics. It also sought to include mid-level performance students, who are the more likely candidates for the labor market. Students in their final year were also considered appropriate for a decision in self-employment. Shapero (1982) observes that self-employment is often preceded by a displacement or precipitating event that triggers action, and considered leaving school, to be such an event.

Kenya’s administrative structure comprises eight provinces subdivided into districts, divisions, locations and sub locations. In the new constitution (2010) provinces are replaced with forty seven counties. Secondary schools in the country fall into government funded, and private. Private schools are run by private organizations or individuals. Government funded schools are divided into national, provincial and district schools. After taking the primary school final exam and successfully passing, government funded schools select students in order of scores. Students with the highest scores gain admission into national schools while those with average scores are selected into provincial and district schools (World Bank, 2008). The schools can also be classified into boys’ and girls’, day and boarding, and rural, urban, and city schools.
Due to cost constraint, it was not possible to include schools from all categories and regions in the sample. Four provinces of Central, Rift, Eastern, and Nairobi were purposively picked out of the country’s eight provinces. These provinces were picked because they were conveniently accessible in terms of both cost and logistics. The provinces also comprise 61% of Kenya’s population, and 75% of enrolled high school students nationally (GOK, 2008a).

Within these provinces, provincial boarding schools were picked. Provincial schools pick a majority (85%) of students from the local area. The schools therefore combine attributes of the other school categories. Like the district and day schools, they admit students from the local area and like national schools; their boarding facilities enable them to enroll students from other parts of the country.

For selection of the schools, a list of provincial girls’ boarding schools in the four provinces was obtained. The list comprised of 42 schools in Central; 73, in Eastern; 15, in Nairobi; and 92, in the Rift Valley region. In each province, a girls’ school was picked by random sampling. To ensure the utmost closeness of background characteristics in both boy and girl-students participating in the study, and mitigate cost, a boys’ provincial boarding school nearest to the sampled girls’ school was then picked. Therefore, in total 969 students in their final year were surveyed in the eight schools, four boys’ schools and four girls’ schools, and two schools were urban, and six schools rural.
Table 1

*Study Sample*

<table>
<thead>
<tr>
<th>Province</th>
<th>Gender</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>Male</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>122</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>Male</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>97</td>
</tr>
<tr>
<td>Central</td>
<td>Male</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>155</td>
</tr>
<tr>
<td>Eastern</td>
<td>Male</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>102</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>969</strong></td>
</tr>
</tbody>
</table>

The 969-sample size is suitable. Gay and Diehl (1992) indicate that in correlation research, at least 30 subjects are required to establish a relationship. Krejcie and Morgan (1970) also observe that, as the population increases, the sample size increases at a diminishing rate and remains eventually constant at slightly more than 380 cases. Therefore, based on Krejcie and Morgan (1970), a sample size not lower than 380 respondents would be acceptable. Alreck and Settle (1995) provide similar evidence and Weisberg and Bowen (1977) observe that a 450-sample size is associated with 4.1% sampling error and would be considered sufficient. Considering these views, the sample of 969 participants would be regarded as large.

Large samples have some downsides: They involve higher data collection and entry cost. However, according to Kasomo (2007), large samples are necessary when groups are to be broken into several subgroups, for example, gender, rural/urban,
experience, role models etc; as in this study, so that different characteristics can be included in satisfactory numbers. In addition, when the target group is heterogeneous as in the national distribution of participants, a large sample size is recommended (Kasomo, 2007). The size of the standard error also largely depends on, and varies inversely with the sample size, and a large sample reduces the standard error and enhances the viability of the study (Kothari, 2008).

**Adolescents’ Beliefs and Schools’ and Students’ Characteristics**

Some researchers question adolescents’ career awareness including careers in entrepreneurship. Kennedy and Peterman (2003) and Ayyagari (2007) argue that students in high school may not be concerned with the feasibility of starting a business because the event is too remote and the study respondents may be assumed not to be concerned about the possibilities of self-employment. However, it may be expected that in situations where students face terminal situation with bleak job prospects, as is the case in this study, the option of self-employment may not be remote and the respondents may have short-term interest in feasibility of entrepreneurship-employment. Knivetton (2004) observes that task of choosing a career is not static but part of a developmental process, and that from early fantasy, through tentative stage in the early years of teenage, individuals shift to the realistic stage to focus an appraisal by late adolescence, and Schmitt-Rodermund and Vondraceck (2002) note that adolescence is a time that entrepreneurial aspirations take place, and that these inspirations are stable. It can therefore be expected that the respondents in this study are aware of their career aspirations and that these intentions can predict entrepreneurship.
The surveyed schools differ in gender, and rural/urban location. Four of the schools were male and four female, two urban and six rural. The regions in which the schools are located also differ in their endowment. Table 2 (World Bank, 2008), shows the regions vary in their levels of urbanization, land potential, poverty, unemployment, and net school enrolment, which could influence schools’ and students’ characteristics.

Table 2

An Overview of Differences Among Provinces, 2005/6

<table>
<thead>
<tr>
<th>Province</th>
<th>Urban</th>
<th>High Land Potential</th>
<th>Poverty</th>
<th>Unemployment</th>
<th>Net Secondary School Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>100%</td>
<td>-</td>
<td>22%</td>
<td>21%</td>
<td>38%</td>
</tr>
<tr>
<td>Central</td>
<td>10%</td>
<td>69%</td>
<td>31%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Eastern</td>
<td>6%</td>
<td>3%</td>
<td>50%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>12%</td>
<td>18%</td>
<td>49%</td>
<td>13%</td>
<td>18%</td>
</tr>
</tbody>
</table>

All the schools chosen were provincial boarding of mid-level performance. In the past, schools have been ranked according to performance. However, besides the difficulties of getting a complete ranking of all Kenyan schools, the ranking has been controversial and is no longer in use. As in the No Child Left Behind, Act (2002), Kilemi (2000) observes that schools engaged in malpractices including withdrawal of weak students and focus on drilling students to excel in examinations, to achieve higher ranking, at the expense of holistic education. The ranking, also, did not take into account disparities in school facilities and environments, and the different students’ social economic background, all of which influence students’ performance.
Nonetheless, based on the quality of their initial students intake, school facilities, and teaching staff; generally, national schools perform best at high school’s examination, and provincial schools have mid-level performance, followed by the district schools. As observed by Kilemi (2000) for the 8-4-4 system of education, business studies are included in the surveyed schools’ curriculum as an elective (Kilemi, 2000) and are, hence, not taken by all students.

The cost of the boarding facilities may be expected to identify boarding schools with the more affluent segment of the society. However, over the past few years, in keeping with the Millennium Development Goals (MDG), the government has made efforts to even access to education across different income groups. Free primary education was declared in 2003 and Secondary Education is supported by Secondary School Bursary Fund (SEBF), and the Constituency Development Fund introduced, respectively, in 1994 and 2003. The funds aim at cushioning the country’s poor and vulnerable groups against the high and increasing cost of secondary education, therefore reducing inequalities (KIPPRA, 2008). Other private and quasi-public NGOs including the Jomo Kenyatta Foundation; World Vision; Local Authority Transfer Fund; Faith Based Organizations; Constituency Development Fund; Chandaria Foundation; among others, have also supported students from weak income background. From these sources, students are guaranteed full bursary for their secondary schooling once they are evaluated as poor and needy. In the African tradition, communities, families and individuals also come together to support needy members, especially in education matters, (Kilemi, 2000) and in 2008, the government also declared free secondary education. Asians, dominant in Kenya’s
business sector, normally enroll in Asian community schools and are not included in this study sample. Besides, despite their dominance, the Asian community, is a small minority. Together with Europeans and Arabs, they comprise 0.1% of Kenya’s population (2009, Census).

Instrumentation

This study was designed to examine the relationships between the perceptions of desirability and feasibility of entrepreneurship, with respondent’s entrepreneurial intention, in high school students in Kenya, and to determine if there were any differences in the perceptions of desirability and feasibility of entrepreneurship for students with different background characteristics. The research committee members had examined the study questionnaire to determine relevance and accuracy of each question. The University of Illinois experts, for compliance with Human subjects’ research requirements, reviewed the questionnaire form and content. The recommendations of both committees were incorporated. This included incorporating scale questions in the survey instrument, clearly conveying respondents’ voluntary participation and choice to skip questions one did not feel inclined to answer, in the consent letter signed by the respondents. The letter also assured confidentiality and anonymity of responses.

Pilot study

A pilot test was carried out with students in two high schools that were not to be part of the final study. The purpose of the pilot test was to ensure clarity and consistency in the interpretation of the questions. A pilot run also provides a check on the feasibility of proposed procedure for coding data, shows up flaws and ambiguities
and yields suggestions for improvement (Kasomo, 2007). Questionnaires were given to seventy students in the two schools. Each participant was asked to enter comments and recommendations on areas of the questionnaire, which they felt required revision. Typographic and numbering errors, and queries regarding the clarity of some of the questions, were considered and incorporated in the final questionnaire.

**Survey instrument**

The final survey instrument, Appendix 1, comprised of two main parts. The first part dealt with the respondents’ demographic and background information. This included gender, age, the fathers’ and mothers’ educational levels, the respondent’s self-assessment of performance in science and art subjects, rural and urban domicile, exposure to parental and other role models, and the respondents’ prior experience in entrepreneurship. This section used dichotomous and multiple-choice questions. The participant’s rural/urban domicile included three choices of towns with less than 10,000 inhabitants (rural), towns with between 10,000 and 100,000 inhabitants (urban), and towns with over 100,000 inhabitants (city) environments. The questions on prior experience, and impact of role models were adopted from the Shapero (1982) instrument.

The second part of the questionnaire consisted of entrepreneurial-intention related items. It included three sets of five questions to measure respondents’ perception of personal desirability, of social desirability, and perception of feasibility of entrepreneurship; and the respondents’ intention to go into self-employment. The questions were on a five point Likert-scale, measured from ‘strongly disagree’ to ‘strongly agree.’ The researcher adopted a five-item measure of career intention
proposed by Shapero (1982), which captures perception of personal desirability of entrepreneurship. The other scale questions cover participants’ perceptions of social desirability, and feasibility of entrepreneurship, and intention itself. The survey questionnaire shows the details of the questions (see Appendix 2).

**Validity**

Validity is the best available approximation to the truth of a given proposition, inference or conclusion (Trochim, 1999). It refers to the accuracy of a study, overall whether a study measures or examines what it claims to measure or examine (Kasomo, 2007). According to Kasomo, validity requires relevance or appropriateness of the group selected to provide the information sought, reliability of the tools used to gather required information, and integrity of the data gathering and analysis procedure, and research findings. Reliability of a research tool is the consistency or the degree to which the instrument measures the same way each time it is used under the same conditions with the same subjects (Kasomo, 2007).

Kasomo (2007) points out that, a study may lack validity if information is obtained from an inappropriate source, tools have no reliability, the data analysis is faulty, data corrupted, or the report is not linked to the study findings. Tools also lack reliability where there is room for participants to lie, or give answers that are considered socially acceptable, or desired (Kasomo, 2007). Therefore, to enhance validity, concepts should be well and clearly defined. Kothari (2008) also notes that confidentiality should be ensured, to safeguard against socially acceptable responses, and respondents should be given freedom to decide which information about themselves they wish to withhold.
In this study, data were collected from high school students in their final year. These students would have information about entrepreneurial intentions as they are on the verge of joining the labor market, with options for employment or self-employment. The reliability of the survey instrument was confirmed using Cronbach’s alpha (α). The measure ranges between zero and one but, what constitutes an acceptable alpha score is subject to debate. Peterson (1994) found that the reported coefficients ranged from 0.6 to 0.99. Malhotra (1993) and Tull and Hawkins (1993) recommend 0.6, as acceptable, whereas Churchill (1979) recommends 0.7. A benchmark of 0.7 was used in this study. The four constructs of perceptions of personal desirability, social desirability, feasibility of entrepreneurship and entrepreneurial intention meet this threshold as shown in Table 3. The results support the reliability of the instrument to measure the intended factors.

Table 3

*Cronbach’s Alpha Scores for Main Constructs (N = 969)*

<table>
<thead>
<tr>
<th>Construct</th>
<th>No. of items</th>
<th>Cronbach’s Coefficient Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal desirability of entrepreneurship</td>
<td>5</td>
<td>0.7576</td>
</tr>
<tr>
<td>Social desirability of entrepreneurship</td>
<td>5</td>
<td>0.7051</td>
</tr>
<tr>
<td>Feasibility of entrepreneurship</td>
<td>5</td>
<td>0.7608</td>
</tr>
<tr>
<td>Entrepreneurial intention</td>
<td>5</td>
<td>0.8016</td>
</tr>
</tbody>
</table>

For accuracy of the data collected, the researcher let the respondents understand what the research intended to measure. Key concepts including entrepreneurship, entrepreneurial intention, and small business enterprises were
explained. It was also made clear that participation was free, one could skip any questions he or she did not feel inclined to answer, that there were no preferred responses, and that the responses were confidential. Data were safely stored, to safeguard its integrity. In the data analysis, the study used SPSS (Statistical Package for Social Scientists), a well established and commonly used computer data-analysis software. The analysis also focused on constructs used to measure entrepreneurial intention, in similar research (Davidsson, 1995; Kruger, 2000) and the report was based directly on the findings of the analysis.

For its validity, this study was therefore, carried out with a relevant and appropriate group. The research instrument was reliable, and endeavors were made to get the respondents to give truthful responses. The data analysis was conducted with reputable tools and, the report drew directly from the findings. The random sampling also gives the study external validity—the ability to generalize findings to the population from which the sample is drawn.

**Procedures**

**Data collection**

Human subjects’ approval for this research was obtained from the Bureau of Education, College of Education, University of Illinois at Urbana Champaign. The data collection was conducted in Kenya and included piloting the research instrument, obtaining a list of the provincial boarding schools for four regions of Kenya including Nairobi, Eastern, Rift Valley, and Central; authorization for the research from the Office of the President, and approval letters from the Ministry of Education to the
target schools. The data collection was conducted between June and December, 2007. A total of 969 questionnaires were distributed among the eight schools selected.

The researcher arranged with the head of each school for a suitable date and time for the data collection. This was normally scheduled after classes to avoid interruption of the participating students’ learning program. It was emphasized that the school’s participation was voluntary.

Before completion of the questionnaires, the researcher explained to the students the purpose of the study: It was an examination of the factors that influence self-employment in high school students in Kenya. The researcher indicated that there were no preferred responses, that the responses were anonymous, and that it was voluntary participation: A respondent could skip any question he or she did not feel inclined to answer. The respondents then signed the consent letters.

Key concepts including entrepreneurship and small business enterprises were explained to ensure a common understanding of the terms by the researcher and the respondents. Entrepreneurship was explained as creation of a business based on Gartner (1989), but also ownership of small enterprises, not necessarily created by the respondent. Small businesses were described to include micro, and informal enterprises including kiosks, and hawking. This definition was used, as the purpose of the study was not to capture innovation, but intention towards self-employment.

The respondents answered categorical and multiple choice questions on the background and demographic variables, and gave responses to Likert-scale questions on a scale of 1-5, ‘strongly agree’ to ‘strongly disagree,’ covering perceptions of personal and social desirability, and feasibility of entrepreneurship. The exercise took
between 20-30 minutes, depending on the number of streams in a class which varied between 2 and 4, in the different schools. To safeguard anonymity and confidentiality of the responses, the researcher collected the questionnaires and the signed letters of consent separately. The respondents retained copies of the signed consent-letters for their records. The completed questionnaires were well secured against possible interference, damage, or deterioration.

**Data entry**

The completed questionnaires were all given unique identifiers ranging from 1-969, for ease of reference, and to safeguard data integrity. Data were edited for correction of obvious errors such as entry in the wrong place, for example, entry recorded as female in a boys’ school, where there were no girls. The different responses were then coded. The nominal gender variable, male, was coded (1) and female (2). Inapplicable questions, such as whether the experience was positive/negative where the respondent had indicated that he/she had never started a business, were coded (9) and missing responses (99). The areas of residence variables were coded (1) for rural, (2) for town and (3) for city. The Likert-scale questions responses were coded from 1-5 for ‘strongly disagree’ to ‘strongly agree’. A database was then created in for all the variables, in SPSS, showing what kind of variable the response was: numerical, or nominal; the size of the variable, and what the codes meant. The data were then keyed into the database. The investigator, thereafter, ran exploratory data analysis to check for obvious errors. Necessary corrections were made.
Data analysis

The data analysis included simple descriptive statistics, correlation, t-test, ANOVA (Analysis of Variance), linear regression analysis, and factor and effect size analysis. While ANOVA compared means, whether the scores for male and female are different; regression showed relationship between variables, whether the score related to gender, for predicting future values (Kothari, 2008).

Simple descriptive statistics including frequencies and percentages were used to analyze the respondents’ background and demographic data. Mean scores and standard deviation were calculated for the Likert-scale questions to develop a participant profile. Correlation analysis was performed to establish the strength of relationships between respondents’ perceptions of personal desirability, social desirability, and feasibility of entrepreneurship with entrepreneurial intention.

Subsequent to the correlation analysis, ANOVA was used to assess whether there were significant differences in the score on perceptions of personal desirability, social desirability, and feasibility of entrepreneurship for participants from different backgrounds. Further, a pair wise t-test was conducted to segregate the difference on entrepreneurial intention for participants from rural, urban, and city environments.

Linear regression analysis was used to determine the predictors of entrepreneurial intention among high school students in Kenya, and the factor and effect size analysis to determine the factors with the largest influence. The analysis gave a model that best explains variation in entrepreneurial intention among the students, and tested the applicability of the Theory of Planned Behavior in the Kenyan situation. The next section discusses the research findings based on the
respondent’s background characteristics, entrepreneurial orientation, and the key research questions.
Chapter 4

Research Findings

This Chapter presents the results of the data collection and analysis. The purpose of the study was to examine the factors that influence entrepreneurial intention of high school students in Kenya based on Ajzen’s Theory of Planned Behavior. Specifically, the study aimed to find out: (i) if there was any relationship between the perceptions of desirability and feasibility of entrepreneurship with entrepreneurial intention, (ii) if there were significant differences in these perceptions for individuals with different background factors, and (iii) if a model of factors that predicting entrepreneurship among the high school, students in Kenya students was consistent with Ajzen’s Theory of Planned Behavior: essentially testing if Adjzen propositions applied in the Kenyan situation.

Data were collected from 969 students in eight boarding secondary schools from four provinces of Kenya. The country has eight provinces that divide into districts and divisions. The four selected provinces include the more productive areas of the country that account for 61% of the population, and 71% of high school student enrollment. The new constitution promulgated in August 2010 replaces the provinces with an administration structure based on 47 counties. The schools were picked by random sampling procedure. Four of the schools were boys’ schools and four were girls’ schools and two were urban, and six rural schools. A survey questionnaire was the primary method of data collection.
Data were collected at the respective schools. Respondents completed questionnaires providing information on individual background and entrepreneurial intention, and answered three key research questions that included:

1. Is there a relationship between:
   a. respondents’ perceptions of personal desirability,
   b. social desirability
   c. and feasibility of entrepreneurship, with entrepreneurial intention?

2. Is there any significant difference in the perceptions of
   a. personal desirability
   b. social desirability, and
   c. feasibility of entrepreneurship among high school students with different backgrounds in Kenya?

3. Is Ajzen’s Theory of Planned Behavior supported in the study model of “Factors that influence entrepreneurial intention among high school students in Kenya?”

The data analysis applied SPSS. Simple descriptive statistics, correlation, ANOVA, Chi-square test and regression, and factor and effect size, analyses were applied. The next section shows the results of the data analyses. The results are presented in sections comprising of:(a) distribution of respondents’ background characteristics, (b) the relationship between the respondents’ perceptions of personal desirability, social desirability, and feasibility of entrepreneurship; and their entrepreneurial intention; (c) difference in the perceptions of personal desirability, social desirability, and feasibility of entrepreneurship, and entrepreneurial intention in respondents with different backgrounds and (d) determining a predictive model of “Factors that influence entrepreneurial intention of high school students in Kenya.”
Distribution of the Respondents’ Background Characteristics

Table 4 shows the distribution of background factors including gender, family business background, location, prior small business ownership, training, and employment experience, among the respondents. All the students participated in the survey. No student chose not to participate, and all completed questionnaires were returned. The response rate was therefore, 100%. However, as shown in total responses (Table 4), not all respondents answered all the questions.

Table 4

Background Characteristics of the Respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total Responses</th>
<th>Category</th>
<th>No of Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent’s Gender</td>
<td>969</td>
<td>Male</td>
<td>493</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>476</td>
<td>49.1</td>
</tr>
<tr>
<td>Fathers Education level</td>
<td>952</td>
<td>Below high School</td>
<td>48</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tech/Voc Education</td>
<td>246</td>
<td>25.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University</td>
<td>445</td>
<td>45.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>50</td>
<td>5.2</td>
</tr>
<tr>
<td>Mothers Education Level</td>
<td>955</td>
<td>Below high School</td>
<td>48</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>16.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tech/Voc Education</td>
<td>305</td>
<td>31.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>University</td>
<td>323</td>
<td>33.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>22</td>
<td>2.3</td>
</tr>
<tr>
<td>In what subjects do you perform best?</td>
<td>948</td>
<td>Science</td>
<td>516</td>
<td>53.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arts</td>
<td>432</td>
<td>44.6</td>
</tr>
<tr>
<td>The home where I have mostly lived</td>
<td>961</td>
<td>Rural</td>
<td>411</td>
<td>42.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Urban</td>
<td>314</td>
<td>32.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>City</td>
<td>236</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>8</td>
<td>0.8</td>
</tr>
</tbody>
</table>

(continued)
Table 4 (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total Responses</th>
<th>Category</th>
<th>No of Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>District where I have mostly lived</td>
<td>942</td>
<td>Central</td>
<td>319</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coast</td>
<td>20</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eastern</td>
<td>155</td>
<td>16.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nairobi</td>
<td>217</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Eastern</td>
<td>7</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nyanza</td>
<td>11</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rift Valley</td>
<td>208</td>
<td>21.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Western</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>27</td>
<td>2.9</td>
</tr>
<tr>
<td>Type of your school</td>
<td></td>
<td>Day school</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boarding school</td>
<td>968</td>
<td>99.9</td>
</tr>
<tr>
<td>Parents ever started a</td>
<td>963</td>
<td>Yes</td>
<td>748</td>
<td>77.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>215</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N/A</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Was the experience Positive/ negative</td>
<td>746</td>
<td>Positive</td>
<td>691</td>
<td>92.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative</td>
<td>55</td>
<td>7.5</td>
</tr>
<tr>
<td>Anyone else known started business?</td>
<td>968</td>
<td>Yes</td>
<td>916</td>
<td>94.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>52</td>
<td>5.4</td>
</tr>
<tr>
<td>Was the experience positive/ negative</td>
<td>903</td>
<td>Yes</td>
<td>838</td>
<td>91.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>65</td>
<td>7.1</td>
</tr>
<tr>
<td>Ever employed in a small company</td>
<td>969</td>
<td>Yes</td>
<td>76</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>893</td>
<td>92.2</td>
</tr>
<tr>
<td>Was the experience positive/ negative</td>
<td>74</td>
<td>Positive</td>
<td>63</td>
<td>81.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative</td>
<td>11</td>
<td>14.3</td>
</tr>
<tr>
<td>Ever started a small business</td>
<td>966</td>
<td>Yes</td>
<td>175</td>
<td>18.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>791</td>
<td>81.6</td>
</tr>
<tr>
<td>Was the experience positive/ negative</td>
<td>169</td>
<td>Positive</td>
<td>151</td>
<td>86.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative</td>
<td>18</td>
<td>10.3</td>
</tr>
</tbody>
</table>
Table 4 (continued)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total Responses</th>
<th>Category</th>
<th>No of Cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever had small business</td>
<td>956</td>
<td>Yes</td>
<td>448</td>
<td>46.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>508</td>
<td>52.4</td>
</tr>
<tr>
<td>Training in/outside class</td>
<td>446</td>
<td>In class</td>
<td>284</td>
<td>63.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Out of class</td>
<td>156</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In/outside</td>
<td>6</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Based on gender representation, of the 969 respondents 50.9% (493) were male and 49.1% (476), female. Of the total, 411 (42.4%) of the respondents came from the rural areas (centers with less than 10,000 residents), 314 (32.4%) from urban centers (towns with between 10,000-100,000 residents), and 236 (24.4%) from large cities (towns with over 100,000 people). With regard to parental background, of the 748 participants who had parents with business background, 367 (49%) were male while 381 (51%) were female and of the 352 participants who intend to start a business in 3 years, 133(38%) were female as compared to the 219 (62%) males.

**Distribution of Respondents’ Entrepreneurial Attitudes.**

Table 5 shows the summary of respondents’ mean score on the key attitude variables of perceptions of personal and social desirability and feasibility of entrepreneurship. A score of 5 indicates a very unfavorable perception of the attitude while a score of 25 indicates a very favorable perception, on the Likert-scale.
Table 5

*Mean Scores for the Key Dependent Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cases</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>95% Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived personal desirability of Entrepreneurship</td>
<td>969</td>
<td>16.89</td>
<td>± 4.30</td>
<td>[16.62,17.16]</td>
</tr>
<tr>
<td>Perceived social desirability of Entrepreneurship</td>
<td>969</td>
<td>17.57</td>
<td>± 3.97</td>
<td>[17.32,17.82]</td>
</tr>
<tr>
<td>Perceived feasibility of Entrepreneurship</td>
<td>969</td>
<td>18.70</td>
<td>± 3.88</td>
<td>[18.45,19.94]</td>
</tr>
</tbody>
</table>

*p < 0.005*

The respondents’ mean score on perception of feasibility of entrepreneurship was 18.70 (95% CI: 18.45, 19.94). The score on perception of social desirability of entrepreneurship was 17.57 (95% CI: 17.32, 17.82) and score on perception of personal desirability of entrepreneurship 16.89 (95% CI: 16.62, 17.16). Out of the possible score of 25, these scores are above the mean. No comparable finding on the levels of entrepreneurial attitudes in different constituencies was found. However, Kruger et al. (2000) found that perception of feasibility had the largest influence on the entrepreneurial intention (t=2.9, p<0.005), and perception of personal desirability (t=20, p<0.005). Perception of social desirability effect in the model was non-significant.

As shown in Table 5, the difference in these respondents’ scores on perceptions of personal desirability, social desirability, and feasibility of entrepreneurship are statistically significant, p<0.005. This statistical significance means the difference is real and not due to chance or sampling error (Kothari, 2008).
Findings on the Study: Key Research Questions 1-3

Findings on research questions 1(i)-(iii)

Research Questions 1(i) - (iii) sought to capture data on the relationship between the perceptions of personal desirability of entrepreneurship, social desirability, and feasibility of entrepreneurship with entrepreneurial intention. Data on the respondents’ perceptions of personal desirability, social desirability, and feasibility of entrepreneurship and entrepreneurial intention were collected by 20 Likert-scale questions. Possible answers ranged from ‘strongly disagree’ to ‘strongly agree’. Correlation analysis carried out to determine the relationships, as delineated in research questions 1-3, shows results as discussed below.

**Research question 1(i)**

*Is there any relationship between respondents’ perceptions of personal desirability of entrepreneurship and entrepreneurial intention?*

Research Question 1(i) sought to find out if there was any relationship between respondents’ perceptions of personal desirability of entrepreneurship and entrepreneurial intention. As shown in Table 6, there was a substantial positive correlation (r = 0.622) between the respondents’ perceived personal desirability of entrepreneurship and entrepreneurial intention. As the perception of personal desirability increases, the entrepreneurial intention also increases, and vice versa.
Table 6

*Correlation Between Respondents’ Perceptions of Personal Desirability, Social Desirability and Feasibility of Entrepreneurship, with the Intention to go into Self-employment.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Entrepreneurial Intention</th>
<th>Perceived Personal Desirability</th>
<th>Perceived Social Desirability</th>
<th>Perceived feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Intention</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Personal Desirability</td>
<td>0.622</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Social Desirability</td>
<td>0.444</td>
<td>0.504</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Perceived Feasibility</td>
<td>0.567</td>
<td>0.500</td>
<td>0.498</td>
<td>1.000</td>
</tr>
</tbody>
</table>

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

Kasomo (2007) describes five relationships, namely:

1. Very high if the value lies between 0.8 to 1;
2. Substantial (high) if the value lies between 0.6 to 0.79;
3. Moderate (average or fair) if the value lies between 0.4 to 0.59;
4. Slight (low) if the value is between 0.2 to 0.39;
5. Negligible (by chance, if the value is between 0 and 0.19, which shows there is no correlation.

*Research question 1(ii)*

*Is there any relationship between respondents’ perceptions of social desirability of entrepreneurship and entrepreneurial intention?*

Research Question 1(ii) sought to find out if there was any relationship between respondents’ perceptions of social desirability of entrepreneurship and
entrepreneurial intention. Table 6 also shows moderate positive correlation (r=0.444) between the respondents’ perceived social desirability of entrepreneurship and entrepreneurial intention. As the perception of social desirability increases, the entrepreneurial intention also increases, and vice versa. The correlation was significant at p <0.001 indicating that the perception of social desirability and entrepreneurial intention are tied in some way and the relationship is not due to mere chance.

**Research question 1(iii)**

*Is there any relationship between respondents’ perception of feasibility of entrepreneurship and entrepreneurial intention?*

In research Question 1(iii), this study sought to find out if there was any relationship between respondents’ perceptions of personal desirability of entrepreneurship and entrepreneurial intention. Table 6, shows there was moderate positive correlation (r= 0.567), between the respondents’ perceived feasibility of entrepreneurship, with entrepreneurial intention. A respondent’s perception of feasibility of entrepreneurship increased, as the respondents entrepreneurial intention increased, and vice versa. The correlation was significant at p <0.001.

**Findings on key Research Questions 2 (i)-(iv).**

Research Questions 2 (i-iv) sought to find out if there were differences in the perceptions of personal desirability, social desirability, feasibility of entrepreneurship and entrepreneurial intention for respondents’ with different background characteristics: gender, parental background, rural/urban environment, and small business employment, ownership and training. The results of comparisons of scores based on the different key research questions are presented below.
Research question 2(i).

Is there any difference in the perception of personal desirability of entrepreneurship for high school students with different backgrounds, in Kenya?

Research Question 2(i) sought to find out if there was any difference in the perception of personal desirability of entrepreneurship for respondents with different background factors. Comparison of scores on perception of personal desirability of entrepreneurship (Table 7) showed no significant difference for gender, rural/urban environment, or parental background.

Table 7

Comparison of Scores on Perceived Personal Desirability of Entrepreneurship for Respondents Various Background Factors.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent’s Gender</td>
<td>Male</td>
<td>493</td>
<td>17.01 (±4.44)</td>
<td>0.367</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>476</td>
<td>16.76 (±4.15)</td>
<td></td>
</tr>
<tr>
<td>Father’s Education level</td>
<td>Below high school</td>
<td>48</td>
<td>17.65 (±3.99)</td>
<td>0.391</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>17.21 (±4.30)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/ voc Education</td>
<td>246</td>
<td>17.09 (±4.32)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>445</td>
<td>16.68 (±4.31)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>50</td>
<td>16.64 (±4.36)</td>
<td></td>
</tr>
<tr>
<td>Mothers’ Education level</td>
<td>Below High School</td>
<td>48</td>
<td>17.41 (±3.91)</td>
<td>0.428</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>17.20 (±3.93)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/Voc Education</td>
<td>305</td>
<td>16.89 (±4.00)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>323</td>
<td>16.66 (±3.92)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>22</td>
<td>16.14 (±4.58)</td>
<td></td>
</tr>
<tr>
<td>In what subjects do you perform best</td>
<td>Science</td>
<td>516</td>
<td>16.71 (±4.40)</td>
<td>0.117</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>432</td>
<td>17.15 (±4.15)</td>
<td></td>
</tr>
<tr>
<td>The home where I have lived most</td>
<td>Rural</td>
<td>411</td>
<td>16.85 (±4.28)</td>
<td>0.427</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>314</td>
<td>16.71 (±4.40)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>236</td>
<td>17.19 (±4.19)</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
Table 7 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents ever started a business?</td>
<td>Yes</td>
<td>748</td>
<td>16.95 (±4.24)</td>
<td>0.814</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>215</td>
<td>16.73 (±4.54)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>4</td>
<td>17.00 (±2.25)</td>
<td></td>
</tr>
<tr>
<td>Anyone else known started a business</td>
<td>Yes</td>
<td>916</td>
<td>16.91(±4.33)</td>
<td>0.587</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52</td>
<td>16.57 (±3.76)</td>
<td></td>
</tr>
<tr>
<td>Ever been employed</td>
<td>Yes</td>
<td>76</td>
<td>18.22 (±3.87)</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>893</td>
<td>16.79 (±4.32)</td>
<td></td>
</tr>
<tr>
<td>Ever started a small business</td>
<td>Yes</td>
<td>175</td>
<td>18.24(±4.14)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>791</td>
<td>16.60 (±4.29)</td>
<td></td>
</tr>
<tr>
<td>Ever had training on how to start a business</td>
<td>Yes</td>
<td>488</td>
<td>17.38 (±4.15)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>508</td>
<td>16.46 (±4.39)</td>
<td></td>
</tr>
</tbody>
</table>

However, as shown in the Table, a significant difference in the perception of personal desirability of entrepreneurship was found for respondents with prior experience in small business employment, business start-up, or small business training and those without such experience. Differences were found in the personal desirability of entrepreneurship, for respondents with different background characteristics including prior small business ownership, training and education experience. Persons who had prior small business ownership experience had a score of 18.24 on personal desirability of entrepreneurship, compared to those persons who did not have such an experience, whose score was 16.46, p<0.001. Persons with prior employment experience scored 18.22, compared to persons who had never been employed who scored 16.79, p=0.005, and persons who had small business training had a score of 17.38, compared to those who did not, who scored 16.46, p<0.001.
**Research Question 2(ii).**

*Is there any difference in the perception of social desirability of entrepreneurship in high school students with different backgrounds, in Kenya?*

In research, Question 2(ii) this study sought to find out if there was any difference in the perception of social desirability of entrepreneurship for respondents with different background factors. One way ANOVA found that there was no significant difference based on prior experience in small business employment as shown in comparison of scores on perception of personal desirability of entrepreneurship (Table 8). However, significant differences were found for gender; parental background; rural, urban, and city environments; and prior experience in small business ownership and training.

**Table 8**

*Comparison of Scores on Perceived Social Desirability of Entrepreneurship for Various Respondents’ Background Factors.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent’s Gender</td>
<td>Male</td>
<td>493</td>
<td>17.29 (±3.86)</td>
<td>0.027</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>476</td>
<td>17.86 (±4.08)</td>
<td></td>
</tr>
<tr>
<td>Father’s Education level</td>
<td>Below high school</td>
<td>48</td>
<td>17.46 (±3.94)</td>
<td>0.095</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>17.15 (±4.32)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/ voc Education</td>
<td>246</td>
<td>17.60 (±3.90)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>445</td>
<td>17.86 (±3.82)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>50</td>
<td>16.50 (±4.21)</td>
<td></td>
</tr>
<tr>
<td>Mothers’ Education level</td>
<td>Below High School</td>
<td>84</td>
<td>17.30 (±3.91)</td>
<td>0.170</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>221</td>
<td>17.38 (±3.93)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/Voc Education</td>
<td>305</td>
<td>17.89 (±4.00)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>323</td>
<td>17.58 (±3.92)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>22</td>
<td>16.00 (±4.58)</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
Table 8 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>In what subjects do you perform best</td>
<td>Science</td>
<td>516</td>
<td>17.54 (±4.04)</td>
<td>0.862</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>432</td>
<td>17.59 (±3.95)</td>
<td></td>
</tr>
<tr>
<td>The home where I have lived most</td>
<td>Rural</td>
<td>411</td>
<td>16.89 (±3.94)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>314</td>
<td>17.72 (±4.06)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>236</td>
<td>18.54 (±3.07)</td>
<td></td>
</tr>
<tr>
<td>Parents ever started a business</td>
<td>Yes</td>
<td>748</td>
<td>17.77 (±3.91)</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>215</td>
<td>16.83 (±4.13)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>4</td>
<td>16.50 (±0.58)</td>
<td></td>
</tr>
<tr>
<td>Anyone else known started a business</td>
<td>Yes</td>
<td>916</td>
<td>17.56 (±3.94)</td>
<td>0.819</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52</td>
<td>17.69 (±4.53)</td>
<td></td>
</tr>
<tr>
<td>Ever been employed</td>
<td>Yes</td>
<td>76</td>
<td>18.43 (±4.01)</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>893</td>
<td>17.50 (±3.96)</td>
<td></td>
</tr>
<tr>
<td>Ever started a small business</td>
<td>Yes</td>
<td>175</td>
<td>18.44 (±4.02)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>791</td>
<td>17.39 (±3.93)</td>
<td></td>
</tr>
<tr>
<td>Ever had training on how to start a business</td>
<td>Yes</td>
<td>448</td>
<td>17.99 (±3.79)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>508</td>
<td>17.17 (±4.12)</td>
<td></td>
</tr>
</tbody>
</table>

Based on gender, female respondents had a score of 17.86 on perception of social desirability of entrepreneurship, compared to male respondents who scored 17.29, p-value =0.027. However, while this might be statistically significant, it appears there might be no practical difference between these means. Respondents whose parents had started small businesses had a score of 17.77 on perception of social desirability of entrepreneurship compared to 16.83, p=0.008 for respondents whose parents had no business experience.

Differences were also found in perception of social desirability of entrepreneurship for individuals with prior experience in small business start up,
employment and training, and those who did not have such experience. Persons who had prior small business start-up experience had a score of 18.44 on social desirability of entrepreneurship, compared to those persons who didn’t have such an experience who scored 17.39, p=0.001. Persons with prior small employment experience had a score of 18.43 on social desirability of entrepreneurship compared to those persons who did not have such an experience who scored 17.50, p-value=0.048. Similarly, persons who had small business training had a score of 17.99 for social desirability of entrepreneurship compared to those who did not have such training who scored 17.17, p=0.001.

Respondents from the rural area scored 16.89, those from the urban area scored 17.72, and those from the city scored 18.54, p<0.001. To determine which of the rural, city and urban environment actually caused the significant difference, the rural urban relationship was subjected to pairwise comparison, t-test, as shown in Table 9

*Pair-wise Comparison for Rural /Urban Environment Against the Respondents Perception of Social Desirability of Entrepreneurship.*

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Mean Score</th>
<th>95% Confidence Interval</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>411</td>
<td>16.89</td>
<td>[16.51, 17.27]</td>
<td>0.005</td>
</tr>
<tr>
<td>Urban</td>
<td>314</td>
<td>17.73</td>
<td>[17.27, 18.18]</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>411</td>
<td>16.89</td>
<td>[16.51, 17.27]</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>City</td>
<td>236</td>
<td>18.54</td>
<td>[18.06, 19.02]</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>314</td>
<td>17.73</td>
<td>[17.27, 18.18]</td>
<td>0.016</td>
</tr>
<tr>
<td>City</td>
<td>236</td>
<td>18.54</td>
<td>[18.06, 19.02]</td>
<td></td>
</tr>
</tbody>
</table>
The t-test showed significant difference on the perception of social desirability of entrepreneurship between the respondents from the urban and rural areas, between those from the city and those from rural areas, and between those from the city, and those from urban areas. The respondents from the urban areas scored 17.73 on the perception of social desirability of entrepreneurship compared to respondents’ from the rural areas who had a score of 16.89, p-value=0.005. The respondents from the city had a score of 18.54 compared to those from the rural areas who recorded a score of 16.89, p<0.001. The respondents from the city also scored 18.54, compared to 17.73, p-value=0.016 for respondents from urban areas.

**Research Question 2(iii).**

*Is there any difference in the perception of feasibility of entrepreneurship in high school students with different backgrounds, in Kenya?*

Research Question 2(iii) sought to find out if there was any difference in perception of feasibility of entrepreneurship for respondents with different background factors. Table 10 shows that based on one way ANOVA, no significant difference was found for parental background, rural/urban environment, or respondent’s small business employment for the perception of feasibility of entrepreneurship.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>p- Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent’s Gender</td>
<td>Male</td>
<td>493</td>
<td>18.97 (±3.74)</td>
<td>0.030</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>476</td>
<td>18.43 (±4.00)</td>
<td></td>
</tr>
<tr>
<td>Father’s Education level</td>
<td>Below high school</td>
<td>48</td>
<td>19.44 (±4.22)</td>
<td>0.275</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>18.67 (±3.89)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/ voc Education</td>
<td>246</td>
<td>18.83 (±3.88)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>445</td>
<td>18.65 (±3.85)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>50</td>
<td>17.74 (±3.86)</td>
<td></td>
</tr>
<tr>
<td>Mothers’ Education level</td>
<td>Below High School</td>
<td>84</td>
<td>18.78 (±4.20)</td>
<td>0.962</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>221</td>
<td>18.84 (±3.93)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/Voc Education</td>
<td>305</td>
<td>18.68 (±3.76)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>323</td>
<td>18.61 (±3.96)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>22</td>
<td>18.45 (±2.89)</td>
<td></td>
</tr>
<tr>
<td>In what subjects do you perform best</td>
<td>Science</td>
<td>516</td>
<td>18.78 (±3.81)</td>
<td>0.562</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>432</td>
<td>18.63 (±3.98)</td>
<td></td>
</tr>
<tr>
<td>The home where I have lived most</td>
<td>Rural</td>
<td>411</td>
<td>18.92 (±3.80)</td>
<td>0.281</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>314</td>
<td>18.48 (±4.04)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>236</td>
<td>18.60 (±3.80)</td>
<td></td>
</tr>
<tr>
<td>Parents ever started?</td>
<td>Yes</td>
<td>748</td>
<td>18.81 (±3.86)</td>
<td>0.263</td>
</tr>
<tr>
<td>a business</td>
<td>No</td>
<td>215</td>
<td>18.33 (±3.94)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>4</td>
<td>19.25 (±3.50)</td>
<td></td>
</tr>
<tr>
<td>Anyone else known started a business</td>
<td>Yes</td>
<td>916</td>
<td>18.76 (±3.86)</td>
<td>0.054</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52</td>
<td>17.69 (±4.53)</td>
<td></td>
</tr>
<tr>
<td>Ever been employed</td>
<td>Yes</td>
<td>76</td>
<td>18.78 (±3.81)</td>
<td>0.860</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>893</td>
<td>18.69 (±3.88)</td>
<td></td>
</tr>
<tr>
<td>Ever started a small business</td>
<td>Yes</td>
<td>175</td>
<td>19.55 (±3.62)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>791</td>
<td>18.51 (±3.91)</td>
<td></td>
</tr>
<tr>
<td>Ever had training on how to start a business</td>
<td>Yes</td>
<td>448</td>
<td>19.11 (±3.76)</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>508</td>
<td>18.32 (±3.96)</td>
<td></td>
</tr>
</tbody>
</table>
Respondent’s parents’ business background, whether the parents had started a business or not; prior small business employment experience, whether the respondent had prior employment in a small business or not; or rural/urban environment, whether the respondent lived in the rural or urban area; did not have a significant influence on the respondent’s perceived feasibility of entrepreneurship.

However, significant difference was found on the perception of feasibility of entrepreneurship for gender, and prior experience in small business startup or training. Male respondents had a score of 18.97 on perception of feasibility of entrepreneurship compared to female respondents’ score of 18.43, p-value=0.030. Persons who had prior small business ownership experience had a score of 19.55 in the perceived feasibility of entrepreneurship, compared to those persons who did not have such prior experience, who scored 18.51, p<0.001, and persons with prior small business training experience scored 19.11 compared to persons who had not had such training, who scored 18.32, p-value=0.002. Thus, gender, and prior experience in small business ownership, employment, or training had a significant impact on the respondent’s perception of feasibility of entrepreneurship.

**Research Question 2(iv).**

*Is there any difference on entrepreneurial intention among high school students with different backgrounds, in Kenya?*

Research Question 2(iv) sought to find out if there was any difference in entrepreneurial intention for respondents with different background factors. Essentially, the question intended to find out direct individual background factors’ effect on entrepreneurial intention. Table 11 shows that based on comparison of scores on Entrepreneurial Intention for respondents’ various background factors,
significant difference was found for gender, small business ownership, employment and training.

Table 11

*Comparison of Score on Entrepreneurial Intention for Various Respondents’ Background Factors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents’ Gender</td>
<td>Male</td>
<td>493</td>
<td>18.37 (±4.44)</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>476</td>
<td>17.18 (±4.52)</td>
<td></td>
</tr>
<tr>
<td>Father’s Education Level</td>
<td>Below high School</td>
<td>48</td>
<td>18.21 (±4.70)</td>
<td>0.685</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>163</td>
<td>17.67 (±4.64)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/Voc Education</td>
<td>246</td>
<td>17.93 (±4.30)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>445</td>
<td>17.75 (±4.67)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>50</td>
<td>17.00 (±3.85)</td>
<td></td>
</tr>
<tr>
<td>Mother’s Education Level</td>
<td>Below high school</td>
<td>84</td>
<td>18.10 (±4.13)</td>
<td>0.832</td>
</tr>
<tr>
<td></td>
<td>Secondary School</td>
<td>221</td>
<td>17.60 (±4.52)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tech/Voc Education</td>
<td>305</td>
<td>17.93 (±4.41)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>323</td>
<td>17.65 (±4.81)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>22</td>
<td>17.50 (±3.41)</td>
<td></td>
</tr>
<tr>
<td>In what subjects do you perform best?</td>
<td>Science</td>
<td>516</td>
<td>17.78 (±4.46)</td>
<td>0.994</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>432</td>
<td>17.79 (±4.64)</td>
<td></td>
</tr>
<tr>
<td>The home where I have mostly lived</td>
<td>Rural</td>
<td>411</td>
<td>17.57 (±4.47)</td>
<td>0.378</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>314</td>
<td>17.81 (±4.65)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>City</td>
<td>236</td>
<td>18.08 (±4.41)</td>
<td></td>
</tr>
<tr>
<td>Parent ever started a business</td>
<td>Yes</td>
<td>748</td>
<td>17.87 (±4.54)</td>
<td>0.631</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>215</td>
<td>17.52 (±4.47)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NA</td>
<td>4</td>
<td>17.75 (±2.36)</td>
<td></td>
</tr>
<tr>
<td>Anyone else known started business?</td>
<td>Yes</td>
<td>916</td>
<td>17.79 (±4.53)</td>
<td>0.931</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>52</td>
<td>17.73 (±4.46)</td>
<td></td>
</tr>
<tr>
<td>Ever been employed?</td>
<td>Yes</td>
<td>76</td>
<td>19.07 (±4.24)</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>893</td>
<td>19.67 (±4.53)</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
Table 11 (continued)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>Mean Score</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever started a small business?</td>
<td>Yes</td>
<td>175</td>
<td>19.12 (±4.48)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>791</td>
<td>17.49 (±4.48)</td>
<td></td>
</tr>
<tr>
<td>Ever had training on how to</td>
<td>Yes</td>
<td>448</td>
<td>18.11 (±4.46)</td>
<td>0.049</td>
</tr>
<tr>
<td>start a business?</td>
<td>No</td>
<td>508</td>
<td>17.53 (±4.55)</td>
<td></td>
</tr>
</tbody>
</table>

From Table 11 above, male respondents showed higher entrepreneurial intention, 18.37 (±4.44), than female respondents 17.18 (±4.52) p < 0.001, and those with prior small business ownership, 19.12 (±4.48) higher than those who had no startup experience 17.49 (±4.48) p< 0.001. Respondents who had prior employment experience showed higher entrepreneurial intention, 19.07 (±4.24) than those who did not have such experience 17.67(±4.53) p=0.010., and those who had small business training higher, 18.11 (±4.46) than those who did not have such training, 17.53 (±4.55), p=0.049.

Findings on research question 3.

Is Ajzen's Theory of Planned Behavior supported in this study model of “Factors that influence entrepreneurial intention among high school students in Kenya?”

Research Question 3 sought to establish if this study findings were consistent with Ajzen’s Theory of Planned Behavior. Based on Ajzen’s Theory of Planned Behavior, intention to perform a planned behavior precedes and influences the performance of the given planned behavior. In addition, the intention to perform a given planned behavior is influenced by the attitude toward the performance of the behavior, and the attitude is influenced by individual background factors.
Factors’ contribution to variability of intention.

Following the ANOVA on perceptions of personal, social desirability and feasibility of entrepreneurship scores for respondents with different background factors, further correlation and regression analysis was undertaken to determine a model of the predictors of entrepreneurial intention among the high school students in Kenya.

When perceptions of personal desirability, social desirability, and feasibility of entrepreneurship are regressed individually against entrepreneurial intention, results are obtained as shown in Table 12.

Table 12

*Simple Linear Regression Model of Perceived Personal Desirability, Social Desirability, and Feasibility of Entrepreneurship, Individually Against Intention to go into Self-employment.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>β (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived personal desirability of entrepreneurship</td>
<td>0.642</td>
<td>0.0027</td>
<td>[0.589,0.694]</td>
<td>&lt; 0.001</td>
<td>0.373</td>
</tr>
<tr>
<td>Perceived social desirability of entrepreneurship</td>
<td>0.487</td>
<td>0.0027</td>
<td>[0.422,0.552]</td>
<td>&lt; 0.001</td>
<td>0.183</td>
</tr>
<tr>
<td>Perceived feasibility of entrepreneurship</td>
<td>0.668</td>
<td>0.0031</td>
<td>[0.608,0.729]</td>
<td>&lt; 0.001</td>
<td>0.329</td>
</tr>
</tbody>
</table>

Perception of personal desirability of entrepreneurship explains 37.3% of the entrepreneurial intention, perception of the social desirability of entrepreneurship explains 18.3%, and perception of feasibility explains 32.9%.
Factor Analysis and Effect Size

From the above data, the perception of personal desirability of entrepreneurship has the greatest influence on the respondents’ entrepreneurial intention. However, according to Conover and Imam (1981), simple linear regression is not conclusive on the size of factors’ contribution to the dependent variable, and the researcher suggests “factor analysis” and calculation of “effect size”.

SPSS was used for factor analysis and effect size calculation. Factor analysis identifies the unique variance accounted for by each of the variables. It was used to describe variability among the three variables, of perception of personal and social desirability, and feasibility of entrepreneurship. From the finding, it is clear that the variation in the three variables mainly reflects the variation in personal desirability, given that it was the one that contributed most of the variance and its Eigen value is the only one which was found to be greater than one. Eigen value indicates variance explained by a particular factor out of the total variance.

Table 13

<table>
<thead>
<tr>
<th>Variables</th>
<th>Eigen values</th>
<th>% of the total variance explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal desirability</td>
<td>2.007</td>
<td>66.904</td>
</tr>
<tr>
<td>Social desirability</td>
<td>0.504</td>
<td>16.805</td>
</tr>
<tr>
<td>Feasibility of entrepreneurship</td>
<td>0.489</td>
<td>16.291</td>
</tr>
</tbody>
</table>

Effect size is a statistical concept that measures the strength of relationship between two variables. It was used to measure the strength of the relation between
intention and the three variables. As reflected in Table 14 below, it was found that personal desirability has the biggest magnitude of relationship with intention followed by social desirability. Feasibility yielded non-significant results.

Table 14

*Effect Size*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial Eta Squared</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal desirability</td>
<td>0.401</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Social desirability</td>
<td>0.346</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Feasibility of entrepreneurship</td>
<td>0.124</td>
<td>0.135</td>
</tr>
</tbody>
</table>

From the factor analysis and effect size, it can therefore be concluded that among the three variables, personal desirability had the largest variability with, and effect on the respondents’ entrepreneurial intention.

**Model Determination**

When perceptions of personal, and social desirability, and feasibility of entrepreneurship are regressed together against entrepreneurial intention, the results are as shown in Table 15: Together, the perceptions of personal and social desirability, and feasibility of entrepreneurship explain 47.6% of entrepreneurial intention.
Table 15

*Multivariate Linear Regression Model of Respondents Perceived Personal Desirability, Social Desirability, and Feasibility of Entrepreneurship Together Against Intention to go Into Self-employment.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p- value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived personal desirability of entrepreneurship</td>
<td>0.642</td>
<td>0.0027</td>
<td>[0.589,0.694]</td>
<td>&lt; 0.001</td>
<td>0.476</td>
</tr>
<tr>
<td>Perception social desirability of entrepreneurship</td>
<td>0.487</td>
<td>0.0027</td>
<td>[0.422,0.552]</td>
<td>&lt; 0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived feasibility of entrepreneurship</td>
<td>0.668</td>
<td>0.0031</td>
<td>[0.608,0.729]</td>
<td>&lt; 0.001</td>
<td></td>
</tr>
</tbody>
</table>

From the correlation between the perceptions of personal desirability, social desirability and feasibility of entrepreneurship and individual background factors with entrepreneurial intention, the following factors were initially factored in a regression model as shown in Table 16.

- Gender
- Ever employment (employment)
- Ever started a business (business)
- Ever trained on small business (training)
- Personal desirability (personal)
- Social desirability (social)
- Feasibility of entrepreneurship (feasibility)
Table 16

Regression of Selected Background Factors, and Perceptions of Personal Desirability, Social Desirability, and Feasibility of Entrepreneurship Together Against Personal Desirability.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.402</td>
<td>0.591</td>
<td>[0.240, 2.256]</td>
<td>0.018</td>
<td>0.493</td>
</tr>
<tr>
<td>Gender (Male=1, Female=0)</td>
<td>0.881</td>
<td>0.215</td>
<td>[0.460, 1.302]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Employed (Yes=1, No=0)</td>
<td>-0.613</td>
<td>0.398</td>
<td>[-0.168, 1.393]</td>
<td>0.124</td>
<td></td>
</tr>
<tr>
<td>Business (Yes=1, No=0)</td>
<td>0.189</td>
<td>0.282</td>
<td>[-0.365, 0.744]</td>
<td>0.502</td>
<td></td>
</tr>
<tr>
<td>Trained (Yes=1, No=0)</td>
<td>-0.187</td>
<td>0.213</td>
<td>[-0.605, 0.231]</td>
<td>0.381</td>
<td></td>
</tr>
<tr>
<td>Perceived personal desirability of entrepreneurship</td>
<td>0.424</td>
<td>0.030</td>
<td>[0.366, 0.483]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived social desirability of Entrepreneurship</td>
<td>0.085</td>
<td>0.032</td>
<td>[0.022, 0.149]</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>Perceived feasibility of Entrepreneurship</td>
<td>0.390</td>
<td>0.033</td>
<td>[0.325, 0.454]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

From the regression, the selected factors together explain 49.3% of the entrepreneurial intention. However, when other variables are factored in the model, while gender was found to be significant, prior experience in small business employment, ownership, and training were found not to be significant. Consequently, these variables were dropped from the regression model and Table 17 shows the final
model of factors that influence entrepreneurial intention among the study respondents to include:

- gender,
- perceptions of personal desirability (personal),
- social desirability (social), and
- feasibility of entrepreneurship (feasibility).

Table 17

*Regression Model of Factors That Influence Entrepreneurial Intention Among High School Students in Kenya.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>β (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p-value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.350</td>
<td>0.591</td>
<td>[0.191, 2.509]</td>
<td>0.023</td>
<td>0.486</td>
</tr>
<tr>
<td>Gender (Male=1, Female=0)</td>
<td>0.913</td>
<td>0.211</td>
<td>[0.499, 1.327]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived personal desirability of entrepreneurship</td>
<td>0.432</td>
<td>0.029</td>
<td>[0.374, 0.490]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Perceived social desirability of entrepreneurship</td>
<td>0.083</td>
<td>0.032</td>
<td>[0.020, 0.146]</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>Perceived feasibility of entrepreneurship</td>
<td>0.385</td>
<td>0.033</td>
<td>[0.321, 0.450]</td>
<td>&lt;0.001</td>
<td></td>
</tr>
</tbody>
</table>

The final prediction model (Figure A4) summarized in the function below:

\[
\text{Intention} = 1.35 \pm 0.591 + 0.913(\pm 0.211) \text{Gender (Male=1, Female=0)} + \\
0.432(\pm 0.029) \text{Personal} + 0.083 (\pm 0.032) \text{Social} + \\
0.385 (\pm 0.033) \text{Feasibility}.
\]
From this model, a respondent’s entrepreneurial intention is influenced by gender, and participant’s perceived personal and social desirability and feasibility of entrepreneurship influence the participant’s entrepreneurial intention. This finding would be consistent with Ajzen Theory of Planned Behavior, as adopted in Shapero (1982) and Davidsson (1995). However, based on the factor analysis and effect size, perception of feasibility could be left out of the model without any effect.

**Influence of the perceptions of social desirability and feasibility of entrepreneurship on perceived personal desirability.**

As shown in Table 18, perceptions of social desirability and feasibility of entrepreneurship showed significant positive relationship with perceived personal desirability of entrepreneurship; (r=0.489,p<0.001) for perceptions of social desirability and (r=0.488,p<0.001) for perception of feasibility of entrepreneurship. Therefore, both perceived social desirability and feasibility of entrepreneurship increase as personal desirability increases, and vice versa.

Table 18

*Correlation Between Respondents’ Perceptions of Social Desirability and Feasibility of Entrepreneurship With Perception of Personal Desirability.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Perceived social desirability</th>
<th>Perceived feasibility</th>
<th>Perceived personal desirability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived social desirability</td>
<td>1.000</td>
<td>0.498</td>
<td>0.504</td>
</tr>
<tr>
<td>Perceived feasibility</td>
<td>0.498</td>
<td>1.000</td>
<td>0.500</td>
</tr>
<tr>
<td>Perceived personal desirability</td>
<td>0.504</td>
<td>0.500</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (2-tailed).*
When social desirability and feasibility of entrepreneurship were regressed individually and together against the perception of personal desirability of entrepreneurship, results obtained were as shown in Table 19.

Table 19

*Regression of Respondents’ Perceptions of Social Desirability and Feasibility of Entrepreneurship Individually on Perception of Personal Desirability.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p- value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived social desirability</td>
<td>0.530</td>
<td>0.030</td>
<td>[0.470, 0.589]</td>
<td>&lt;0.001</td>
<td>0.240</td>
</tr>
<tr>
<td>Perceived feasibility</td>
<td>0.541</td>
<td>0.031</td>
<td>[0.480, 0.602]</td>
<td>&lt;0.001</td>
<td>0.238</td>
</tr>
</tbody>
</table>

The two perceptions respectively contribute 24% and 23.8% of the personal desirability of entrepreneurship, but when regressed together (Table 20), the two explain 32.1% of the perception of personal desirability of entrepreneurship.

Table 20

*Regression Model of Respondents’ Perceptions of Social Desirability and Feasibility of Entrepreneurship Together on Perception of Personal Desirability.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (slope)</th>
<th>Std Error</th>
<th>95% Confidence Interval</th>
<th>p- value</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived social desirability of entrepreneurship</td>
<td>0.357</td>
<td>0.033</td>
<td>[0.293, 0.422]</td>
<td>&lt; 0.001</td>
<td>0.321</td>
</tr>
<tr>
<td>Perceived feasibility of entrepreneurship</td>
<td>0.362</td>
<td>0.034</td>
<td>[0.296, 0.428]</td>
<td>&lt; 0.001</td>
<td>0.321</td>
</tr>
</tbody>
</table>
Chapter Summary

This study sought to examine the factors that influence entrepreneurial intention among the high school students in Kenya. Specifically, the study was to establish if there were any relationships between the perceptions of personal social and feasibility of entrepreneurship; and the intention to go into self-employment, as posited in the Ajzen’s (1991) Theory of Planned Behavior and Shapero’s (1992) Entrepreneurial Event model; and if there were any significant differences in entrepreneurial intention for participants with different background factors. Simultaneously, the study sought to determine if the observed relationships supported Ajzen’s Theory of Planned Behavior. Data were collected from 969 respondents in eight high schools in four regions of Kenya that carry 61% of the country’s population, and 75% of enrolled high school students.

In summary of the study findings, this Chapter shows that a majority of the respondents (77%) had parents with business background. On prior experience, 7.8% had employment experience in small business enterprises, 18.1% in small business ownership, and 46.2% training in small business. Among the three variables of the perception of personal desirability of entrepreneurship, perception of social desirability and perception of feasibility of entrepreneurship, the highest mean score was in the respondents’ perception of feasibility of entrepreneurship 18.70 (95% CI: 18.45, 19.94). The score on perception of social desirability of entrepreneurship was 17.57 (95% CI: 17.32, 17.82) and score on perception of personal desirability of entrepreneurship was the lowest 16.89 (95% CI: 16.62, 17.16).
The data analysis showed that the perceptions of personal desirability, social desirability, and feasibility of entrepreneurship positively correlated with entrepreneurial intention. The correlation was strongest for perceived personal desirability of entrepreneurship ($r = 0.611$) and lowest for perceived social desirability of entrepreneurship ($r = 0.428$). Correlation with perceived feasibility was ($r = 0.574$). These correlations were statistically significant, $p=0.001$.

Significant differences in perception of personal desirability of entrepreneurship was found between respondents who had experience in small business start-up and those who did not, between respondents who had prior employment experience, and those who did not, and between respondents who had small business training, and those who did not have such training. Respondents with small business ownership experience, employment, or training had significantly higher perception of personal desirability of entrepreneurship than those respondents who did not have such experience.

Significant differences in perception of social desirability of entrepreneurship was found for gender, parental background, prior small business start-up experience, employment, and training; and respondents’ rural, urban or city domicile. Male respondents showed higher perception of social desirability of entrepreneurship than female respondents, respondents with parental business background higher than those who did not have such background, and respondents with small business experience, employment, or training higher than those without. Respondents from the city also showed higher perception of social desirability than respondents from urban areas,
and respondents from urban showed higher perception than the respondents from rural areas.

For perception of feasibility of entrepreneurship, significant differences were found for gender and small business startup experience and training. Male respondents indicated higher perception of feasibility of entrepreneurship than female respondents, and respondents with small business start up experience or training higher than those who did not have such experience or training,

Further regression analysis showed the influence of some of the factors on entrepreneurial intention to be weak. However, gender and perceptions of personal and social desirability, and feasibility of entrepreneurship; remained strong mediators of entrepreneurial intention. Based on these findings, entrepreneurial intention is posited to be a function of gender, and perceptions of personal and social desirability, and feasibility of entrepreneurship. The next Chapter discusses the study findings.
Chapter 5
Discussion, Conclusion, and Recommendations

Kenya has experienced a rising unemployment problem. Currently, an estimated 12.7% of the country’s labor force is unemployed (GOK, 2008b). The problem, particularly affects the youth, people aged 15-35. An estimated 25% of youths aged 15-24, are unemployed. In the past, the government has promoted vocational and technical training and introduced policies to support small business development in efforts to create jobs through self-employment as an alternative to formal employment (GOK, 1992; 2005). However, the efforts have not succeeded as envisaged. Despite their being equipped with vocational and technical skills, and the improved policy environment support for small business development, youths graduating from various educational and technical training institutions do not go into self-employment in the numbers expected; and a large number continue to seek paid employment, many of them remaining unemployed (Kilemi, 2000; Kinyanjui, 2007).

The efforts to promote entrepreneurship would, expectedly, be premised on the personality traits and behavioral theories; and the implication that all that is required for individuals to go into self-employment is to equip them with skills to start and run small businesses. Against this, the more current thinking lays stress on the need to be able to predict entrepreneurship, in order to influence business creation and self-employment. This predictive approach emphasizes the role of intention, based on Theory of Planned Behavior (Ajzen, 1971). The approach holds greater promise in guiding formulation of policies to promote entrepreneurship (Krueger,
2000), and this study examined the factors that influence entrepreneurial intention in high school students in Kenya.

Specifically, the study aimed at finding out: (a) if there was any relationship between perceived desirability and feasibility of entrepreneurship, and individual background factors, (b) if there was any difference in perceived desirability and feasibility of entrepreneurship and entrepreneurial intention, for respondents with different background characteristics. The perceived desirability of intention included perceived personal and social desirability and the individual background factors included, gender, parental background, education, and small business and employment experience. The study also aimed at finding out (c) if any observed relationships supported Adjzen (1991) Theory of Planned Behavior, implicitly testing the applicability of the theory in the Kenyan context. Based on Ajzen’s Theory, the perceptions of personal and social desirability and feasibility of entrepreneurship precede and influence the intention to go into self-employment, and these perceptions are moderated by the individual background factors. Further, the theory posits the intention to go into self-employment as the best predictor of entrepreneurship.

The study was carried out with 969 final year students in eight secondary schools. The data were analyzed using the SPSS computer software. Scherer, et al. (1989) also indicates that high business failure rate could discourage potential entrepreneurs and according to Naffziger et al. (1994), predicting entrepreneurship is only partial, and promoting entrepreneurship should consider firm performance. Beesly and Hamilton (1984), further argue that initiatives intended to stimulate new business creation must anticipate turbulence and aim to reduce death rates among the
firms. This study, therefore, also examined literature on reducing business failure, or sustaining small business survival and growth, its flip side. The next section discusses the study findings, their implications, recommendations arising thereof, and suggestions for future research.

**Discussion**

The discussion is in five parts. The first part discusses the study sample. This is followed by a discussion of the respondents’ background characteristics. The third part discusses the study model and the fourth part discusses findings on the relationship between the respondents’ perceptions of personal and social desirability, and feasibility of entrepreneurship, with entrepreneurial intention. The last part discusses findings on the difference in the perceptions of personal and social desirability and feasibility of entrepreneurship, for respondents with different background characteristics.

Since promoting entrepreneurship also requires reduction of the high small business mortality rate (Scherer, et al., 1989; Naffziger, et al., 1994), and entrepreneurship is the nexus of enterprising individuals and entrepreneurial opportunities (Shane & Venkataraman, 2000), this section, in addition, discusses the findings in the literature review, on enhancing business survival and growth, and the creation of entrepreneurial opportunities.

**The study sample**

The sample ratio of 50.9% male and 49.1% female, with 23% of the respondents from the urban area indicates that the sample corresponds with the rural/urban distribution of the country’s population, and gender distribution in
secondary schools. The sample is therefore, representative of the target population. Besides, though the schools were picked from four of the country’s regions, the analysis indication (Table 2) that the respondents came from all parts of the country, enhances the national representativeness of the study findings.

**Respondents’ background characteristics**

The study findings that respondents’ score on the perception of feasibility of entrepreneurship was higher than their score on the perception of social desirability of entrepreneurship, and the score on personal desirability was the lowest, suggests that the respondents perceived entrepreneurship as more feasible than personally or socially desirable, and more personally desirable than socially desirable.

The difference in the respondents’ perception of feasibility and desirability of entrepreneurship may be attributed to a number of factors. Since attitudes can be learned (Krueger, 2000) the respondents’ higher perception of feasibility of entrepreneurship could be due to higher exposure to aspects of feasibility of entrepreneurship compared to other perceptions, in business education and training or a higher absorption of feasibility aspects of business creation. Vocational education in Kenya has concentrated on feasibility aspects of business creation without adequate attention to the desirability of entrepreneurship (KIE, 2010, Kilemi 2000, King, 1996). A strong internal locus of control could also reduce the impact of social norms, and could explain the respondents’ low perception of the social desirability of entrepreneurship (Adjzen, 1987; Baggozzi, et al., 1992).

Despite the lack of clear understanding of its cause, the respondents’ higher scores in perception of feasibility compared to perception of personal and social
desirability of entrepreneurship suggests that, students leaving high school perceive entrepreneurship as more feasible than personally or socially desirable, and more personally, than socially desirable. Since perception of feasibility of entrepreneurship is more about the ability to successfully create a business (Krueger et al. 2000), the respondents’ higher perception of feasibility than personal and social desirability of entrepreneurship, also suggests a higher awareness or interest in business creation than in a career in entrepreneurship.

The findings that adolescents are interested in careers and this is a stable phenomenon (Kennedy and Peterman, 2003; and Ayyagari, 2007) indicates that this can be used to predict entrepreneurship.

**The study model**

The study model indications that entrepreneurial intention of high school students in Kenya is a function of the gender of the respondent, and his or her perceptions of personal, and social desirability and feasibility of entrepreneurship \( (Intention = 1.35 (±0.591) + 0.913(±0.211) \, Gender \, (Male=1, \, Female=0) + 0.432(±0.029) \, Personal \, + \, 0.083 \, (±0.032) \, Social \, + \, 0.385 \, (±0.033) \, Feasibility) \), suggests that entrepreneurial intention of high school students in Kenya is influenced, and can be predicted from student’s gender, and the perceptions of personal and social desirability, and feasibility of entrepreneurship. The study finding that these variables contribute 48.6% of the respondent’s entrepreneurial intention indicates that the factors are strong predictors of entrepreneurial intention, and this is consistent with other research findings.
In Ajzen’s theory, attitude towards the act, social norms and perceived behavioral control which are respectively equivalent to personal desirability, social desirability and feasibility of entrepreneurship explain up to 60% of the variance in intention, and intention can explain up to 30% or more of the variance in the target behavior (Krueger 1996). Self-efficacy or perceived feasibility is the strongest predictor, predicting up to 35% of career intention (Bandura, 1986). In an empirical study using Ajzen’s model, Krueger et al. (2000) found that perceptions of feasibility and social and personal desirability of entrepreneurship explained 35% of intention, and 40.8% using the Shapero model. However, while based on factor analysis and effect size, the perception of personal desirability had the greatest effect on entrepreneurial intention in this study, using Shapero model, Krueger found that perception of feasibility had the greatest effect and the effect of social desirability was non-significant in the final model, though the raw correlation between social norms and intentions was significant ($R^2=0.31$, $p<0.002$).

This study findings are also consistent with Davidsson’s (1995) finding that “conviction” influenced entrepreneurial intention, and that conviction was influenced by general and domain attitudes including payoff, societal and knowhow similar to the perceptions of personal, social and feasibility, which are also influenced by personal backgrounds. According to Davidsson, similar to this study finding, payoff or the perception of personal desirability of entrepreneurship had the largest influence, on entrepreneurial intention followed by perceived feasibility. Social or the perceived social desirability was relatively unimportant, which Davidsson attributes
to the entrepreneurs’ relatively individualistic start-up motivations. Davidsson also found direct influence on intention for gender and role models.

Kim and Hunter (2009) in a meta analysis of various studies, further observes that, though different intention models contain different terms explaining attitude behavior relationship, all of them trace causal links from intention. According to the researcher, the Meta analysis showed that intentions successfully predict behavior, and attitudes successfully predict intentions. Basu and Virick (2008) also found attitudes, subjective norm, and behavioral control significantly correlate with entrepreneurial intention.

This study model that entrepreneurial intention is a function of gender and respondent’s perception of desirability and feasibility of entrepreneurship, and a strong predictor of intention is therefore consistent with Ajzen’s Theory of Planned Behavior and supported by other researchers’ findings. The influence on entrepreneurial behavior itself would be the subject of a longitudinal study. However, two significant aspects of this study model are the direct gender effect, and non-significance of parental background on entrepreneurial intention.

*The direct gender effect*

Most entrepreneurs are male and researchers posit gender to have a strong influence on entrepreneurial behavior. (Davidsson, 1995; Matthews & Moser, 1995; Scherer et al., 1989; Wilson et al., 2004). Most researchers also assume that gender, together with other background factors, influence intention indirectly only through attitudes (Krueger, 2000). However, as in this study, Davidsson (1995) found gender to have some direct and indirect effect on entrepreneurial intention. Researchers,
therefore, differ on the direct gender effect and this could, hence, be an area for further research.

*Non-significance of parental background influence on respondents’ entrepreneurial intention*

Researchers also show that parental background is one of the major factors that influence entrepreneurship. Davidsson (1995) observes that apart from the over-representation of males, the most consistent result in entrepreneurship research is the marked over-representation among those who found their own business of individuals with parental role models. According to Davidsson, about 40% of small business owner-managers had a self-employed parent compared with about 15% of other vocational groups. In his final model, Davidsson (1995) suggests that vicarious experience’s direct influence on entrepreneurial intention should be factored in. Therefore, the finding that parental background did not have significant influence on entrepreneurial intention of high school students in Kenya is not consistent with other research findings and could, like the direct gender effect, be a subject of future research.

*Correlation of perceptions of desirability and feasibility of entrepreneurship with entrepreneurial intention.*

This study findings that the respondents’ perceived personal and social desirability and feasibility of entrepreneurship were positively correlated with entrepreneurial intention means that the entrepreneurial intention would increase with a rise in the three attitudes and vice versa. Other researchers found that the perceived desirability and feasibility of entrepreneurship positively correlate with
entrepreneurial intention (Krueger et al. 2000; Busa & Vrik, 2008). Increasing perceived desirability and feasibility of entrepreneurship, therefore, increases the entrepreneurial intention.

The finding of positive correlation (0.622, p<0.001), (0.444, p<0.001), and (0.567, p<0.001), respectively, between respondents’ perception of personal desirability; social desirability; and feasibility of entrepreneurship with entrepreneurial intention, means that, an increase in the perception of personal desirability is accompanied by higher increase in increase in respondents’ entrepreneurial intention, than an increase in perception of social desirability, and feasibility of entrepreneurship. Factor analysis and effect size further indicate personal desirability to have the greatest influence on intention among the three entrepreneurial attitudes. This differs with Krueger et al. (2000) finding that based on Ajzen theory; perception of feasibility of entrepreneurship had the largest influence on entrepreneurial intention. However, this study finding that perception of personal desirability of entrepreneurship had the largest influence on entrepreneurial intention, followed by the perception of feasibility is consistent with Davidsson (1995).

Since the respondents’ score of perception of personal desirability of entrepreneurship was higher than the score in perception of social desirability, and feasibility (Table 3), the finding that the perception of personal desirability has the strongest correlation with entrepreneurial intention suggests that an increase in the attitude where the respondents scored lowest, contributes the highest increase, in entrepreneurial intention.
Correlation of the perceptions of feasibility and social desirability of entrepreneurship with perception of its personal desirability.

The finding that the perceptions of social desirability and feasibility of entrepreneurship have positive correlation with respondents’ perceived personal desirability of entrepreneurship indicates that rise in the perceptions of social desirability and feasibility of entrepreneurship is accompanied by an increase in its perceived personal desirability and vice versa. The finding that perception of social desirability of entrepreneurship contributes 24% of perception of personal desirability, and perception of feasibility 23.8% means that the two perceptions indirectly contribute to entrepreneurial intention through perception of personal desirability, in addition to their direct influence. Krueger et al. (2000) also found that perceived social desirability correlates with perceived personal desirability of entrepreneurship ($R^2=0.29, p<0.004$), and that perception of feasibility correlates with perception of social desirability of entrepreneurship ($R^2 =0.31, p<0.002$).

The observed indirect effect means that an increase in the perceptions of feasibility and social desirability of entrepreneurship leads to an increase in its perceived personal desirability. This is in addition to the perceptions of social desirability and feasibility of entrepreneurship’s direct effect on the respondents’ entrepreneurial intention.

Effect of individual background factors on the respondents’ entrepreneurial intention.

The finding that respondents with different background characteristics differed in their perceptions of personal and social desirability and feasibility of
entrepreneurship suggests that some background factors influenced the respondents’ entrepreneurial attitudes. Some research findings are consistent with the conclusions in this study as indicted on individual background factors, below. However, limited research has been done on the effect of background factors on entrepreneurship as the assumption has been that the effect of background factors is mediated through attitudes, and there is need for more research in this area.

**Gender**

This study found that there was a difference in perception of social desirability and feasibility of entrepreneurship between male and female respondents, p=0.027, and p=0.030, Tables 8 and 9 respectively, together with the findings that 44.7% males, compared to 27.9% females, want to go into entrepreneurship within the next three years, indicate predominance of male in entrepreneurial intention, and a difference in entrepreneurial attributes between genders, with the males having more entrepreneurial attributes. The findings also suggest that males are more likely, than females, to become entrepreneurs.

Several researchers concur on male predominance in entrepreneurship (Davidsson, 1995; Matthews & Moser, 1995; Scherer et al., 1989, Wilson et al., 2004). Wilson et al. (2004) found that interest in entrepreneurship, as a career, was lower in girls, than in boys. However, the difference in entrepreneurial attributes between genders is not unanimously ascribed. Different researchers variously attribute the difference in entrepreneurial orientation in male and females to higher entrepreneurial intention in males than females (Crant, 1996; Wilson, Marlino & Kickul, 2004; Zhao, Seibert, & Hills, 2005), gender stereotyping, or absence of role models (Davidsson,
Therefore, while the gender difference and male predominance in entrepreneurial intention among the respondents may be accepted, its cause could be attributed to a variety of factors and the area could be of future research interest.

**Influence of role models**

While this study model did not show significant influence of availability of a role model on entrepreneurial intention, the study findings that there was significant difference in the perception of social desirability of entrepreneurship between respondents whose parents had a business background and those without such background, p=0.008, suggests that presence of parental role model increased a respondent’s perception of social desirability of entrepreneurship.

Researchers show that role models and, particularly, parental role models are a major influence on entrepreneurial behavior. Davidsson (1995) found direct role-model influence on conviction. However, as in this study, the general view is that as with other background factors, role models influence entrepreneurial intention indirectly through attitudes, though there could be need for further research in view of Davidsson’s findings.

Other important aspects of role models are that role model influence is gender specific, its effect is enhanced by the quality of the role model, and both poor performing and successful role models have influence, but different impacts. De Wit and van Winden (1989); and Dunn and Holtz-Eakin (1995) found that self-employed fathers influence their sons and Delmar et al. (2000) found that mothers influence daughters. Gist (1987) and Bandura (1977), found that effects of modeling are enhanced when there is a perceived similarity between the subject and model in terms
of personal characteristics and capabilities, and Scherer et al. (1989) observes that individuals who observe a low-performing parental role model also possess expectations of pursuing an entrepreneurial career, but their self-efficacy, may be lower than those of individuals who observe a high-performing parental role model. The gender of the entrepreneurial parent was however not captured in this study and could be an area for future studies.

**Prior experience**

The finding in this study that perceived personal, and social desirability, and feasibility of entrepreneurship, and entrepreneurial intention, differed for respondents with different prior experience in small business ownership, employment, and training means that respondents who had prior experience, employment or training had a stronger perception of personal desirability of entrepreneurship, than those who did not, and that prior experience in small business startup, employment, and training could influence the respondents’ entrepreneurial intention.

The finding of a difference in the perception of feasibility of entrepreneurship between persons with prior small business ownership and/or training experience, and respondents who did not have such experience, means that, prior experience in business start up, employment, and training influenced perception of feasibility of entrepreneurship; and that, increasing prior exposure in business start up or training increases the perception of feasibility of entrepreneurship.

This study findings on difference in entrepreneurial intention for respondents with different prior experience suggests that prior experience has influence on entrepreneurship and this is supported in other research. Davidsson (1995) found that
small firm work experience had a small effect on perceived know-how or perception of feasibility, but no other effects. Other researchers also underscore the role of prior experience in entrepreneurial intention. Basu and Virik (2008) for example, found that education and prior experience in small business led to higher perception of feasibility of entrepreneurship, and its personal desirability. Therefore, based on research, prior experience influences entrepreneurial intention.

*Urban/rural environment*

The study finding that respondents from rural, urban and city areas differed in their entrepreneurial intentions suggests that environment could have an influence on entrepreneurial behavior. The influence may not be due to the environment per se but to the attributes of the environment. Majority of financial institutions are located in urban areas and rural areas are also constrained by lack of transport infrastructure and business role models more than the urban area and cities (Gemini, 1999). Such differences could explain the difference in entrepreneurial intention in the different environments.

*Implications*

This study has a number of important implications. One key implication is that the study findings can be generalized to the rest of the source population. Since the study sample corresponds to the study population, the findings can apply to other students finishing high school in Kenya. Other implications relate to the theory of entrepreneurship, policy, and entrepreneurship education and training.
Implications for entrepreneurship theory

Another important implication of this study findings is that entrepreneurial behavior can be enhanced or changed through deliberate actions. The finding that individual background factors which can be altered, such as prior experience, employment, and training; and the perceptions of desirability and feasibility of entrepreneurship which can be learnt, influence entrepreneurial intention, imply that it is possible to take deliberate action to influence creation of entrepreneurs. Importantly, this study model therefore collaborates the view that entrepreneurship can be nurtured (Brockhaus, 1994; Gartner 1990, Shane & Venkataraman, 2000) and similar to Kruger (2000), Davidsson (1995) and Shapero (1982), informs on possible strategies in the continued quest for ways to enhance and harness entrepreneurship for economic development.

The finding that the perceptions of personal and social desirability and feasibility of entrepreneurship influence entrepreneurial intention, and that these perceptions are influenced by individual background factors indicates consistency with Ajzen’s (1981) Theory of Planned Behavior and implies that Ajzen’s Theory of Planned Behavior applies in a cultural environment that is different from that in the US, and particularly so, in a developing country. This is significant as many countries with different social and economic milieu grapple with ways to promote entrepreneurship.

The finding that gender has direct influence on entrepreneurship also has important implications for entrepreneurship theory. Since most intention researchers have assumed that gender, as well as other individual background factors, influence
entrepreneurial intention, and subsequently entrepreneurship, indirectly only through attitudes (Krueger et al., 1995), the finding that besides the indirect effect, gender has a residual contribution on entrepreneurial intention, suggests need for continued research in this area.

Policy implications

The finding that background characteristics, such as prior experience, that is changeable; and attitudes, which can be learned, influence entrepreneurial intention, in principle implies support for entrepreneurship education to influence entrepreneurial orientation. EU (2008) defines entrepreneurship education to include:

1. Developing personal attributes and horizontal skills that form the basis of an entrepreneurial mindset and behavior.
2. Raising students’ awareness of self-employment as possible career option.
3. Practical experience on enterprise projects and activities, such as students running small businesses firms
4. Providing specific business skills and knowledge on how to start and successfully run an enterprise.

While vocational training provides skills that could form the basis of self-employment, entrepreneurship education creates perceptions of desirability and feasibility of entrepreneurship and enhances the chance of a trainee becoming self-employed.

Other researchers find that entrepreneurship education influences entrepreneurial intention, and support its inclusion in orienting persons to self-employment. Kennedy and Peterman (2003) found that participation in an entrepreneurship-training program influenced students’ perception of personal and social desirability of entrepreneurship. The students, who participated in an
entrepreneurship-training program, reported significantly higher perceptions of both desirability and feasibility of entrepreneurship. Basu and Virick (2008) also found that prior education in entrepreneurship enhanced positive attitude, and perceptions of personal and social desirability, and feasibility of entrepreneurship. Soutaris et al. (2007) and Kuratko (2006) found that entrepreneurship education programs raised entrepreneurial attitudes and intention.

This study finding that the perceptions of desirability and feasibility of entrepreneurship influence entrepreneurial intention and therefore, subsequently, entrepreneurship also implies that for government and public policy to enhance entrepreneurship, the policies must influence entrepreneurial attitudes and intention. Government entrepreneurship’s promotion policies, therefore, need to have provisions that specifically address the perception of desirability and feasibility of entrepreneurship. Krueger et al, (2000) further emphasizes the need to focus on the “perception” rather than just reality.

Another policy implication is the need for a strong entrepreneurship culture. This study finding that the respondents’ perception of feasibility of entrepreneurship was the highest and the perception of personal desirability the lowest, while the perception of personal desirability had the greatest impact on entrepreneurial intention, implies need to enhance the social and personal desirability of entrepreneurship. An entrepreneurship culture is an environment that supports entrepreneurs and conveys the message that the entrepreneur is recognized and valued in the society (Krueger, et al. 2000). Based on Gibb (1988), an entrepreneurship culture includes abundant positive role models, ample opportunities for
familiarization with small business tasks, a network of independent business contacts, provision, formally and or informally, of knowledge, and insight into process of small business management, and opportunity to practice entrepreneurial attributes reinforced by the society’s culture during formative years. Krueger et al. (2000) also observes that even if the quantity and quality of potential entrepreneurs are increased, the credibility of entrepreneurship among critical stakeholders in the community must be increased, that government officials, politicians, suppliers, investors, bankers, friends, neighbors and the community at large must also see and communicate entrepreneurship as desirable and feasible.

While the entrepreneurship culture fuels gradual, long-term desirability of careers in self-employment (Gibb, 1988), an increase in desirability of entrepreneurship in the short run, implies elevating the consciousness of community members about entrepreneurship and keeping self-employment as a “hot issue.” Scott and Twomey (1988) distinguish between three categories of factors that influence aspiration of students to entrepreneurship, including predisposing factors that develop over several years and include entrepreneurship culture; triggering factors that are situational and short-term, such as the effects of looking for work, and career advice received; and possessing a business idea. Events such as the World Entrepreneurship Day, Chicago Entrepreneurship Run, Entrepreneurship Conferences, and the Global Entrepreneurship Week, have been institutionalized elsewhere, to create vibrant interest in entrepreneurship, and keep it topical and could be considered as triggering factors. In Kenya, similar activities are used to forge awareness on thematic issues
such as literacy, gender, and environment. Similar activities could be applied to bolster interest in entrepreneurship in the country, in the short run.

**Implications for entrepreneurship education and training.**

This study finding’s implications for education and training include propositions to enhance entrepreneurial intention, and the changeable individual background characteristics.

*Enhancing entrepreneurial intention*

The finding that the perceptions of personal and social desirability, and feasibility of entrepreneurship influence entrepreneurial intention, and hence entrepreneurship, implies that entrepreneurship education should include measures that influence these attitudes. From this study findings, entrepreneurial intention can be enhanced by influencing the following factors:

1. Small business ownership experience
2. Small business employment
3. Small business training

The study finding that prior small business ownership and employment and training, influence entrepreneurial intention suggests that entrepreneurship education should integrate experiential and practical training with theory courses. Prior experience could be influenced through opportunities for self-employment and internship programs for school youths. In this direction, the Kenya government is implementing a 5 year (2010-2015) World Bank-funded Youth Empowerment Project. However, the program that comprises labor-intensive works and social services, private sector internships and training and capacity of the Ministry of Youth
Affairs and Sports (MoYAS) to implement the national youth policy and increase the institutional capacity for youth policy planning, seeks to prepare the youths more for salaried employment rather than self-employment.

Experiential learning emphasizes the role where students engage in some activity, reflect upon the activity, derive insight from the analysis, and incorporate the result through a change in understanding (Kolb, 1984). Knowles (1984) andragogy — the theory of adult learning — which could apply to post high school, also emphasizes experiential learning. According to Knowles, adults are self-directed, need to know why they need to learn something, approach learning as problem solving, learn best when of immediate value, and need to learn experientially. Gibb (2002) and Sogunro (2004) also argue that traditional teaching methods such as, lectures and examinations, are not the most effective means of encouraging entrepreneurial skills’ development, and that in entrepreneurial learning, traditional teaching methods need to be complemented by activities such as learning by doing and engaging students in active learning.

Other advocates argue that the experiential training should involve getting the trainee to come up with a business idea. Scott and Twomey (1988) observe that possessing a business idea, is the key to small business aspirations, and that possessing an idea, alone, may prompt entrepreneurial aspirations, and provides an independent pull toward entrepreneurship. Bygrave (1997) and Ronstadt (1988) observe that more than 50% of startup ideas emerge from a person’s prior experience. However, despite this recognition of the role of experiential learning, KIE (2010a) summative evaluation of the 8-4-4 system, notes that entrepreneurship training in
Kenya has been mainly theory, and proposes including more practical and experiential business and entrepreneurship training.

Krueger (1996) further observes that perception of perusal desirability of entrepreneurship depends on the perceived likely outcomes and rewards of target behavior by potential entrepreneurs, and that the perception of social desirability is tied to what important people in the potential entrepreneur’s life think about the individuals launching a venture. He further observes that feasibility drives from ones’ belief in their competence, self-efficacy and the belief that the situation will permit them to exercise that capability. Based on this, therefore, to enhance personal desirability requires an emphasis on the outcomes and the rewards of entrepreneurship, and their perceived benefits. Enhancing social desirability requires that there is a clear sense that important players approve of self-employment; and enhancing feasibility requires promotion of self-efficacy and the support environment to make entrepreneurship seem more doable. This implies that to enhance personal desirability measures should be promoted to enhance the outcome and rewards and the perception of their desirability including autonomy; and enhancing social desirability requires ensuring important individuals support entrepreneurship. Parents are considered an important role model and in this context entrepreneurship promotion should include ensuring that there is a positive view of entrepreneurship by parents in order to attain desired outcomes. This suggests that one of the reasons that entrepreneurship promotion has not succeed could be that, while efforts are made to socialize students into entrepreneurship, the parents could be giving a different message, and it is necessary to cultivate parents’ support. The effect of self efficacy
and support environment implies that, training potential entrepreneurs in self-employment skills could enhance feasibility. Self-efficacy can be enhanced by teaching competence and providing critical role models. Krueger also argues that the teaching should be internalized than just teaching, and emphasizes that perceptions are far more important than objective reality, and the messages should be properly interpreted.

McGrath and King (1995) also distinguish between entrepreneurship self-employment, at the higher end of the micro-enterprise sector and the larger subsistence self-employment at the lower end: and though this study views entrepreneurship broadly to include all self-employment, youths would be encouraged to consider the entrepreneurship self-employment. Target groups, for self-employment orientation besides the in-school youths would, therefore, also include the out-of-school unemployed, and youths in subsistence self-employment. This study finding on entrepreneurial intention and prior experience imply need for the following:

1. For both the in-school, and the out-of-school-unemployed, youths:
   - enhance the desirability and feasibility of entrepreneurship.
   - education and training in small business creation and management.

2. For youths in subsistence employment:
   - enhance the desirability and feasibility of entrepreneurship as some may have been pushed into self-employment
   - education and training in entrepreneurship to help identify higher level-business opportunities based on interest and experience.
   - business financing
   - business growth management.

3. Training and education for the unemployed and in subsistence self-employment to utilize existing investment in schools (Nelson, 1986).
Other researchers (Brazeal & Krueger, 1994; Krueger, 1996; Kuehn, 2008) argue that these background measures should be complimented with measures that encourage small business creation which may include the following:

1. Measures that reduce the cost of setting up, and running small businesses, or enhancing their revenue and profitability including such measures as reduction or exemption from taxes, fees and licenses, lower interest rates, and other targeted investment allowances.

2. Provisions that mitigate risk and the consequences of business failure, including laws that favor rehabilitation of weak enterprises.

3. Programs and initiatives that raise community awareness about the intrinsic rewards of starting a business, and self-employment, as compared to salaried employment, including stressing on the benefits and imperative for self-employment, and highlighting successful businesses to show entrepreneurship also, as feasible.

4. Enhancing the benefits of self-employment as compared to wage employment.

5. Visibly recognizing, potential and existing entrepreneurs, to convey community perception of entrepreneurship as desirable.

6. Ensuring availability and visibility of resources.

7. Providing skills development for evaluating opportunities, mobilizing resources, and managing enterprises.

8. Increasing the diversity of opportunities to increase feasibility perception.

Another implication of the influence of prior experience is that entrepreneurship education should be offered to individuals already in employment, interested in self-employment; and to small business enterprise owners interested to grow their businesses. As suggested by King (1996), this could be in evening programs and involve a maximalist approach where the mainstream is enterprise education with vocational training an add-on, where necessary, and could include public servants and retirees. Such training would help civil servants equip themselves
with the basic skills for the establishment and management of their own businesses while still in service, rather than wait until the last minute of disengagement from service, and apart from ensuring safe-landing, offer productive outlets for their terminal benefits (SMEDAN, 2008). Besides, as observed by Singh and de Noble (2000), individuals with prior experience have the benefits of know-how, network, and resources in creating enterprises, and are the next generation of entrepreneurs.

**Implications for other individual background characteristics**

The implications for other individual background characteristics include suggestions on role models, gender, and rural/urban entrepreneurs.

**Role models**

The finding that availability of role models influences the perception of social desirability of entrepreneurship implies that entrepreneurship education should include exposure to appropriate role models. Bandura (1986) Social Learning Theory posits use of role models as very effective in training. Krumboltz, Mitchell, & Jones (1976) and Mitchell & Krumboltz (1984) propose role models as an important environmental factor in forming career preferences and making a career path salient to the observer. Davidsson’s (1995) finding that role models have a significant influence suggests their use in training programs. Exposure to role models could include using credible business people in training, visits to local or attachment and mentoring programs. The view that role models’ influence is gender specific (De Wit & van Winden, 1989; Dunn & Holtz-Eakin, 1995) Delmar et al. (2000). Gist (1987) and Bandura (1977), and Scherer et al. (1989) implies need for gender correspondence between the role models and trainees.
Gender consideration

The view that gender influences entrepreneurial intention implies that gender aspects should be considered in entrepreneurship education. Female and male entrepreneurs are motivated by different factors, go into business for different reasons and often face different gender related constraints (Bennet & Dann, 2000; Orser, Barbara, Riding & Kathryn, 2006; McCormick, 2001). Both, therefore, require different consideration. Brush (1992) urges that business should be looked at through the eyes of women, and gender should be incorporated in business training.

OECD (2004) also points out that gender consideration is important because women entrepreneurship has been identified as untapped resource and its being neglected in the past has resulted in lower women participation rates in entrepreneurship than men do. Further, IFC (2006) observes that eliminating gender-based inequalities in education and access to agricultural inputs in Kenya could result in a one-off increase in as much as 4.3% in GDP growth, and a sustained year-on-year increase of 2.0 to 3.5% in GDP growth. According to IFC, without increased attention to the gender dimensions of economic development, Kenya is unlikely to meet its growth targets.

Consideration for rural/urban environment

The study findings that rural or urban environment significantly influences the perception of social desirability of entrepreneurship implies that the entrepreneurship training should take into account the trainees rural/urban background. Rural enterprises are faced with different constraints from urban enterprises. Markets, infrastructure and skilled labor are major problems, while the urban enterprises cite
competition, and lack of credit as the more serious constraints (Gemini Survey, 1999). The difference in the constraints also implies need for different focus and emphasis in rural and urban training, while the finding that respondents from the rural area perceived entrepreneurship as less socially desirable implies that training in the rural areas need to lay emphasis on the social desirability of entrepreneurship.

**Creation of entrepreneurial opportunities.**

Krueger (2000) Runyan, Droge, and Swinney’s (2008) observation that both the “unemployment push” based on the assumption of positive relationship between unemployment and self-employment, and the entrepreneurial approach based on a negative relationship that entrepreneurship leads to reduction of unemployment are complementary, suggests that the two approaches be part of job creation strategy in Kenya. This calls for provision of the unemployed with skills to and requisite support facilities to enable them create enterprises, which addresses the supply side of entrepreneurship, and for creation of opportunities that attract unemployed people into self-employment, addressing the demand side. While the former includes equipping individuals with technical and vocational skills and training in identifying and evaluating opportunities and mobilizing necessary resources for business creation, the latter involves a multi-sectored approach to development to diversify entrepreneurial opportunities (Krueger, 2000).

**Sustaining small business survival and growth**

Research view that high mortality rate could discourage entrepreneurship implies that promoting entrepreneurship requires reduction of the rate. Based on the research findings that small business risk, inadequate finance access from the formal
lending institutions, and poor management contribute to the high mortality rate, suggests that entrepreneurship education should include emphasis on information, innovative “just do it” financing strategies, and growth management.

In enterprise growth process, Churchill and Lewis (1983), and Greiner (1978) also show delegation to play a key part in enterprise growth, not just incrementally but more so in internal organization and from the startup and survival to growth and maturity stages (Achtenhagen, et al., 2010). Davidsson (1989) also observes that in entrepreneurial education, a major issue may be how to teach entrepreneurs to delegate responsibility and detach themselves from routine tasks and be happy with it. In addition, according to Bhide (2000), start-ups naturally pass through successive stages provided the entrepreneur is willing to delegate authority to subordinates.

To enhance the small business survival and growth, delegation should, therefore, also be considered as part of entrepreneurship education, together with the non-conventional finance sources and strategies to overcome the liability of newness. In Kenya, the challenge is also to know in what stage the different categories of small business informal, micro and small business fall so as to know their problems and strategies to move each category to the next stage of growth.

Conclusions and Recommendations

Based on these study findings and their implications, the following recommendations were made:

Recommendations for policy makers

Some of the important conclusions for this study is that social desirability of entrepreneurship is low, high small business mortality rate discourages
entrepreneurship, and entrepreneurship promotion requires both enterprising persons and entrepreneurial opportunities. These conclusions suggest that to increase entrepreneurial orientation, it is necessary to enhance the perception of personal desirability of entrepreneurship, and also the social desirability and feasibility of entrepreneurship, reduce small business mortality rate and generate entrepreneurial opportunities. To enhance entrepreneurial orientation among the youths in Kenya, recommendations were made for policy makers to:

1. Include entrepreneurship education in primary, high school and post high school education curriculum. While there is debate on the role and place for entrepreneurship training in educational institutions, given the high unemployment in Kenya, the dominant agriculture and informal sectors, declining formal employment opportunities, and the imperative for self-employment, students leaving school at all levels need exposure to entrepreneurship education. This could help change the “employment mind set” and encourage more youths to venture into self-employment. Gibb (1988) argues that almost anyone can run a small business, depending on the demands of the firm.

2. Formulate public policies to enhance entrepreneurship target the entrepreneurial attitudes and intention.

3. Institute policies and programs that support the evolution of a strong entrepreneurship culture, and enhance the credibility of entrepreneurship as desirable and feasible among key stakeholders and the community at large including:

   a. Measures to enhance the success of small business enterprises. This could comprise initiatives that reduce the cost of setting up and running small businesses, or enhance their revenue and profitability including such measures as reduction or exemption from taxes, fees and licenses; lower interest rates, and other targeted investment allowances.

   b. Establish programs and initiatives that raise community awareness about the intrinsic rewards of starting a business and self-employment, by stressing on the benefits and imperative for self-employment, and highlighting successful businesses to show entrepreneurship as feasible.
c. Ensuring that there are provisions that mitigate risk and the consequences of business failure, including laws and regulations that support rehabilitation of weak enterprises that show potential.

d. Visibly recognizing, potential, and existing entrepreneurs, to convey community perception of entrepreneurship as desirable.

e. Ensuring availability and visibility of resources for business creation and expansion.

f. Providing skills development for evaluating opportunities, mobilizing resources, and managing enterprises.

g. Increasing the diversity of opportunities to increase perception of feasibility of entrepreneurship.

4. Planning and implementing a program of activities to raise consciousness of entrepreneurship as a “hot topic,” and maintaining an atmosphere likely to trigger entrepreneurial behavior. Events such as the World Entrepreneurship Day, Chicago Entrepreneurship Run, and various other activities, have been institutionalized elsewhere to raise consciousness and maintain vibrant interest in entrepreneurship. In Kenya, such activities have also been used to create local awareness on thematic issues such as literacy, gender and environment and similar events and activities could therefore be used to bolster interest in entrepreneurship as a career. While the entrepreneurship culture supports a gradual orientation, the proposed measures create a vibe and make it fashionable.

**Recommendations for education and training**

To enhance entrepreneurial orientation among the youth in Kenya, the findings and conclusions of this study suggest need for the following:

1. Integration of entrepreneurship education with general education, general and vocational education, and vocational education and training, curriculum. While vocational skills training provide a basis for self-employment, entrepreneurship education would enhance self-employment orientation for students leaving school at different levels as it raises the perceptions of desirability and feasibility of entrepreneurship.

2. For youths in school, and unemployed out of school youths, inclusion of measures to enhance perceptions of personal desirability, social desirability, and feasibility of entrepreneurship in Entrepreneurship education that may include:
a. Small business start-up experience  
b. Small business employment  
c. Small business Training.

Where vocational aspects cannot be included in the curriculum, due to cost constraints, education can be offered on a minimalist basis, without the vocational component.

3. For out of school youths in subsistence employment, inclusion of measures to identify higher level business opportunities based on individual experience and interest including:

a. Business skills  
b. Business growth.  
c. Credit availability.

4. Entrepreneurship education and training to include practical experience in small business creation and management. This could comprise practical business creation, games, and simulations for students to get experience in business creation and management. The training should involve identifying business ideas and could provide business plan preparation. Possessing a business idea is a sure way to business creation (Bhide, 2000)

5. Entrepreneurship education and training to give consideration to gender aspects. Female and male business owners face different constraints and are motivated by different factors, and the consideration of the gender-based challenges would help improve female participation and contribution to development. Lack of successful female entrepreneurs as role models is cited as one reason for male predominance, and female under-representation in entrepreneurship.

6. Rural/urban enterprises face different challenges and entrepreneurship education should include consideration for rural or urban entrepreneurs.

7. Role models have been found to have strong influence in entrepreneurship and should be incorporated in entrepreneurship education. This could include inviting practicing entrepreneurs as speakers, or field visits to operating enterprises. Role models are also gender-sensitive and while observing a low performing model has impact, more successful role models lead to higher self-efficacy. Due consideration should therefore be given to these aspects in selecting role models. Highlighting female role models could help improve women participation and performance in entrepreneurship.

8. Prior experience is a vital cue for self-employment, and in addition to exposing students to experience, in a more comprehensive approach, entrepreneurship education should target employed individuals including civil
servants and retirees, and small business owners interested to improve performance. Training civil servants would equip them with the basic skills for the establishment and management of their own businesses while still in service, rather than wait till the last minute of disengagement from service. Apart from ensuring safe landing, the training would offer productive outlets for retirees’ terminal benefits. Individuals leaving employment are better advantaged for self-employment due to their experience, network, and accumulated savings, and are the next generation of entrepreneurs.

**Recommendation for creating entrepreneurial opportunities**

Entrepreneurship should include equipping individuals to start business enterprises and creating entrepreneurial opportunities. While the former leads to creation of small and micro enterprises that provide jobs largely by their sheer numbers, and is short term, the latter is long-term and creates growth oriented enterprises that generate jobs by expansion. The two address the demand and supply sides of entrepreneurship, and are complementary.

**Recommendations for small business survival and growth**

A large number of enterprises die early. The high mortality rate could discourage potential entrepreneurs, and orientating the youth towards self-employment requires improved business survival and growth rate. This includes support to enable small business enterprise owners overcome the major causes of business failure which includes: liability of newness, inadequate finance, and poor management; and would include risk reduction strategies, unconventional financing strategies and business growth management, including information, bootstrapping and delegation. This would help reduce mortality rate and render self-employment more feasible, and more desirable.
Suggestions for Further Research

This study sought to establish if there were relationships between perceptions of personal desirability, social desirability, and feasibility of entrepreneurship with the entrepreneurial intention, and if there were any relationships between the perceptions and background factors of high school students in Kenya. The study was a survey with 969 respondents in eight high schools, picked in a convenient sample due to the cost and access constraints. Data collection was by self-reporting.

The study was premised on the Ajzen’s (1991) theory that entrepreneurial intention precedes and is the best predictor of behavior. The principal findings were that there was positive correlation between the perceptions and entrepreneurial intention. Background factors were also found to mediate perceptions. From the conduct and findings, the following suggestions arise for future research:

1. Further studies should be conducted to replicate the findings using different and more robust samples including random sampling which will not be so much constrained by cost and accessibility considerations.

2. Carry out studies with objective data-collection methods other than self-reporting.

3. It would also be useful to test the intention theory on other populations including employees in public and private sector organizations, teachers and unemployed youth to be able to design better self-employment strategies. King (1996) wonders to what extent the self-selection into vocational training signifies interest in self-employment and one interesting study group would be trainees in TIVET institutions.

4. There is need for future studies to establish the link between entrepreneurial intention and business creation. This requires a longitudinal study.

5. Parents are a major influence on the children’s career choice. One of the ways to promote entrepreneurial intention is therefore vicariously through the parents. The low parental influence on female participants in this study would be an important area in future research.
6. While it is important to create new enterprises, it is equally vital for established enterprises to survive and grow. One of the problems in Kenya is lack of growth among small business enterprises — missing middle — (Nelson & Muroki, 1997). Research indicates that enterprises grow through various stages and that by knowing what stage an enterprise is at, it is possible to know the problems to anticipate and possible solutions. Research in micro, small and medium enterprise in Kenya should be carried out to see if there is intra and inter-group growth in micro, small and medium enterprises in sales, employment and management practices. Such research would help design more effective strategies for enterprise growth and development in Kenya.

7. Intention to create a business is the most defining characteristic of entrepreneurship. Personality traits and background factors have also been found to contribute to entrepreneurship. Researchers indicate that individual background factors influence entrepreneurial intention through attitudes. Further research should also examine any link between intention and the personality traits including risk-taking, motivation, innovation and the desire for autonomy.
References


Foster, P.J. (1965). The vocational school fallacy in development planning. In C.A Anderson & M.J. Bowman (Eds.), Education and economic development (pp. 142-166). Chicago, IL: Aldine.


Gartner, B. W. (Summer 1989). Who is an entrepreneur is the wrong question? Advances in Entrepreneurship, 47-67.


Appendix A

Figures and Tables

*Figure A1*, Ajzen’s (1961) model of Theory of Planned Behavior.

*Figure A2*, Shapero’s Entrepreneurial Event model.
Figure A3, Davidsson’s (1995) model of Determinants of Entrepreneurial Intention.
Figure A4. Hypothesized model of factors that influence entrepreneurial intention of high school students in Kenya.

Figure A5. Modified model of factors that influence entrepreneurial intention of high school students in Kenya.
<table>
<thead>
<tr>
<th>Phases</th>
<th>Direct supervision</th>
<th>Supervised supervision</th>
<th>Indirect control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-operated</td>
<td>Owner-managed</td>
<td>Professional management</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existence</th>
<th>Survival</th>
<th>Success</th>
<th>Take-off</th>
<th>Resource Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conception</td>
<td>Startup</td>
<td>Survival</td>
<td>Growth</td>
<td>Expansion</td>
</tr>
</tbody>
</table>


| Owner/Firm relationship |  |  |  |  |  |

| Kenya SMEs | Pre-start up | Under 3 years Survival self-employment and Micro-enterprises? | 3-5 years 5-10 employees? | Over 5 years 10-50 Employees? |

*Figure A6. Synthesis of small business enterprises growth models: Firm characteristics, goals, constraints and strategies.*
<table>
<thead>
<tr>
<th>Model</th>
<th>Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greiner (1978)</td>
<td>Creative</td>
</tr>
<tr>
<td></td>
<td>Direction</td>
</tr>
<tr>
<td></td>
<td>Delegation</td>
</tr>
<tr>
<td></td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td>Churchill &amp; Lewis (1983)</td>
<td>Existence</td>
</tr>
<tr>
<td></td>
<td>Survival</td>
</tr>
<tr>
<td></td>
<td>Success</td>
</tr>
<tr>
<td></td>
<td>Take off</td>
</tr>
<tr>
<td></td>
<td>Resource</td>
</tr>
<tr>
<td></td>
<td>Maturity</td>
</tr>
<tr>
<td>Mount, Zinger &amp; Forsyth (1993)</td>
<td>Inception</td>
</tr>
<tr>
<td></td>
<td>Survival</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
</tr>
<tr>
<td></td>
<td>Expansion</td>
</tr>
<tr>
<td></td>
<td>Maturity</td>
</tr>
<tr>
<td>Steinmetz (1969)</td>
<td>Owner-Operated</td>
</tr>
<tr>
<td></td>
<td>Owner-Managed</td>
</tr>
<tr>
<td></td>
<td>Functional</td>
</tr>
<tr>
<td></td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td>Supervised</td>
</tr>
<tr>
<td></td>
<td>Supervision</td>
</tr>
<tr>
<td></td>
<td>Indirect</td>
</tr>
<tr>
<td></td>
<td>Control</td>
</tr>
<tr>
<td>Kazanjian (1988)</td>
<td>Conception</td>
</tr>
<tr>
<td></td>
<td>Survival</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
</tr>
<tr>
<td></td>
<td>Stability</td>
</tr>
<tr>
<td>Cooper (1979)</td>
<td>Start up</td>
</tr>
<tr>
<td></td>
<td>Early Growth</td>
</tr>
<tr>
<td></td>
<td>Later Growth</td>
</tr>
<tr>
<td>Scott (1987)</td>
<td>Entrepreneurial</td>
</tr>
<tr>
<td></td>
<td>Functional</td>
</tr>
<tr>
<td></td>
<td>Organization</td>
</tr>
<tr>
<td></td>
<td>Divisional</td>
</tr>
<tr>
<td></td>
<td>Decentralized</td>
</tr>
<tr>
<td>ILO</td>
<td>Pre-start up</td>
</tr>
<tr>
<td></td>
<td>Start-up</td>
</tr>
<tr>
<td></td>
<td>Survival</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
</tr>
<tr>
<td></td>
<td>Maturity</td>
</tr>
</tbody>
</table>

*Figure A7, Stages of Business – Growth Models*
Table A1

*Vocational and Technical Training Institutions Curriculum*

<table>
<thead>
<tr>
<th>National Polytechnics</th>
<th>Technical Institutes</th>
<th>Youth Polytechnics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information and Computer</td>
<td>Carpentry and Joinery,</td>
<td>Carpentry &amp; joinery,</td>
</tr>
<tr>
<td>Technology, Chemical</td>
<td>Building Technology,</td>
<td>Building Technology,</td>
</tr>
</tbody>
</table>
Appendix B

Survey Questionnaire

Survey of entrepreneurial intention of high school students in Kenya

**DETACH THIS PAGE AND SEND BACK SEPARATELY.**

Dear Participant,

This study is being undertaken by Kibuka Gethaiga, a doctoral student in Human Resource Development, in the College of Education, University of Illinois, Urbana-Champaign campus. The study is being guided by Prof. James Allen Leach as the Responsible Project Investigator (RPI). The purpose of the study is to understand your perceptions about desirability and feasibility of entrepreneurship to you (how you like the idea of going into your own business, and to what extent you think it is something you are capable of doing). The study involves your completing a questionnaire on your demographic and background information, intention to go or not to go into your own business and what you or your family and friends think about it. The questionnaire should take no longer than 20 minutes. The study would help in the design and development of policies and programs to support promotion of entrepreneurship in schools to help reduce the level of unemployment among school leavers. Your participation is voluntary and your answers will be kept anonymous. They cannot be traced back to you. Your responses will also not be contained in any school record and will not impact your status at the school.

The final report on the study will be presented to the research committee headed by Dr. Leach and the report could also be used for a conference paper on entrepreneurial orientation among high school students in Kenya. No names of the respondents or the schools where the study was carried out will however appear in the final or any other report presented. Though complete answers would be most helpful for the study, you are free to skip any question you do not wish to answer, or withdraw from the study at any point. You will be welcome to a summary of the research if requested. If you have any questions or concerns, feel free to contact Kibuka Gethaiga at kibuka@uiuc.edu or tel. 217 390 4620 or Dr. James Leach at 217-333-0807 or jaleach@uiuc.edu
Dear Participant,

The purpose of this survey is to understand your intentions and perceptions about going into your own business (becoming an entrepreneur). The survey will take approximately 20 minutes. Your participation is voluntary and your responses will be anonymous and kept confidential. Your participation will assist in helping improve entrepreneurship teaching in high schools to better prepare students wishing to go into self-employment. The findings of the survey will only be accessible to the researcher. If you have any questions or concerns, please feel free to contact Kibuka Gethaiga at kibuka@uiuc.edu or 217 390 4620 or 254-722-713-215.

Background Information:

1. Gender
   Male   Female

2. Age
   _____ Years

3. Father’s highest education level
   Below high school
   Secondary school
   Technical & voc edu.
   University or higher edu.

4. Mother’s highest education level
   Below high school
   Secondary school
   Tech & vocational edu.
   University or higher edu.

5. In what subjects do you perform best?
   Science   Arts

6. The home where I have mostly lived is in a town
village with

7. The name of the District where I have mostly lived is ____________________

8. Type of your school (mark all categories that apply)
   Boys’  Girls’  Mixed

9. Have your parents ever started a business?
   Yes  No

10. If (yes) to Q 9, was this a positive or negative experience for you?
    Positive  Negative

11. Has anyone else you know ever started a business?
    Yes  No

12. If (yes) to Q 11, was this positive or negative experience for you?
    Positive  Negative

13. Have you ever been employed in a small or new company?
    Yes  No

14. If (yes) to Q 13, was this a positive or negative experience for you?
    Positive  Negative

15. Have you ever started a small business?
    Yes  No

16. If (yes) to Q 15, was this a positive or negative experience for you?
    Positive  Negative

17. Have you ever had training in how to start a small business?
    Yes  No

18. If (yes) to Q 17 was the training in or outside class subjects?
    Part of class work  Not part of class

Please indicate who gave the training, if outside class work ____________________

Indicate your level of agreement with the following sentences:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>

19. Starting a business is much more desirable to me than other career opportunities I have
   1 2 3 4 5

20. I would rather have my own business than pursue another promising career
   1 2 3 4 5

21. There is no limit as to how long I would give maximum effort to establish my own business
   1 2 3 4 5

22. My personal philosophy is to do what ever it takes to
Establish my own business                        1      2    3    4    5
23. Having my own business would entail great satisfaction for me 1      2    3    4    5
24. I believe that my family members would approve of my decision to start my own business 1      2    3    4    5
25. I believe that my friends would approve of my decision to start my own business 1      2    3    4    5
26. I believe that my parents would approve of my decision to start my own business 1      2    3    4    5
27. My community regards owning ones business more highly than taking a job 1      2    3    4    5
28. I think I would be more respected if I had my own business than if I was employed 1      2    3    4    5
29. Overall, my skills and abilities will help me start a business 1      2    3    4    5
30. My past experience will be very valuable in starting a business 1      2    3    4    5
31. I am confident I can put in the effort needed to start a business 1      2    3    4    5
32. If I tried to start a firm, I would have a high chance of succeeding 1      2    3    4    5
33. Starting a firm and keeping it working would be easy for me 1      2    3    4    5
34. My professional goal is establishing my own business 1      2    3    4    5
35. I will make every effort to start and run my own business in the future 1      2    3    4    5
36. I have seriously thought about starting a business 1      2    3    4    5
37. I have got the firm intention to start a business some day 1      2    3    4    5
38. There is a strong probability that I will start my own business in the next 3 years 1      2    3    4    5

THANK YOU FOR YOUR ASSISTANCE AND YOUR PRECIOUS TIME!
Vita

Gethaiga Kibuka was born in Nyeri District, in Kenya. After his primary and secondary school education, Kibuka obtained a Bachelors degree in Economics and Government from Nairobi University.

After working in finance and accounting in Nairobi City Council, in 1978 Kibuka was awarded a government scholarship to study for an MBA degree in Emporia State University, USA. He then worked in the Industrial Development Bank, and Kenya Investment Authority. In 1996, Kibuka set up his own consulting firm offering Business Development Services. He attended extensive training with various organizations including United Nations Industrial Development Organization and International Labor Organization.

In 2003, Kibuka joined the University of Illinois for a doctoral degree. In the course of his studies, Kibuka was attached to Technology Entrepreneur Centre in the School of Engineering and the Center for Entrepreneurial Leadership in the School of Business, where he acquired considerable exposure to entrepreneurship. During the later part of his studies, Kibuka lectured in entrepreneurship at Jomo Kenyatta University of Agriculture and Technology, and the Catholic University of Eastern Africa, in Nairobi, Kenya.

Kibuka has published books on entrepreneurship development in Kenya. Among these are Investors Guide on Financial Resources for Industrial Projects in Kenya; Small Business Enterprises: Sources of Finance and other Support services; and Opportunities: Going into Business for Yourself. Currently Kibuka is the proprietor of Enterprise Development Centre for Africa (EDCA) in Nairobi.