Journal of Enterprising Culture
Vol. 23, No. 4 (December 2015) 405–447

DOI: 10.1142/S0218495815500144

Entrepreneur's Intrapersonal Resources and Enterprise Success among Micro and Small Scale Women Entrepreneurs

Celestine Katongole*, John C. Munene, Muhammed Ngoma and Samuel Dawa
Department of Leisure and Hospitality
Makerere University Business School
P. O. Box 1337, Kampala, Uganda
**kcelestine@mubs.ac.ug*

Arthur Sserwanga
Mutesa I Royal University, Uganda

The study explores the relationship between intrapersonal resources (formal schooling, formal entrepreneurial education and training, and informal entrepreneurial training and education) and success of micro and small enterprises (MSEs). Using Structural Equation Modeling, the study tested the mediating role of entrepreneurial competence in this relationship on a sample of 303 women drawn from the tourism and hospitality sector. The results reveal that entrepreneurial competence plays a mediating role in the relationship between intrapersonal resources and enterprise success. The results also show that informal entrepreneurial training is important in complementing formal entrepreneurial training and education towards enterprise success. It is also shown that formal schooling has a weak relationship with entrepreneurial competence but has varying relationships with both financial and non-financial success.

Keywords: Women entrepreneurs; micro and small enterprises; entrepreneurial resources; formal schooling; formal entrepreneurial education; informal entrepreneurial training and education; enterprise success; financial success; non-financial success; entrepreneurial competence; Africa; Uganda.

INTRODUCTION

Drawing from economic and organisational models, enterprise success has often been defined in terms of economic performance (Wiklund *et al.*,

* Corresponding author.

2009; Honig, 1998). The term enterprise success has sometimes been used interchangeably with growth and performance in the literature (Reijonen and Komppula, 2007; Hmieleski and Baron, 2009, Danson, 1999). The indicators of success that have been used include sales growth, profit, turnover, number of orders or contracts, balance sheet results and number of employees (Wiklund *et al*., 2009; Walker and Brown, 2004; Honig, 1998). In a micro enterprise perspective however, evidence suggests that non-financial aspects are as relevant to entrepreneurs as the financial aspects (Reijonen and Komppula, 2007; Jennings and Brush, 2013; Walker and Brown, 2004; Chell and Baines, 1998). This implies that success in MSEs is a personal issue depending on the circumstances of the entrepreneur. This is further compounded by the integration of the entrepreneur and the enterprise (McCartan-Quinn and Carson, 2003) which integrates the entrepreneur's perception of enterprise success with his/her personal success. The non-financial objectives which MSE entrepreneurs often pursue include self-fulfillment, goal achievement, pride in the job and flexible lifestyle (Walker and Brown, 2004).

Formal schooling, formal entrepreneurial education and training, and informal entrepreneurial training and education are included in one model to predict enterprise success among MSE women entrepreneurs in Uganda. These three forms of training and education are treated as intrapersonal resources, because they can be relied upon in the productive operations of the firm. Another reason is that these resources can drive value extraction from other resources rendering a myriad of *services* in the production process of an enterprise (Penrose, 1959).

Most scholars only use formal schooling as a measure of education while enterprise success is measured largely by entrepreneur's earnings (Sluis *et al*., 2005). These measurements may not be comprehensive enough especially for the women entrepreneurs in a developing country for a number of contextual reasons (Dawa and Namatovu, 2015a). It is in this regard that it has been stated that women do not measure success entirely in financial terms (Cliff, 1998; Katongole *et al*., 2014). Entrepreneurial education though has been shown to possess a strong relationship with enterprise success because of its ability to influence entrepreneurial competence (Stone, 2008).

The role of resources towards enterprise success has been widely studied (Helfat and Peteraf, 2003; Sirmon *et al*., 2011). However we argue that the results so far do not fully explain this relationship. For example Dawa and Namatovu (2015b) showed that increase in personal resources does not necessarily result in growth for women entrepreneurs.

Because women entrepreneurs in Uganda's tourism sector operate in a resource scarce environment, intrapersonal resources accumulated over time may be the main resources to draw upon when faced with difficulties or opportunities without the benefit of external support. The original purpose of some of these resouces may be different from the purpose for which they are needed (e.g. to learning traditional hospitality for purely domestic purposes) such that the women will need to combine and re-combine them in a manner that creates value. Thus we expect that these resources have a stronger predictive power of enterprise success when combined.

Man *et al.* (2002) in asserting that entrepreneurial competence affect the firm's long term performance state that the concept is characterized by its long term orientation, controllability, relativity and dynamism which provides a relevance for its use in investigating performance of small firms. Competences generally reflect the capacity of an entrepreneur to be innovative, generate industry experience, participate in business networks, have financial awareness, and treat employees as a business asset which in turn influences success of firms (Morrison *et al.*, 2003).

This paper therefore contributes to understanding the distal relationship between resources and entrepreneurial success. In this regard it is argued that this relationship is mediated by competences.

Research Context

The field of entrepreneurship has been key in fuelling emergence, growth and development of many economic sectors. One sector that has particularly benefited from the growth of the entrepreneurship field is tourism (Thomas, 2000; Getz, 2004) so much that it now accounts for about 9% of global GDP and 260 million jobs (World Travel and Tourism Council, WTTC). The industry has created enormous opportunities for developing countries to earn foreign exchange, reduce unemployment and poverty. Such a contribution of the tourism sector has been possible partly because of entrepreneurs who have turned tourism resources into products (Koh and Hatten, 2002). Unlike other economic sectors, in tourism a product represents the overall experience which a visitor obtains from the combination of attractions, accommodation, transport and support services (World Tourism Organization; European Travel Commission, 2011). The product is offered by several actors, many of whom are often operating micro and small enterprises (Shaw and Williams, 2004). Entrepreneurship

facilitates opportunity recognition, creative resourcing, innovation, timing of action and relation management in these enterprises (Morrison and Thomas, 1999).

Despite the importance of entrepreneurship to tourism development, there is general recognition among tourism scholars that the field of entrepreneurship has received limited scholarly attention (Morrison, 2002; Alonso and O'Neill, 2009; Ateljevic and Page, 2009). This dearth of scholarly investigation has resulted into misplaced presumptions being made about small tourism enterprises and overly general conventional wisdom being perpetuated (Thomas *et al.*, 2011). Consequently, the contribution of tourism research to policy making, planning and future success of the tourism small businesses may be impeded (Page *et al.*, 1999). Furthermore, the few existing studies have been made in the developed economies, without much attention to the developing countries (Morrison *et al.*, 2008).

The setting of the study is Uganda, an East African country that has over the last decade experienced remarkable tourism growth. Tourism generates over US$1 billion to the Ugandan economy, employs 484,000 (directly and indirectly), has grown by 215% over the period 2001–2011 and is expected to generate US$2.6 billion by the year 2024 (Ministry of Tourism, 2014). The sector is Uganda's largest services export industry and is the second largest (14%) after trade (61%) in Uganda's economy (UBOS, 2011). The growth and expansion of tourism has provided opportunities for women both as employees and entrepreneurs. As employees, women take up to 70% of the jobs in the industry and as entrepreneurs, they own almost half (46%) of all tourism enterprises in the country (Uganda Bureau of Statistics, 2011).

The involvement of women in the sector particularly as entrepreneurs provides opportunities for furtherance of scholarly investigation of some of the management assumptions that have been held true in other parts of the world, and other fields of study. For Uganda, this investigation is important because women are marginalized, often denied access to ownership of resources and active engagement in economic activities (Munene *et al.*, 2005). One sector where women have become very active in the recent past is tourism. The predominance of women in Uganda's tourism sector is attributed to the association of the sector with unsociable hours of work (72 per week compared to 45 for other sectors) yet monthly pay ranks among the lowest in the country. Furthermore, the sector attracts less educated employees (75% of all employees are school dropouts [UNDP, 2013]). Because 96.5% of girls who join primary school never make it to high school (Ministry of Education and Sports,

2013), chances are high that they end up in the tourism sector. Tourism is able to attract such girl school dropouts because socio-culturally, girl children are groomed to be hospitality providers in homes (cooks, caretakers, doing domestic chores, etc), having basic informal skills to fit in the tourism sector.

THEORY DEVELOPMENT

The Human Capital Theory

The human capital theory (Becker, 1964, 1975) is a useful framework in explaining the nature of intrapersonal resources that we are studying. This is because human capital represents the sum of a person's skills, experience, capabilities, values and tacit knowledge that are economically usable (Edvinsson and Malone, 1997). Proponents of the human capital theory believe that investment in education and training increases productivity, knowledge about sources of finance, technical and managerial skills, and self-efficacy (Zhao *et al*., 2005; Wright *et al*., 1998). This form of capital is a key element in improving a firm's competitive advantage (Schultz, 1993) and is regarded as the most valuable of all types of capital (Becker, 1993). The human capital theory is built on three major assumptions: labour skills are durable and flexible; current productivity affects future productivity; and there is a positive association between the amounts of education and individual earnings (Albrecht, 1976). From these assumptions, it can be said that education increases efficiency of people which in turn increases organisational success (Selvarajan *et al*., 2007). Human capital can be attained through education, training, and work experience (Becker, 1993) and once developed, can improve entrepreneurial competence (Stone, 2008).

Whereas the general proposition of the human capital theory is that education increases productivity, within the entrepreneurship field, general education has not been found to increase entrepreneurial competence (Morrison, 2000). However, a specific branch of education — entrepreneurship education has been found to have a significant effect on competence of entrepreneurs (Dumas, 2001). Entrepreneurship education builds entrepreneurial competence because it focuses on developing specific skills and values that help entrepreneurs to sustain business operations. These skills and values help the entrepreneur to attain enterprise success (Wiklund *et al*., 2009), are useful in identifying business opportunities and help pursuit of these opportunities (Alvarez and Busenitz, 2001).

Entrepreneurial experience also serves as a source of information for knowledge which helps to identify and exploit entrepreneurial opportunities (Corbett, 2007).

Defining Enterprise Success in Micro and Small Scale Enterprises

A successful enterprise may be considered as one that has not been placed into bankruptcy, or has not discontinued operations (Watson, 2007). Although this definition has been accepted in a few studies, it is inadequate because even enterprises that cannot break-even can be regarded as successful. Such a proposition may not always hold true because there is a difference between closure and failure (Headd, 2003). An enterprise may have been discontinued not as a result of failure but because its resources were diverted to pursue more profitable opportunities. A successful enterprise can close when the owner accepts employment elsewhere or chooses to retire and sells it. However, failure could mean ceasing to exist (discontinuance for any reason); closing or a change in ownership; filing for bankruptcy; closing to limit losses; and failing to reach financial goals (Headd, 2003). Overall though, enterprise success should be seen as sustained satisfaction of principal stakeholder aspirations (Jennings & Beaver, 1997). Therefore, in MSEs enterprise success is subjective, and closure after should not be construed as failure.

Previous literature has shown that women do not measure enterprise success entirely in financial terms alone (Cliff, 1998; Katongole *et al.*, 2014) because this metric has gender underpinnings. A further critique of this is that it is limiting to describe enterprise success using externally visible measures alone (Sørensen and Chang, 2006; Jennings and Brush, 2013) because various entrepreneurs have different ways of defining success, and some of these measurements are personal subjective measures (Reijonen and Komppula, 2007).

INTRAPERSONAL RESOURCES AND ENTERPRISE SUCCESS

The returns from formal schooling for entrepreneurs are relatively lower than for employees (Dumas, 2001) yet formal and informal education and training significantly influence entrepreneurship outcomes.

Although there are mixed results about the relationship between formal schooling and enterprise success, there seems to be agreement that individuals from families with a business background are likely to succeed

because of the apprenticeship training and informal education (Dhaliwal, 2000). Prior experience in business may only be helpful if the person has capacity to learn from such experience. Due to the differences in levels of entrepreneurial experience, a number of studies have shown that novices and experts think differently when it comes to opportunity identification and pursuit (Sarasvathy, 2008), suggesting that experience is necessary but not a sufficient condition for enterprise success.

Whereas experience is vital to enterprise success, it is mainly the entrepreneurial and industry experience that seem to have a significant effect on enterprise success. This is because these types of experience provide an entrepreneur with specific knowledge and skills that are key in driving venture performance. On the other hand, labour force experience has a weak impact on entrepreneurship because it rarely gives an individual the key skills required to survive in venture creation (Hamilton, 2000; Bosma, van Praag, Thurik & de Wit, 2004).

Women entrepreneurs in particular tend to possess limited enterprise success because they have limited formal schooling and prior business ownership experience (Cliff, 1998). Formal schooling, especially at the level of vocational and college education increases incomes of an entrepreneur (Honig, 1998) but women often lack it, and thus are unlikely to attain financial success. Generally, having ability to read and count is vital for the day to day operations of a business and as the enterprise size increases, college education becomes more useful and relevant (Honig, 1998).

However, judging women as less successful based entirely on financial measures of success may be unfair (Katongole *et al*., 2014). Women attach value to both financial and non-financial success (Davis and Shaver, 2012; Kelley *et al*., 2011). Because women have limited education, they are likely to work harder to attain informal training to be able to generate entrepreneurial competencies, and once these competencies are attained, these women are likely to attach more value to non-financial success. The pursuit of non-financial success may be greater for less formally educated women in sub-Saharan Africa because society looks at them as people with low skills (Bruni *et al*., 2004). Women are also often presented as lacking in status and thus this social construction limits their ability to access resources which are made available by the environment. However, they may also attach value to financial success because women are the primary caregivers to children and family dependents and lately many women serve as the sole bread earners in their homes (Kiggundu, 2002). These obligations drain the resource base of the enterprise and thus limit enterprise financial success (Renzulli and Aldrich, 2005).

INTRAPERSONAL RESOURCES AND ENTREPRENEURIAL COMPETENCE

Intrapersonal resources build the competence of the entrepreneur which can help to provide a competitive advantage to the firm (Reynoso, 2008). Man *et al.* (2002) consider entrepreneurial competences to be higher-level characteristics encompassing traits, skills and knowledge stating that they may be perceived as the total ability of the entrepreneur to perform successfully. In their paper they propose that long-term performance of SMEs can be explained by entrepreneurial competences. However, apart from knowledge (know what) and skills (know how), entrepreneurial competence also needs the development of appropriate attitudes and motives (know why), social skills (know who) and the know-when (Johannisson, 1993). Despite the exhaustive study of entrepreneurial competence, its measurement and its relationship to entrepreneurial performance and business success is in need of further rigorous research and development in practice (Mitchelmore and Rowley, 2010). Entrepreneurial competence allows for identification of opportunities and search of resources to exploit these opportunities (Chandler and Jansen, 1992; Erikson, 2002) and makes entrepreneurs become dynamic, flexible and self-regulating (Haynie and Shepherd, 2009). The ability to identify business opportunities is partly accounted for by the experience one accumulates in the course of life (Baron and Ensley, 2006) but exploiting these opportunities often requires technical knowledge and abilities (Corbett, 2007). This thinking suggests that the human capital components of entrepreneurial knowledge and experience are key in building entrepreneurial competence (Markowska, 2011). Therefore entrepreneurial competence can be learned and developed (Baron and Ensley, 2006; DeTienne and Chandler, 2004), and the learning process is gradual, taking the dimensions of formal and informal entrepreneurial training and education. Both these types of training and education can help the entrepreneur develop key skills and knowledge necessary for recognizing and exploiting entrepreneurial opportunities (Markowska, 2011). However, this issue is yet to receive wide scholarly attention (Markowska, 2011) yet this is vital to our understanding of the whole concept of entrepreneurship (Krueger, 2007). As earlier alluded to, informal entrepreneurial training and education can be obtained from a number of sources including the people who are close to the entrepreneur. This training can also be obtained through the experiences that people go through in the course of the entrepreneurship process. Looking at this form of training from this perspective is important because human experiences

create assumptions and behaviors which a person can adapt to life's circumstances (Bandura, 1986). A person's behavior in business situations is sometimes a result of the identification process, one where a person patterns his thoughts, feelings or actions after another person who acts as a model (Bandura, 1969). In some instances, the willingness of a person to engage in certain actions is facilitated by others (Markowska, 2011). Indeed research has found that the people whom the entrepreneurs regard as superior tend to exert a strong influence on their actions (Lockwood *et al*., 2002; Davidsson and Honig, 2003). These superior individuals act as sources of knowledge and skills which help to build the competence of the entrepreneurs (Ravasi and Turati, 2005). Bandura (1969) therefore argues that many behavioral similarities often result from selective exposure to environmental settings and activities. An entrepreneur may therefore attempt to repeat those actions and behaviors from which she gains a benefit. This ability calls for the power of cognition which is the capacity for thinking (sensation, perception and conception) and knowing (recollection of past, consciousness of the present, and anticipation of the future). This cognitive ability helps a person to manage themselves by setting standards for themselves, matched by self-rewarding or self-punishing outcomes. The virtue of self-regulation enables a person to display the appropriate behavior within specific business situations. The extent of self-management may account for self-dedication, self-discipline and self-reinforcement which are important in the identification and exploitation processes of entrepreneurial opportunities. It is therefore likely that informal entrepreneurial training and education enhances entrepreneurship through advice from experts and imitation and copying (Aldrich and Martinez, 2007).

Although informal entrepreneurial training and education are critical to competence development, it appears that this form of training can be reinforced by formal entrepreneurial training and education. Several empirical studies (e.g. Ronstad, 1985) reveal that entrepreneurial education and training helps to build entrepreneurial competences such as creativity, ambiguity tolerance, opportunity identification and venture evaluation, networking and ethical assessment. Other researchers (e.g. Garavan and O'Cinneide, 1994; Hood & Young, 1993) show that entrepreneurship training develops reality coping mechanisms, reality-testing skills, managerial and leadership skills, and technical-functional skills. The formal training and education provides the "natural spring" from which the entrepreneur taps key principles and knowledge that are key when faced with unique business situations. This "spring" is often lacking among informally trained entrepreneurs because they rely largely on experience to go about

business challenges. Indeed formal entrepreneurial training and education help to develop competences such as decision making, innovating thinking, communication, problem solving, and negotiation (Izquierdo *et al.*, 2005).

Although several studies have measured the impact of education on competence and enterprise success, few studies have had a particular emphasis on how entrepreneurial education and training affect entrepreneurial competence. This form of education caters for both formal and informal education, and can be long term or short term. Informal education can involve the entrepreneur learning from superior entrepreneurs and others who are in business, usually working informally with relatives. She can also learn through self-teaching, trial and error. Experience occurs in three forms: experience as a manager; experience as owner; and the diversity of experience (Storey, 2011). We argue that it is the experience as an owner and manager that is relevant in building entrepreneurial competences.

Through formal and informal training, the entrepreneur is able to acquire new knowledge, skills, and abilities which increase the chances of the enterprise's success. The informal learning can particularly develop one's intuiting and interpreting capabilities. Intuiting reflects an entrepreneur's conviction that something is true even when she has no evidence yet (Franco and Haase, 2009). This intuitive mind arises out of the experience and retained images in the entrepreneur's memory and is helpful in discovering new possibilities and innovations for the business. The value of previous informal entrepreneurial training is that the entrepreneur is able to use it to recall, recognize and compare situations. The major weakness in this argument is that the entrepreneur is only able to recognize what she has seen before, and for completely different situations, she cannot comprehend anything – thus informal training has to be complemented with formal entrepreneurial training where vital principles are taught. Therefore, combined formal and informal entrepreneurial training should have a stronger predictive power of enterprise success than either informal or formal schooling alone. Based on the above reviewed literature, the following hypotheses emerge:

H1: There is a significant positive relationship between the entrepreneur's intrapersonal resources and entrepreneurial competence.

H2: Informal entrepreneurial training and education is likely to build stronger entrepreneurial competence than formal entrepreneurial training and education among micro and small women entrepreneurs.

H3: Enterprise success significantly varies with the woman entrepreneur's level of formal schooling.

H4: Entrepreneurial competence mediates the relationship between the entrepreneur's intrapersonal resources and enterprise success.

Methods

We collected data from MSE women entrepreneurs who owned and operated enterprises in the tourism and hospitality sector of Uganda. We particularly targeted women operating enterprises from Kampala, central and eastern regions of Uganda because these regions accommodated 71% of all the tourism enterprises in Uganda (UBOS, 2011). A woman was deemed to be an entrepreneur if she owned at least half of the shares in the business and was also involved in its management. We selected these women from two business development service providers that were of national character, and seven women business associations. From the lists obtained we used simple random sampling to select the respondents to participate in the study. However, because some contact addresses had changed, we also took physical walks through the streets, identifying women entrepreneurs who were willing to participate in the study. This approach has also been used successfully by other researchers in Africa (e.g. Khayesi, 2010; Frese *et al*., 2007). Using this approach, we contacted every other woman entrepreneur for participation in the study. We targeted 369 women entrepreneurs but managed to obtain usable data from 303, representing 82.2% response rate.

We collected data using a self-administered questionnaire which we had pretested on 60 respondents and factor analyzed the findings to eventually develop a more context specific, valid and reliable instrument. We measured intrapersonal resources using entrepreneurial training and education as proxies. We captured information on entrepreneurial training that focused on opportunity identification & assessment, networking, technical-functional skills, and negotiation. We considered both formal and informal training and education (Sample item: I have worked under supervision of a more experienced business person before). The items were measured using a six point scale with anchors ranging from completely untrue (1) to completely true (6). Furthermore, we measured formal schooling (type, level, field) as an intrapersonal resource although treated separately in SEM. For the specific entrepreneurial training skills, we investigated the skills which the respondents believed they had acquired from the entrepreneurial training and these skills were anchored on a dichotomous scale. The difference between formal schooling and formal entrepreneurial training and education is that formal schooling follows the general

education that people attain in school while formal entrepreneurial training and education reflects the specific training and education that a person receives for entrepreneurship purposes. For entrepreneurial competence we developed an instrument based mainly on the list of the entrepreneurial competences widely studied and documented in literature (e.g. Frese *et al*., 2007; Edvinsson and Malone, 1997; Reynoso, 2008). These competences included among others creativity & initiative, opportunity recognition & evaluation, failure coping, and bargaining. A total of seven items were used to capture the construct of entrepreneurial competence. Sample Item: (I can easily evaluate whether an opportunity is viable or not). The items were measured using a six point scale with anchors ranging from completely untrue (1) to completely true (6).

We measured enterprise success using both financial and non-financial measures (Stam and Elfring, 2008; Chandler and Hanks, 1993). We measured financial success (perception) using four items focusing on profitability, employment, increase in number of business branches and capital stock expansion (Reijonen and Komppula, 2007; Begley and Boyd, 1987; Krauss *et al*., 2005; Watson, 2007). The leading question was: what do you consider as success in business? We also used sales growth by measuring proportion of change in daily sales over the life span of an enterprise (Danson, 1999; Hmieleski and Baron, 2009; and we called this *hard* financial success. These figures were self-reported and wherever possible effort was made to look at the receipt books to verify the information provided. Overall though, owner managers tend to be objective about performance and success of their enterprises (Venkatraman and Ramanujam, 1986). For the non-financial success, we adopted indicators that have been reported by studies in Uganda (e.g. Katongole *et al*., 2014). These included socio-economic emancipation, freedom from bosses and personal contentment with owning a business. For background data we collected information such as age, type of sub-sector, business location, and age of business.

We checked all field questionnaires for completeness and used SPSS (19) to run the analysis. We performed missing value analysis (MVA) to establish whether the missing values were missing at random, and help to avoid committing Type I and Type II errors. We used the EM (Expectation-maximisation) method to perform MVA and all Missing Completely at Random (MCAR) results were significant ($p < 0.05$), creating no need to replace the missing data. However, because SEM required no missing data at all, we replaced the few missing variables using linear interpolation method. In order to further prepare the data for parametric analysis, we tested for normality, homogeneity of variance, linearity, independence of

the error terms and multicollinearity as key conditions for parametric analysis (e.g. Decoster, 2001; Field, 2005; Sekaran, 2003). The data was appropriately transformed and these assumptions were met.

We conducted exploratory factor analysis (EFA) and through principal component analysis and varimax rotation, generated a number of components underlying each of the study constructs. Intrapersonal resources produced two components (formal and informal entrepreneurial education and training) which together accounted for 57.6% of the variance in the construct of interpersonal resources (Appendix 1). The system retained three items for formal entrepreneurial training and education (39%) and three items for informal entrepreneurial training and education (19%) because these had loadings above 0.4 (Field, 2005). For entrepreneurial competence, six out of the original nine items were found with high inter correlation and were retained (Appendix 2). Two factors were essentially identified and these accounted for 62% of the variance in the construct of entrepreneurial competence. The factors were labeled as opportunity identification and evaluation (35.4%) and technical expertise and bargaining (19%). The construct of enterprise success was composed of non-financial success (28.2%) and financial success (24.2%) which both accounted for 52.4% of the variance in the construct (Appendix 3).

After conducting EFA, we conducted confirmatory factor analysis (CFA) to identify the factor structure of the variables (MacCallum and Austin, 2000) and Structural Equation Modelling (SEM) to test the hypothesized relationships. CFA helps to validate the hypothesized relationship between a construct and its indicators, and this confirmation can sometimes result into elimination of some indicators (MacCallum and Austin, 2000). SEM is commonly used in cross-sectional studies despite the fact that this design does not provide sufficient time for variables to change so that the hypothesized effects can be observed. Cross sectional studies allow for evaluation of relationships at a point in time and can therefore not allow for lag times which are associated with longitudinal studies (MacCallum and Austin, 2000). This means that it may be difficult to measure causality in cross-sectional designs. However, for such causal inference to be made the researcher can argue that there is instantaneous change in variables which allows for concurrent measurement. In our study, the variables of interest did not change over the period of interest (the time the causal effect occurs and the time the variable is measured) and thus it was possible to make directional inferences (Gollob and Reichardt, 1987). We chose maximum likelihood method over other methods (e.g. weighted least

squares, two-stage least squares, asymptotically distribution free) because our data was normally distributed (Kline, 2005; Schreiber *et al.*, 2006).

For the chi-square test, we rejected the model if the *p*-value was less than 0.05 as this would mean that the hypothetical model was significantly different from the measurement model. The acceptable root mean square error of approximation (RMSEA) was 0.06 and below and Tucker-Lewis Index (TLI) had to be 0.95 and above (Hu and Bentler, 1999). Furthermore, the acceptable level of goodness of fit (GFI) was 0.90, adjusted goodness-of-fit index (AGFI), 0.85, and CFI 0.90 (Kim, 2007; Yang, 2006). For the entrepreneur's intrapersonal resources, two items were removed during the model modification process (Appendix 4), and then the Chi-square = 3.2, df = 2, $p = 0.198$ showed that the observed model was not significantly different from the hypothesised. Also the global fit indices confirmed this relationship (NFI = 0.987; TLI = 0.984; CFI = 0.995; RMSEA = 0.045). For entrepreneurial competence the observed data fitted fairly well the hypothesised model, and the hypothesised relationships between the indicators of entrepreneurial competence and the entrepreneurial competence itself were supported (Chi-square = 0.012, df = 1, $p = 0.914$). The global fit indices confirmed this relationship (GFI = 1.000; AGFI = 1.000; NFI = 1.000; TLI = 1.031; CFI = 1.000; RMSEA = 0.000). For enterprise success (Appendix 6), the observed data fitted fairly well the hypothesised model (χ2GoF = 19.86, df = 14, p = 0.1135; RMR = 0.069; GFI = 0.984; AGFI = 0.959; NFI = 0.962; TLI = 0.976; CFI = 0.988; RMSEA = 0.037).

RESULTS AND DISCUSSION

Demographic Characteristics and Descriptive Statistics

The data came from women owning and operating restaurants and take-aways (45.3%), craft shops (26.8%), bars (14.6%) accommodation facilities (9.1%) and tour and travel agencies (4.2%). The low numbers in some business categories were a function of the structure of the tourism and hospitality industry in Uganda, which generally has more restaurants than any other category (UBOS, 2011). The majority of the women entrepreneurs were school dropouts (69.3%) with just 30.7% having tertiary and university education. Among those with tertiary and university training, majority of them had pursued business education (36.5%), and social sciences (15.4%). Furthermore, almost half of the women entrepreneurs were aged 25–35 years (48.8%), followed by those aged 35-45 years (34.3%), generally reflecting the demographic structure of Uganda's population

which is predominantly youthful (UBOS, 2012). The high representation of the youth demographic may be attributed to the nature of business in the tourism industry which entails a considerable amount of activity. Many of women entrepreneurs were mothers (72.1%), with some having more than six children (11.4%). More than half of the women entrepreneurs were married (53.3%) with one quarter single and never married.

As seen in Table 1, the oldest business enterprise was about 29 years but the average enterprise age was 4.9 years. The financial capital averaged at UGX5,273,703[1] and daily sales were about UGX185,764. The firms had less than 4 employees by the time of the study.

Capital, sales and number of employees were not measured on a scale, and in this case a minimum of 0 represents the inability of the respondent to

Table 1. Descriptive Statistics.

	N	Min	Max	Mean	Std. Deviation
Timeframe between business inception and time of study (years)	303	0.00	29.00	4.9106	4.84394
Current capital (UGX)	303	0.0	150,000,000	5,273,702.970	1.2713
Current sales (UGX)	303	0.0	5,000,000.0	185,764.046	511948.5107
Current employees	303	0.0	30.0	3.480	4.1838
Proportional change in capital since business began	303	0.10	750.00	8.4751	48.51647
Proportional change in sales since business began (financial success — hard)	303	0.00	60.00	3.2445	4.99177
Proportional change in employees since business began	303	0.00	8.33	2.0102	1.14173
Informal entrepreneurial training	303	1.00	6.00	3.6832	1.51639
Formal entrepreneurial education	303	1.00	6.00	2.6774	1.74613
Intrapersonal resources	303	1.00	6.00	3.1803	1.39543
Entrepreneurial Competence	303	1.43	6.00	4.2419	0.94665
Non-financial success	303	2.64	6.00	4.9364	0.79034
Financial success (perceived)	303	2.00	6.00	5.0701	0.99100
Social emancipation	303	1.00	6.00	4.7492	1.41636

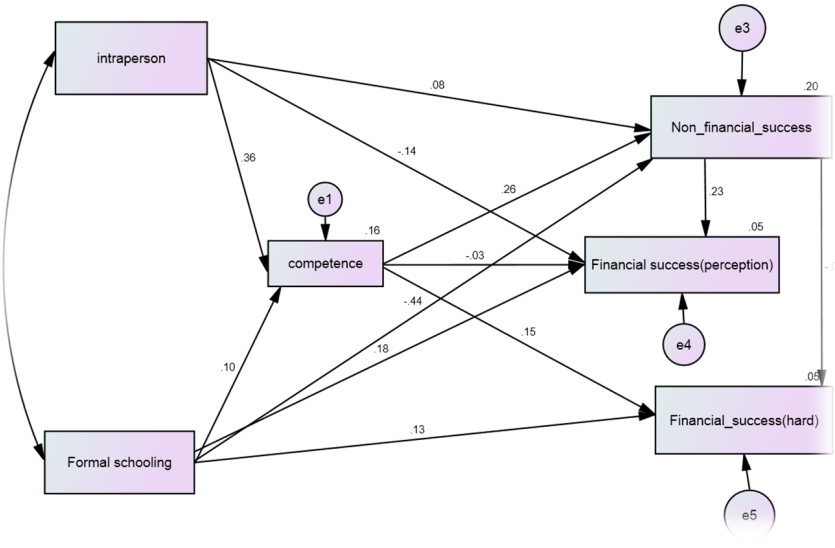
[1] US$1 is equivalent to UGX2600.

remember the figure after years of operating the business. However 0 for timeframe between business inception and time of study implies that some firms were barely one year old.

Furthermore, the results in Table 1 show that the mean score for intrapersonal resources was fair (mean = 3.2). However, formal entrepreneurial education was the lowest (mean = 2.68) probably reflecting the limited investment the entrepreneurs had made into formal entrepreneurial education. The mean for informal entrepreneurial training was high at 3.7, suggesting that most of the entrepreneurs who participated in the study invested more in informal training than they did in formal education. The entrepreneurs scored high on entrepreneurial competence (mean = 4.2), and very high on perceived financial success (mean = 5.07) and non-financial success (mean = 4.9). For all the variables above, the standard deviations were relatively small, all below 2, suggesting stability of the data (Field, 2005).

HYPOTHESES TESTING

The results in Figure 1 show that the hypothesized model is a good fit to the data. This is because the goodness of fit Chi-square value is 3.258; Df = 2; and the *P*-value = 0.196. To further test the fitness of the model to the one



Chi-square = 3.258; Df = 2; sig. = 0.196; GFI, 0.996; AGFI, 0.963; NFI, 0.985; TLI, 0.953; CFI, 0.994; RMSEA, 0.046

Figure 1. SEM Model for Entrepreneur's Intrapersonal Resources and Enterprise Success.

which we hypothesised, we generated other indices such as GFI = 0.996; AGFI = 0.963; NFI = 0.985; TLI = 0.953; CFI = 0.994; and RMSEA = 0.046 which confirm that the model fitted the data appropriately. It is further revealed that 66.7% of the critical ratios were above 1.96 and all the *p*-values were smaller than 0.05, suggesting that all regression coefficients in the model were clearly different from zero at 0.05 level.

Our first hypothesis **H1** stated that there is a significant positive relationship between the entrepreneur's intrapersonal resources and entrepreneurial competence. We tested this hypothesis and the results in Table 2 reveal that an entrepreneur's intrapersonal resources had a significant positive relationship with entrepreneurial competence ($\beta = 0.356$). The results in Table 2 show that the direct effect of intrapersonal resources was equal to the total effect, suggesting non-existence of any indirect relationship. Based on these results therefore **H1** is supported.

The second hypothesis **H2** stated that informal entrepreneurial training and education is likely to build stronger entrepreneurial competence than formal entrepreneurial training and education among MSE women entrepreneurs. In order to test this hypothesis, we disaggregated the various categories of intrapersonal resources and obtained informal entrepreneurial training and education, formal entrepreneurial training and education and formal schooling. The results in Table 2 reveal that the total effect of formal schooling on entrepreneurial competence was weak ($\beta = 0.097$), implying that formal schooling may not have had a significant relationship with the competence of the entrepreneurs who participated in the study. To further understand whether informal entrepreneurial training and education and formal entrepreneurial training and education had a different relationship with the competence of entrepreneurs, we performed a multiple regression analysis. The results which are summarized in Table 3 show that both formal and informal entrepreneurial training and education were significantly related to entrepreneurial competence (F-statistic, 15.8, $p < 0.05$). Both factors accounted for about 36% of the variation in entrepreneurial competence. However, we found that formal entrepreneurial training and education was the only statistically significant factor that was related to entrepreneurial competence ($t = 4.55$, $p < 0.05$). Whereas for every unit change in formal entrepreneurial training and education there was a 0.4 change in entrepreneurial competence, for every unit change in informal training and education, there was only a 0.12 change in entrepreneurial competence — and this was not statistically significant ($t = 1.2$, $p > 0.05$). These results do not support **H2,** and is thus rejected.

Table 2. Results from the Structural Equations Model on the Effects of Explanatory Variables on the Dependent Variables.

Model	**B**				*β*				
Direct Effect	**Formal Schooling**	**Intrapersonal Resources**	**Entrepreneurial Competence**	**Non-Financial Success**	**Formal Schooling**	**Intrapersonal Resources**	**Entrepreneurial Competence**	**Non-Financial Success**	**R^2**
Entrepreneurial competence	0.904	0.294	0.000	0.000	0.097	0.356	0.000	0.000	0.165
Non-financial success	–4.514	0.077	0.283	0.000	–0.437	0.084	0.257	0.000	0.196
Financial success (perception)	1.485	–0.099	–0.029	0.179	0.185	–0.139	–0.034	0.230	0.055
Financial success (hard)	318103.39	0.000	41720.805	–11839.746	0.126	0.000	0.154	–0.048	0.053
Indirect Effect									
Entrepreneurial competence	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Non-financial success	0.256	0.083	0.000	0.000	0.025	0.091	0.000	0.000	
Financial success (perception)	–0.789	0.020	0.051	0.000	–0.098	0.028	0.059	0.000	
Financial success (hard)	88132.684	10371.685	–3353.569	0.000	0.035	0.046	–0.012	0.000	
Total Effect									
Entrepreneurial competence	0.904	0.294	0.000	0.000	0.097	0.356	0.000	0.000	
Non-financial success	–4.258	0.160	0.283	0.000	–0.413	0.176	0.257	0.000	
Financial success (perception)	0.696	–0.079	0.021	0.179	0.087	–0.111	0.025	0.230	
Financial success (hard)	406236.07	10371.685	38367.236	–11839.746	0.161	0.046	0.142	–0.048	

Path Coefficients for the Structural Model

			Estimate	S.E.	C.R.	P	β
Entrepreneurial competence	—	Intrapersonal resources	0.294	0.048	6.155	***	0.356
Entrepreneurial competence	—	Formal schooling	0.904	0.541	1.672	0.095	0.097
Non-financial success	—	Intrapersonal resources	0.077	0.055	1.401	0.161	0.084
Non-financial success	—	Formal schooling	−4.514	0.588	−7.678	***	−0.437
Non-financial success	—	Entrepreneurial competence	0.283	0.062	4.550	***	0.257
Financial success (hard)	—	Formal schooling	318103.393	159543.974	1.994	0.046	0.126
Financial success (perception)	—	Formal schooling	1.485	0.543	2.735	0.006	0.185
Financial success (perception)	—	Intrapersonal resources	−0.099	0.046	−2.126	0.034	−0.139
Financial success (perception)	—	Entrepreneurial competence	−0.029	0.054	−0.541	0.589	−0.034
Financial success (hard)	—	Entrepreneurial competence	41720.805	16314.417	2.557	0.011	0.154
Financial success (perception)	—	Non-financial success	0.179	0.049	3.684	***	0.230
Financial success (hard)	—	Non-financial success	−11839.746	15250.371	−0.776	0.438	−0.048

Table 3. Effect of Informal Entrepreneurial Training and Education and Formal Entrepreneurial Training and Education on Entrepreneurial Competence.

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	**B**	**Std. Error**	**Beta**	***t***	**Sig.**	**Tolerance**	**VIF**
1(Constant)	2.423	0.380		6.369	0.000		
Informal entrepreneurial training & educ.	0.120	0.102	0.137	1.177	0.244	0.836	1.196
Formal entrepreneurial training & educ.	0.400	0.088	0.528	4.548	0.000	0.836	1.196
R	0.597[a]						
R^2	0.356						
Adjusted R^2	0.334						
F-statistic	15.784						
Sig. (F-statistic)	0.000[a]						

[a]Dependent Variable: Entrepreneurial Competence.

Our third hypothesis H3 stated that enterprise success significantly varies with the woman entrepreneur's level of formal schooling. The results from testing this hypothesis (Table 2) show that formal schooling is significantly related to hard financial success ($\beta = 0.161$) and non-financial success ($\beta = -0.413$). However, the relationship between formal schooling and non-financial success was negative, implying that the higher the level of formal schooling, the less a female entrepreneur will measure success in non-financial terms. To further understand this finding, we computed a one way ANOVA test to analyse the effect of formal schooling on non-financial success. As seen in Appendix 7, there were significant differences in non-financial success among respondents with various levels of formal schooling ($F = 12.3$; $df = 2$; $p = 0.000$). The perception of non-financial success was significantly different among the women entrepreneurs with college education and those with both primary and secondary school education. However, non-financial success of the entrepreneurs with primary education did not significantly differ from that of entrepreneurs with secondary school education. Additionally, the results in Table 2 show that the total effect of formal schooling on hard financial success is positive and significant at 95% confidence level ($\beta = 0.177$). This standardized coefficient means that the lower the level of formal schooling, the weaker the hard financial success that a female entrepreneur will realize over time in business. Based on all these findings, therefore, **H3** is supported.

The final hypothesis **H4** stated that entrepreneurial competence mediates the relationship between the entrepreneur's intrapersonal resources and enterprise success. To be able to test such a mediating role of entrepreneurial competence, three conditions must be met. First, there has to be a direct relationship between intrapersonal resources and entrepreneurial competence; second, entrepreneurial competence should be related to enterprise success; and three, intrapersonal resources must be related to enterprise success. Looking at Table 2, condition one is met ($\beta = 0.356$). Also entrepreneurial competence had a significant direct relationship with hard financial success ($\beta = 0.154$), and non-financial success ($\beta = 0.257$). Entrepreneurial competence had a weak negative relationship with the perception of financial success ($\beta = -0.034$). Intrapersonal resources (informal and formal entrepreneurial training and education) had a strong direct negative relationship with the perception of enterprise success ($\beta = -0.139$) and a fairly weak positive relationship with non-financial success ($\beta = 0.084$). There was no direct relationship between intrapersonal resources and hard financial success ($\beta = 0.000$). Finally, formal schooling had a strong and negative relationship with non-financial success

($\beta = -0.437$) though it was positively related to the perception of financial success ($\beta = 0.185$) and hard financial success ($\beta = 0.126$).

The standardized mediated effect of intrapersonal resources on hard financial success is 0.046. This means that due to the indirect effect of intrapersonal resources on hard financial success, when intrapersonal resources go up by 1 standard deviation, hard financial success goes up by 0.046 standard deviations. With regard to non-financial success, the standardized mediated effect of intrapersonal resources is 0.091. This implies that due to the mediated effect of intrapersonal resources on non-financial success, when intrapersonal resources go up by 1 standard deviation, non-financial success goes up by 0.091 standard deviations. When the direct effect is added, a unit change in standard deviation of intrapersonal resources leads to a 0.176 standard deviations increase in non-financial success. All these results provide support for hypothesis **H4**.

The results in Figure 1 indicate variances in the relationship between the entrepreneur's intrapersonal resources and enterprise success. Formal schooling accounted for up to 16.5% of the variation in entrepreneurial competence (R-square = 0.165) but when combined with intrapersonal resources and entrepreneurial competence altogether accounted for about 20% of variation in non-financial success (R-square = 0.196) and only 5% of hard financial success (R-square = 0.053). Non-financial success had a strong direct relationship with the perception of financial success ($\beta = 0.23$) but had no sound relationship with hard financial success ($\beta = -0.048$).

DISCUSSION

Women Entrepreneurs' Intrapersonal Resources and Enterprise Success

Our focus on entrepreneurial resources was limited to formal entrepreneurial training and education, informal entrepreneurial training and education, and formal schooling measured as the highest level of formal education attained. Confirmation of H1, implies that MSE women entrepreneurs who have strong intrapersonal resources are likely to be entrepreneurially competent. This is because an entrepreneur who has invested in informal entrepreneurial training, formal entrepreneurial education and formal schooling is likely to identify and exploit business opportunities successfully (Dumas, 2001; Honig, 1998). There are variations in the contributions of the various intrapersonal resources towards entrepreneurial

competence. Unlike many studies that use formal schooling as the only proxy of intrapersonal resources (Edwards and Muir, 2005; Orchan and Scott, 2001) and thus report higher competence levels resulting from this schooling, we have shown that formal schooling can only predict 9.7% of the variation in entrepreneurial competence. Such a finding is not new in developing regions as a number of studies have shown that the nature of formal schooling in these regions inhibits entrepreneurship activities (e.g. Morrison, 2000; Cutura, 2008). The expectation would be that education and training raise the competence level of entrepreneurs (Kelley *et al*., 2013) but in Uganda about 69.3% of women entrepreneurs have just primary and secondary school education, a level which does not develop the necessary entrepreneurial skills.

Whereas formal schooling accounted for little variation in entrepreneurial competence, there were marked differences in the little influence which existed due to the levels of formal schooling. We can claim that women entrepreneurs who have attained college and university formal schooling are likely to be more entrepreneurially competent than women who have not attained this level of education. The results show that entrepreneurs who have attained tertiary education are significantly different from those with secondary and primary education, and in this same order, entrepreneurs with secondary are different from those with primary education in relation to entrepreneurial competence. We argue that one would be slightly more entrepreneurially competent if they attained one more level of formal schooling.

At college and university, students are exposed to some business management training, and more recently to entrepreneurship education (Katono *et al*., 2010). Furthermore, entrepreneurs who have completed college and university are often more likely to start their careers in paid employment, and this experience is useful when they become entrepreneurs (Kuratko, 2005). Such entrepreneurs have often been reported to easily identify and exploit opportunities (Shane and Venkataraman, 2000) and run their enterprises more efficiently (Unger, 2006). Indeed, the recent GEM report on women entrepreneurs shows that higher formal schooling helps women entrepreneurs in SSA to build self-confidence (Kelley *et al*., 2013). What is interesting though from our study is that the formal schooling levels of most entrepreneurs are low yet these entrepreneurs are able to register financial and non-financial success. In this regard we argue that formal and informal training are in tandem can explain this.

Formal and Informal Entrepreneurial Training and Education, and Enterprise Success

The descriptive statistics showed that formal entrepreneurial training and education ranks lowest compared to informal training, highlighting the limited investment the women entrepreneurs make into formal entrepreneurial education. This may not necessarily be a problem as there is evidence that there are many successful entrepreneurs world-over without formal education (Storey, 2011). However, formal entrepreneurial education and training increases the know-why, know-who, know-how, know-when and know-what (Johannisson, 1991). It builds competences such as negotiation, creative thinking, product development, resource mobilisation and venture development (Solomon *et al.*, 2002). Nonetheless, despite these benefits of formal entrepreneurship training, most MSE women entrepreneurs invest more in informal entrepreneurial training than they do in formal entrepreneurial education. This investment is made because formal entrepreneurial training and education requires financial investment, and for this which may not be easily forthcoming for this cohort of entrepreneurs.

Unfortunately, many MSE women entrepreneurs do not see formal training as a remedy to their enterprise problems. This is more so in the tourism and hospitality industry where informal entrepreneurial training is more relevant than formal training because the nature of work is not complex (Morrison and Teixeira, 2004). However, after testing H2, we cannot confidently claim that informal entrepreneurial training and education builds stronger entrepreneurial competence than formal entrepreneurial training and education among MSE women entrepreneurs. Instead, it is the formal entrepreneurial training, which is neglected by entrepreneurs that is positively related to entrepreneurial competence.

Theoretically, while the different types of intrapersonal resources may have varying relationships with entrepreneurial competence, our conceptualization is that combined, these resources could have a stronger relationship with the entrepreneur's competence. Despite having low formal schooling and investing little in formal entrepreneurial training, the women entrepreneurs perceived themselves as highly competent. This belief could have been possible largely through reliance on recombination of the various intrapersonal resources. While serving as employees in their previous jobs or while learning domestic activities (e.g. cooking skills for those who owned restaurants), entrepreneurs obtain training that is later used in their own enterprises. This form of learning may complement, or in the absence of finances for training, substitute formal training.

Formal entrepreneurial training and education has a stronger relationship with entrepreneurial competence than both informal entrepreneurial training and formal schooling. Indeed, in the tourism sector, certain activities will require formal training because they are not taught at home. Furthermore, as proposed by Kuratko (2005) certain activities in service business require an advanced understanding of several factors which only can be accessed through training in entrepreneurship.

Intrapersonal Resources and Enterprise Success: The Mediating Role of Entrepreneurial Competence

Man *et al.*'s (2002) model implies that developing entrepreneurial competencies is a more important issue than directly providing more resources and a positive environment to the entrepreneur.

The results of testing **H4** lead us to a conclusion that it is through entrepreneurial competence that the entrepreneur's intrapersonal resources can influence enterprise success. This conclusion is consistent with the results in previous studies which reveal that investment in intrapersonal resources results into increased competences (Corbett, 2007; Wright *et al.*, 1998; Lumpkin and Lichtenstein, 2005). These results respond to the call for clarification of the relationship between entrepreneurial competences and business success (Mitchelmore and Rowley, 2010). In a similar conceptualization Man *et al.* (2002) propose that competences can be categorized as relationship competences that are important in creating contacts and connections necessary for firm performance. However, like our study reveals, a few other studies have shown that these intrapersonal resources largely have an indirect effect on enterprise success (Wiklund *et al.*, 2009). Entrepreneurial competence serves as a conduit through which the different types of intrapersonal resources influence the different types of enterprise success. For instance, entrepreneurial competence mediates the relationship between intrapersonal resources and non-financial success. This relationship occurs because it is often difficult to become entrepreneurially competent without much investment in entrepreneurial training and education. Therefore, by the time an entrepreneur learns how to effectively discern opportunities and how to execute them, she has invested heavily and thus values the satisfaction and contentment that it comes with.

When we compare the direct and indirect relationships of intrapersonal resources on enterprise success, we find that intrapersonal resources have a stronger indirect effect on enterprise success, and between the two variables, entrepreneurial competence plays a fundamental role. Interestingly,

our results affirm that formal schooling alone (excluded from intrapersonal resources) is mildly related to entrepreneurial competence but has a strong relationship with enterprise success. The same variable (formal schooling) has a strong negative relationship with non-financial success, indicating that women entrepreneurs who are educated are more likely to define success in financial terms. It is the less educated women who will cherish non-financial success because they have to pay fees for their children, have to cater for the family needs, and are perhaps more likely to be forced into entrepreneurship (Kelley *et al*., 2013). For the educated women, entrepreneurship is more of a choice and will thus go for financial rewards. Such women have a wide spectrum of career opportunities, including paid employment. These careers expose the entrepreneur to a number of opportunities and specific experiences which encourage entrepreneurship. Such an entrepreneur is likely to attain higher financial success (Masakure *et al*., 2009). Therefore, while less educated women pursue socio-economic emancipation and freedom from bosses, the educated women pursue financial growth in their enterprises. Pursuit of financial success could be a choice for the highly educated women while the less educated settle for non-financial success — and this could be the very reason their enterprises often remain micro while those for educated women grow and expand to become big. Formal schooling could therefore account for differences in levels of ambition among women entrepreneurs.

CONCLUSIONS AND IMPLICATIONS

In the tourism and hospitality industry of Uganda, informal entrepreneurial training is important but it can only complement formal entrepreneurial training and education – it cannot be a substitute. These resources predict enterprise success quite strongly but have a better predictive power of non-financial success than financial success. Although ultimately vital in influencing the choice of success to pursue, financial or non-financial, general formal schooling has a limited relationship with MSE women entrepreneur's competence. This is because such schooling does not build the specific competencies such as opportunity identification and evaluation, technical proficiency and business negotiation abilities.

Formal entrepreneurial training and education that is reinforced with informal entrepreneurial training and education builds entrepreneurial competences that are relevant to MSE women entrepreneurs. Women entrepreneurs who are competent are more likely to seek socio-economic

emancipation, freedom from bosses and contentment in life. Furthermore, these entrepreneurs are also able to attain greater sales growth.

Organizations should strike a proper balance between formal and informal training in the process balancing cost and convenience, access and practicability. At different stages of firm development and firm size the balance will have to change with more formal training sufficing later and for bigger firms. Balancing these two brings the opportunity to learners to combine knowledge and interactions with the former preeminent in formal and the latter in informal training.

Our contribution to the entrepreneurship field is that for women in MSEs, formal schooling, informal entrepreneurial training and formal entrepreneurial training may have to be considered separately to understand how each influences both entrepreneurial competence and enterprise success. These resources may have to be added to the long list of entrepreneur's resources that influence enterprise success in micro and small enterprises.

Policies to structure and institutionalize informal training should be developed with a view to attaining homogeneity and measurability as these skills are crucial in complementing formal training.

The key methodological limitation of this study is the lack of sampling frames, and where contacts exist, they are not accurate. We obtained several contacts of enterprises but on reaching the premises, most businesses had either closed or shifted location. Moreover, even those available were at times reluctant to participate in the study. We therefore decided to complement the predetermined sampling lists with walks through all the streets in the towns where we conducted the study, selecting every other enterprise for participation in the study. The nature of respondents (unable to speak English) required that we translate the questionnaire into local languages and back-translate it to ensure no meaning was lost. This process is both expensive and time consuming. Future studies should include comparisons with male entrepreneurs to broad the applicability of the insights this study has developed.

References

Aldrich, H. E. and Martinez, M. A. (2007). Many are called, but few are chosen: An evolutionary perspective for the study of entrepreneurship. In Á. Cuervo, D. Ribeiro, & S. Roig, *Entrepreneurship* (pp. 293–311). Berlin/Heidelberg: Springer.

Alonso, A. and O'Neill, M. (2009). Staffing issues among small hospitality businesses: A college town case. *International Journal of Hospitality Management*, 28:573–578.

Alvarez, S. A. and Barney, J. B. (2013). A narrative perspective on entrepreneurial opportunities. *Academy of Management Review*, 157–160.

Alvarez, S. A. and Busenitz, L. (2001). The entrepreneurship of resource-based theory. *Journal of Management*, 27:755–775.

Amine, L. S. and Staub, K. M. (2009). Women entrepreneurs in sub-Saharan Africa: An institutional theory analysis from a social marketing point of view. *Entrepreneurship & Regional Development*, 21(1):183–211.

Ateljevic, J. and Page, S. (2009). *Tourism and Entrepreneurship — International Perspectives*. Butterworth-Heinemann: Elsevier.

Baker, T., Gedajlovic, E. and Lubatkin, M. (2005). A framework for comparing entrepreneurship processes across nations. *Journal of International Business Studies*, 36:492–504.

Bandura, A. (1969). *Social Learning Theory of Identificatory Processes, From Handbook of Socialization Theory and Research*. Rand McNally & Company.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs, N.J: Prentice-Hall.

Bandura, A. and Walters, R. (1963). *Social Learning and Personality Development*. New York: Holt, Rinehart, & Winston.

Baron, R. and Ensley, M. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*, 52(9):1331–1344.

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

Becker, G. S. (1964). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. Chicago: University of Chicago Press.

Becker, G. S. (1975). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 2nd edition. Princeton, New Jersey: Princeton University Press.

Begley, T. M. and Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 79–93.

Bird, S. R. and Sapp, S. G. (2004). Understanding the gender gap in small business success: Urban and rural comparisons. *Gender and Society*, 18(1):5–28.

Bruni, A., Gherardi, S. and Poggio, B. (2004). Entrepreneur-mentality, gender and the study of women entrepreneurs. *Journal of Organizational Change Management*, 17(3):256–268.

Brush, C. G. (1990). Women and enterprise creation. In S. Gould and J. Parzen, *Women, Entrepreneurship and Economic Development*, (pp. 37–50). Paris: OECD.

Brush, C. G. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16:45–30.

Brush, C. G. and Vanderwerf, P. A. (1992). A comparison of methods and sources for obtaining estimates of new venture performance. *Journal of Business Venturing*, 7:157–170.

Brush, C. G., Bruin, A. D. and Welter, F. (2009). A gender-aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, 1(1):8–24.

Carter, N., Gartner, W., Shaver, K. and Gatewood, E. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18:13–39.

Chaganti, R. and Parasuraman, S. (1996). A study of the impacts of gender on business performance and management patterns in small businesses. *Entrepreneurship Theory and Practic*, 21:73–75.

Chandler, G. and Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, 7(3):223–236.

Chattopadhyay, R. and Ghosh, A. (2002). Predicting entrepreneurial success: A socio-psychological study. *Journal of Entrepreneurship*, 22–31.

Chell, E. and Baines, S. (1998). Does gender affect business performance? A study of microbusinesses in the business services in the UK. *Entrepreneurship and Regional Development*, 10:117–135.

Cliff, J. E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, Gender, and business size. *Journal of Business Venturing*, 13:523–542.

Cooper, A., Folta, T. and Woo, C. (1995). Entrepreneurial information search. *Journal of Business Research*, 10:107–120.

Corbett, A. (2007). Learning assymetries and the discovery of entrepreneurial opportunities. *Journal of Business Venturing*, 22(1):97–118.

Datta, P. and Gailey, R. (2012). Empowering women through social entrepreneurship: Case of a women's cooperative in India. *Entrepreneurship Theory and Practice*, 36(3):569–587.

Davidson, M. J. and Burke, R. J. (2004). Women in management worldwide: Facts, figures and analysis — an overview. In M. J. Davidson, & R. B. (Eds), *Women in Management Worldwide: Facts, Figures and Analysis*, (pp. 1–15). London: Ashgate Publishing Limited.

Davidsson, P. and Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18:301–331.

Davis, A. and Shaver, K. (2012). Understanding gender variations in business growth intentions across the life course. *Entrepreneurship Theory and Practice*, 36:495–512.

Dawa, S. and Namatovu, R. (2015a). Social networks and growth of female-owned ventures: A sub-saharan africa perspective. *Journal of Developmental Entrepreneurship*, 20(2):1–19.

Dawa, S. and Namatovu, R. (2015b). Self-finance — Application of the restricted pecking order theory among Uganda women. *International Journal of Entrepreneurship and Small Business*, 21(4):513–526.

de Bruin, A. (2007). Book review: Women and entrepreneurship: Contemporary classics. *Women in Management Review*, 22:337–339.

Delmar, F., Davidsson, P. and Gartner, W. (2003). Arriving at the high growth firm. *Journal of Business Venturing*, 18:189–216.

Dess, G. and Robinson-Jr, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately held firm and conglomerate business unit. *Strategic Management Journal*, 5(3):265–273.

DeTienne, D. R. and Chandler, G. (2004). Opportunity identification and its role in the entrepreneurial classroom: A pedagogical approach and empirical test. *Academy of Management Learning and Education*, 3(3):242–257.

Dew, N., Read, S., Sarasvathy, S. and Wiltbank, R. (2008). Outlines of a behavioral theory of the entrepreneurial firm. *Journal of Economic Behavior & Organization*, 66:37–59.

Dhaliwal, S. (2000). Entrepreneurship — A learning process: The experiences of Asian female entrepreneurs and women in business. *Education + Training*, 42(8):445–453.

Douglas, E. and Shepherd, D. A. (2000). Entrepreneurship as a utility maximizing response. *Journal of Business Venturing*, 15:393–410.

Ducheneaut, B. (1997). *Women Entrepreneurs in SME's. Report Prepared for the OECD Conference on Women Entrepreneurs in Small and Medium Enterprises: A Major Force for Innovation and Job Creation*. Paris: OECD.

Dumas, C. (2001). Micro enterprise training for low-income women: The case of the community entrepreneurs programme. *Journal of Entrepreneurship*, 10:17–42.

Eddleston, K. A. and Powell, G. N. (2008). The role of gender identity in explaining sex differences in business owners' career satisfier preferences. *Journal of Business Venturing*, 23(2):244–256.

Edelman, L. F., Manolova, T. S. and Brush, C. G. (2008). Entrepreneurship education: Correspondence between practices of nascent entrepreneurs and textbook prescriptions for success. *Academy of Management Learning & Education*, 7(1):56–70.

Edvinsson, L. and Malone, M. S. (1997). Intellectual Capital: Realizing your Company\'s True Value by Finding its Hidden Brainpower.

Erikson, T. (2002). Entrepreneurial capital: The emerging venture's most important asset and competitive advantage. *Journal of Business Venturing*, 17:275–290.

Field, A. (2005). *Discovering Statistics Using SPSS (Second Edition)*. London: Sage Publications.

Fiet, J. (2000). The theoretical side of teaching entrepreneurship. *Journal of Business Venturing*, 16(1):1–24.

Florin, J., Lubatkin, M. and Schulze, W. (2003). A social capital model of high growth ventures. *Academy of Management Journal*, 46(3):374–384.

Franco, M. and Haase, H. (2009). Entrepreneurship: an organisational learning approach. *Journal of Small Business and Enterprise Development*, 16(4):628–641.

Frese, M., Fay, D., Hilburger, T., Leng, K. and Tag, A. (1997). The concept of personal initiative: Operationalisation, reusability and validity in two German samples. *Journal of occupational and organisational psychology*, 19:91–100.

Frese, M., Krauss, S. I., Keith, N., Escher, S., Grabarkiewicz, R., Luneng, S. T. *et al.* (2007). Business owners' action planning and its relationship to business success in three african countries. *Journal of Applied Psychology*, 92(6):1481–1498.

Garavan, T. and O'Cinneide, B. (1994). Entrepreneurship education and training programmes: A review and evaluation-Part 2. *Journal of European Industrial Training*, 18:13–21.

Gendron, G. and Greene, P. (2004). Practitioners' perspectives on entrepreneurship education: An interview with Steve Case, Matt Goldman, Tom Golisano, Geraldine Laybourne, Jeff Taylor and Alan Webber. *Academy of Management Learning & Education*, 3(4):352–353.

Getz, D. (2004). *Family Business in Tourism and Hospitality.* Cambridge: CABI Publishing.

Gollob, H. F. and Reichardt, C. S. (1987). Taking account of time lags in causal models. *Child Development*, 58:80–92.

Hansen, G. S. and Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*, 10(5):399–411.

Haynie, J. M. and Shepherd, D. (2009). A measure of adaptive cognition for entrepreneurship research. *Entrepreneurship Theory and Practice*, 33(3):695–714.

Headd, B. (2003). Redefining business success: Distinguishing between closure and failure. *Small Business Economics*, 21:51–61.

Helfat, C. E. and Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24:997–1010.

Hmieleski, K. M. and Baron, R. A. (2009). Entrepreneurs' optimism and new venture Performance: A social cognitive perspective. *Academy of Management Journal*, 52(3):473–488.

Honig, B. (1998). What determines success? Examining the Human, Financial and Social Capital of Jamaican micro entrepreneurs. *Journal of Business Venturing*, 13:371–394.

Honig, B. (2001). Human capital and structural upheaval: A study of manufacturing firms in the West Bank. *Journal of Business Venturing*, 16:575–594.

Honig, B. (2004). Entrepreneurship education: Toward a model of contingency-based planning. *Academy of Management Learning and Education*, 3(3):258–273.

Honig, B. L., Katongole, C. and Maya, M. (2014). Entrepreneurial promotion and sustainability: The community as a unit of analysis. In D. Zoogah, *Research Methodology in Strategy and Management, RMSM Vol. 9*, pp. 167–188. Emerald Publications.

Hu, L. and Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6:1–55.

Izquierdo, E., Deschoolmeester, D. and Salazar. (2005). The importance of competences for entrepreneurship: A view from entrepreneurs and scholar's perspective. *Este Articulo Fue presentado en el IntEnt, Surrey- Reino Unido*.

Jennings, J. E. and Brush, C. G. (2013). Challenges to (and from) the broader entrepreneurship literature. *The Academy of Management Annals*, 7(1):661–713.

Johan, W., Per, D. and Federic, D. (2003). What do they think and feel about growth: An expectancy-value approach to small business managers' attitudes toward growth. *Entrepreneurship Theory and Practice*, 27(3):247–270.

Johannisson, B. (1991). University training for entrepreneurship: A Swedish approach. *Entrepreneurship and Regional Development*, 3(1):67–82.

Katongole, C., Ahebwa, W. M. and Kawere, R. (2014). Enterprise success and entrepreneur's personality traits: An analysis of micro- and small-scale women-owned enterprises in Uganda's tourism industry. *Tourism and Hospitality Research*, 0(0):1–12.

Kelley, D., Brush, C. G., Greene, P. and Litovsky, Y. (2011). *The Global Entrepreneurship Monitor: 2010 Women's Report*. Wellesley, MA: Babson College & GERA.

Kelley, D., Brush, C. G., Greene, P. and Litovsky, Y. (2013). *The Global Entrepreneurship Monitor: 2010 Women's Report*. Wellesley, MA: Babson College & GERA.

Kiggundu, M. N. (2002). Entrepreneurs and entrepreneurship in Africa: What is known and what needs to be done. *Journal of Developmental Entrepreneurship*, 7(3):239.

Kirzner, I. (1997). Entrepreneurial discovery and the competitive market process: An austrian approach. *Journal of Economic Literature*, 35:60–85.

Kline, R. B. (2005). *Principles and Practices of Structural Equation Modelling (2nd ed.)*. New York: Guilford Press.

Koh, K. Y. and Hatten, T. (2002). The tourism entrepreneur: The overlooked player in tourism development studies. *International Journal of Hospitality & Tourism Administration*, 3(1).

Krauss, S. I., Frese, M., Friedrich, C. and Unger, J. M. (2005). Entrepreneurial orientation: A psychological model of success among southern African small business owners. *European Journal of Work and Organizational Psychology*, 000–000.

Krueger, N. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice*, 31(1):123–138.

Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, trends and challenges. *Entrepreneurship Theory & Practice*, 577–597.

Lado, A. A., Boyd, N. G., Wright, P. and Kroll, M. (2006). Paradox and theorizing within the resource-based view. *Academy of Management Review*, 31(1):115–131.

Langowitz, N. and Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31:341–365.

Lee, C., Lee, K. and Pennings, J. (2001). Internal capabilities, external networks, and firm performance: A study on technology-based ventures. *Strategic Management Journal*, 22:615–640.

Lester, D. and Parnell, J. (2008). Firm size and environmental scanning pursuits across organizational life cycle stages. *Journal of Small Business and Enterprise Development*, 15:540–554.

Lockwood, P., Jordan, C. H. and Kunda, Z. (2002). Motivation by positive or negative role models: Regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83(4):854–864.

Lumpkin, G. T. and Lichtenstein, B. B. (2005). The role of organizational learning in the opportunity-recognition process. *Entrepreneurship Theory and Practice*, 29(4):451–472.

MacCallum, R. C. and Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review Psychology*, 51:201–226.

Main, H. (2002). The expansion of technology in small and medium hospitality enterprises with a focus on net technology. *Information Technology and Tourism*, 4(1):167–174.

Man, T. W., Lau, T. and Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2):123–142.

Markowska, M. (2011). *Entrepreneurial Competence Development — Triggers, Processes and Consequences: Doctoral Thesis*. Jönköping University.

Masakure, O., Henson, S. and Cranfield, J. (2009). Performance of microenterprises in Ghana: A resource-based view. *Journal of Small Business and Enterprise Development*, 16(3):466–484.

McCartan-Quinn, D. and Carson, D. (2003). Issues which impact upon marketing in the small firm. *Small Business Economics*, 21(2):201–13.

McFerson, H. M. (2010). Poverty among women in Sub-Saharan Africa: A Review of selected issues. *Journal of International Women's Studies*, 11(4):50–72.

Miller, S. A. (1998). *Developmental Research Methods (2nd Eition)*. Upper Saddle River, New Jersey: Prentice-Hall.

Ministry of Finance, Planning and Economic Development. (2008). *Enhancing the Competitiveness of Micro, Small and Medium Enterprises in Uganda, Discussion Paper 16*. Kampala: Republic of Uganda.

Ministry of Tourism, Wildlife and Antiquities. (2014). *The Integrated Uganda Tourism Master Plan 2014–2024 (Draft)*. Kampala: MTWA.

Minniti, M. (2010). Female entrepreneurship and economic activity. *European Journal of Development Research*, 22:294–312.

Minniti, M., Allen, E. I. and Langowitz, N. (2006). *Global Entrepreneurship Monitor: 2005 Report on Women and Entrepreneurship*. Babson College and London Business School.

Mitchelmore, S. and Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda, *International Journal of Entrepreneurial Behavior & Research*, 16(2):92–111

Morrison, A. (2000). A contextualisation of entrepreneurship. *International Journal of Entrepreneurial Behaviour & Research*, 12:192–209.

Morrison, A. (2002). Small hospitality businesses: Enduring or endangered. *Journal of Hospitality and Tourism Management*, 9(1):1–11.

Morrison, A. and Teixeira, R. (2004). Small business performance: A tourism sector focus. *Journal of Small Business and Enterprise Development*, 11(2):166–173.

Morrison, A. and Thomas, R. (1999). The future of small firms in the hospitality industry. *International Journal of Contemporary Hospitality Management*, 11(4):148–154.

Morrison, A., Breen, J. and Ali, A. S. (2003). Small business growth: Intention, ability, and opportunity. *Journal of Small Business Management*, 41(4):417–425.

Munene, J., Schwartz, S. and Kibanja, G. (2005). *Escaping from Behavioral Poverty in Uganda: The Role of Culture and Social Capital*. Kampala: Fountain Publishers.

Namatovu, R., Dawa, S., Mulira, F. and Katongole, C. (2012). *Understanding Women Micro and Small Entrepreneurs in Uganda*. Dakar: Trust Africa.

National Planning Authority. (2010). *National Development Plan*. Kampala, Uganda.

National Planning Authority. (2013). *Uganda Vision 2040*. Kampala: The Republic of Uganda.

Olaniyan, D. and T., O. (2008). Human capital theory: Implications for educational development. *European Journal of Scientific Research*, 24:157–162.

Orchan, M. and Scott, D. (2001). Why women enter into business: An explanatory model. *Women in Management Review*, 16:232–243.

Page, S., Forer, P. and Lawton, G. (1999). Small business development and tourism: Terra incognita. *Tourism Management*, 20:435–459.

Peredo, A. M. and Chrisman, J. J. (2006). Toward a theory of community-based enterprise. *The Academy of Management Review*, 31(2):309–328.

Pérez, E. H. and Canino, R. M. (2009). The importance of the entrepreneur's perception of "Success". *Review of International Comparative Management*, 10(5):990–1010.

Powell, G. N. and Eddleston, K. A. (2008). The paradox of the contented female business owner. *Journal of Vocational Behavior*, 73:24–36.

Private Sector Foundation of Uganda. (2011). *An Analysis of Private Sector Growth Challenges and Proposals for Policy Reforms*. Kampala: PSFU.

Private Sector Foundation Uganda. (2010). *Private Sector Platform for Action: A Synopsis of Key Private Sector Growth Challenges and Proposals for Policy Reforms*. Kampala: PSFU.

Rauch, A., Frese, M. and Utsch, A. (2005). Effects of human capital and long-term human resources development on employment growth of small-scale businesses: A causal analysis. *Entrepreneurship Theory and Practice*, 29:681–698.

Rauch, A., Frese, M. and Utsch, A. (2005). Effects of human capital and long-term human resources development on employment growth of small-scale businesses: A causal analysis. *Entrepreneurship Theory and Practice*, 29:681–698.

Rauch, A., Wiklund, J., Lumpkin, G. T. and Frese, M. (2009). Entrepreneurial orientation and business performance: Cumulative empirical evidence. *Entrepreneurship Theory and Practice*, 33:761–787.

Ravasi, D. and Turati, C. (2005). Exploring entrepreneurial learning: A comparative study of technology development projects. *Journal of Business Venturing*, 20:137–164.

Reijonen, H. and Komppula, R. (2007). Perception of success and its effect on small firm performance. *Journal of Small Business and Enterprise Development*, 14(4):689–701.

Renzulli, L. A. and Aldrich, H. (2005). Who can you turn to? Tie activation within core business discussion networks. *Social Forces*, 84(1):323–341.

Reuber, R. and Fischer, E. (1994). Entrepreneur's experience, expertise, and the performance of technology based firms. *IEEE Transactions on Engineering Management*, 41:365–374.

Reynoso, C. F. (2008). Role of intangible assets in the success of small and medium sized businesses. *Global Journal of Business Research*, 2(1):53–68.

Robb, A. M. and Fairlie, R. W. (2009). Determinants of business success: An examination of Asia-owned businesses in the USA. *Journal of Population Economics*, 22(4):827–858.

Rogoff, E. G., Lee, M.-S. and Suh, D.-C. (2004). "Who Done It?" Attributions by entrepreneurs and experts of the factors that cause and impede small business success. *Journal of Small Business Management*, 42(4):364–376.

Ronstad, R. (1985). The educated entrepreneurs: A new era of entrepreneurial education is beginning. *American Journal of Small Business*, 10:7–23.

Roomi, M. A., Harrison, P. and Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England. *Journal of Small Business and Enterprise Development*, 16(2):270–288.

Rosa, P., Carter, S. and Hamilton, D. (1996). Gender as a determinant of small business performance: Insights from a British Study. *Small Business Economics*, 8:463–478.

Sarasvathy, S. (2008). *Effectuation. Elements of Entrepreneurial Expertise*. Cheltenham, UK: Edward Elgar.

Schmidt, J. and Keil, T. (2013). What makes a resource valuable? identifying the drivers of firm idiosyncratic resource value. *Academy of Management Review*, 38(2):206–228.

Schreiber, J. B., Stage, F. K. and King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research*, 99(6):323–337.

Schultz, T. (1993). The economic importance of human capital in modernization. *Education Economics*, 1:13–19.

Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach, Volume 1*. John Wiley & Sons.

Selvarajan, T. T., Ramamoorthy, N., Flood, P. C., Guthrie, J. P., MacCurtain, S. and Liu, W. (2007). The role of human capital philosophy in promoting firm innovativeness and performance: Test of a causal model. *International Journal of Human Resource Management*, 18:1456–1470.

Shane, S. and Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25:217–226.

Sharpe, N. R., Veaux, R. D., Velleman, P. F. and Wright, D. (2012). *Business Statistics*. Toronto: Pearson Canada Inc.

Shaw, G. and Williams, A. (2004). From lifestyle consumption to lifestyle production: Changing patterns of tourism entrepreneurship. In R. Thomas, *Small Firms in Tourism: International Perspectives* (pp. 99–113). Oxford: Elsevier.

Shinnar, R. S., Giacomin, O. and Janssen, F. (2012). Entrepreneurial perceptions and intentions: The role of gender and culture. *Entrepreneurship Theory and Practice*, 36:465–494.

Simpson, M., Tuck, N. and Bellamy, S. (2004). Small business success factors: The role of education and training. *Education & Training*, 46(8/9):481–91.

Sirmon, D. G. and Hitt, M. A. (2003). Managing resources: Linking unique resources, management and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27:339–358.

Sirmon, D. G., Hitt, M. A. and Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32:273–292.

Sirmon, D. G., Hitt, M. A., Ireland, R. D. and Gilbert, B. A. (2011). Resource orchestration to create competitive advantage: Breadth, depth, and life cycle effects. *Journal of Management*, 37(5):1390–1412.

Sluis, J. V., Praag, M. V. and Vijverberg, W. (2005). Entrepreneurship selection and performance: A meta-analysis of the impact of education in developing economies. *World Bank Economic Review*, 19(2):225–261.

Snyder, M. (2000). *Women in African Economies: Business Ventures and Investment Patterns of 74 Ugandan Women*. Kampala: Fountain Publishers.

Solomon, G. T., Duffy, S. and Tarabishy, A. (2002). The state of entrepreneurship education in the united states: A nationwide survey and analysis. *International Journal of Entrepreneurship Education*, 1(1):1–22.

Sørensen, J. B. and Chang, P. M. (2006). *Determinants of Successful Entrepreneurship: A Review of the Recent Literature*. Report prepared for the Ewing Marion Kauffman Foundation.

Stam, W. and Elfring, T. (2008). Entrepreneurial orientation and new venture performance: The moderating role of intra- and extra-industry social capital. *Academy of Management Journal*, 51(1):97–111.

Stevenson, L. and St-Onge, A. (2005). *Support for Growth-Oriented Women Entrepreneurs in Uganda*. International Labour Organization.

Storey, D. J. (2011). Optimism and chance: The elephants in the entrepreneurship room. *International Small Business Journal*, 29(4):303–321.

Sullivan, D. M. and Meek, W. R. (2012). Gender and entrepreneurship: A review and process model. *Journal of Managerial Psychology*, 27(5):428–458.

Thomas, F., Barya, G. and Katongole, C. (2011). *Opportunity Study: Inclusive Tourism Programme*. Geneva: International Trade Centre.

Thomas, R. (2000). Small firms in the tourism industry: Some conceptual issues. *International Journal of Tourism Research*, 2(5):345–353.

Thomas, R., Shaw, G. and Page, S. (2011). Understanding small firms in tourism: A perspective on research trends and challenges. *Tourism Management*, 32:963–976.

Uganda Bureau of Statistics. (2011). *Census of Business Enterprises in Uganda*. Kampala: UBOS.

Uganda Bureau of Statistics. (2011). *Statistical Abstract*. Kampala: UBOS.

Unger, J. M. (2006). *Entrepreneurial Success: The Role of Human Capital and Learning*. Inaugural-Dissertation, Justus-Liebig-Universität Gießen.

United Nations World Tourism Organisation. (2012). *Situational Assessment of the Economics of Tourism in the Republic of Uganda*. Kampala: UNWTO.

United Nations World Tourism Organisation. (2012). *Tourism Highlights*. UNWTO.

VanderWerf, P. and Brush, C. (1992). A comparison of methods and sources for obtaining new estimates of performance. *Journal of Business Venturing*, 7:157–170.

Venkatraman, N. and Ramanujam, V. (1986). *Measurement of Business Economic Performance: An Examination of Method Convergence*. Massachusetts Institute of Technology.

Walker, E. and Brown, A. (2004). What success factors are important to small business owners. *International Small Business Journal*, 22(6):577–594.

Watson, J. (2007). Modeling the relationship between networking and firm performance. *Journal of Business Venturing*, 22(6):852–874.

Watson, J. and Robinson, S. (2003). Adjusting for risk in comparing the performances of male- and female-controlled SMEs. *Journal of Business Venturing*, 18:773–788.

Wiklund, J., Patzelt, H. and Shepherd, D. A. (2009). Building an integrative model of small business growth. *Small Business Economics*, 32:351–374.

World Bank. (2012). *Uganda Tourism Sector Situation Assessment: Tourism Reawakening*. World Bank.

World Bank. (2013). *Economic and Statistical Analysis of Tourism in Uganda, Final Draft*. World Bank.

World Tourism Organization; European Travel Commission. (2011). *Handbook on Tourism Product Development*. Madrid: World Tourism Organization; European Travel Commission.

World Travel and Tourism Council. (2013). *The Travel & Tourism Competitiveness Report: Reducing Barriers to Economic Growth and Job Creation*. Geneva: World Economic Forum.

Wright, M., Westhead, P. and Sohl, J. (1998). Editors' introduction: Habitual entrepreneurs and angel investors. *Entrepreneurship Theory and Practice*, 22(4):5–21.

Zhao, H., Seibert, S. E. and Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90:1265–1272.

Appendix 1: Intrapersonal Resources Rotated Component Matrix

	Component	
	Formal Entrepreneurial Education	**Informal Entrepreneurial Training**
I have attended a specific education course on how to do business	0.888	
I always attend specific training programs on how to do business	0.830	
I always read different materials on how to succeed as an entrepreneur	0.598	
I continuously learn from others how to do business better		0.779
I have a mentor who always teaches me how to do business better		0.745
I have worked under supervision of a more experienced person before		0.433
Eigen values	2.315	1.140
% variance	38.581	18.993
Cumulative %	38.581	57.574
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.659	
Bartlett's Test of Sphericity: Approx. Chi-Square	322.456	
Df	15	
Sig.	0.000	

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Appendix 2: Entrepreneurial Competence Rotated Component Matrix

	Component	
	Opportunity Identification & Evaluation	**Technical Expertise & Bargaining**
I am an expert in my area of specialization		0.460
I encourage new ideas from any worker regardless of his/ her status		0.537
When negotiating deals, I come out successful many times		0.687
I have a large network of people I know		0.794
I can easily assess whether an opportunity is viable or not on my own	0.879	
I can easily identify a business opportunity	0.812	
Eigen values	2.123	1.142
% variance	35.388	19.033
Cumulative %	35.388	54.420
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.617	
Bartlett's Test of Sphericity: Approx. Chi-Square	252.687	
Df	15	
Sig.	0.000	

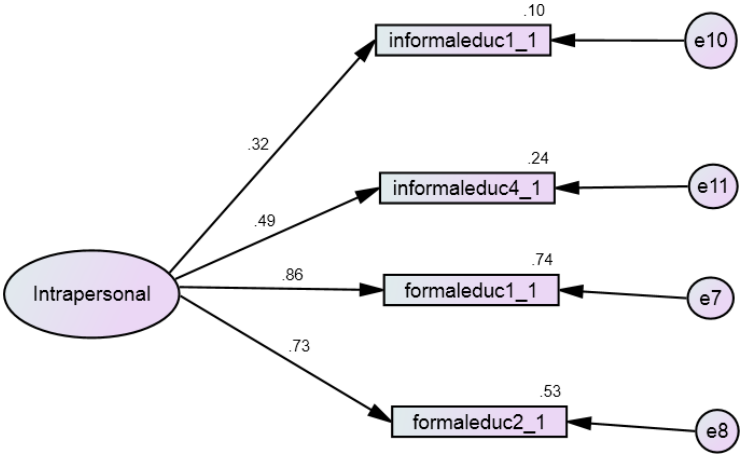
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Appendix 3: Rotated Component Matrix for Enterprise Success

	Component	
	Non-Financial Success	**Financial Success**
Looking after myself and my children	0.866	
Paying school fees for my children	0.834	
Building a house out of money from business	0.714	
Being content and satisfied with life	0.648	
Freedom from having a boss	0.633	
Opening more branches of this same business		0.804
Making a lot of profit		0.754
Increasing the stock in business		0.646
Recruiting more employees		0.633
Keeping the business up and running		0.456
Eigen values	3.136	2.107
% variance	28.233	24.196
Cumulative %	28.233	52.429
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.737	
Bartlett's Test of Sphericity: Approx. Chi-Square	826.492	
Df	45	
Sig.	0.000	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Appendix 4: The Measurement Model for Intrapersonal Resources



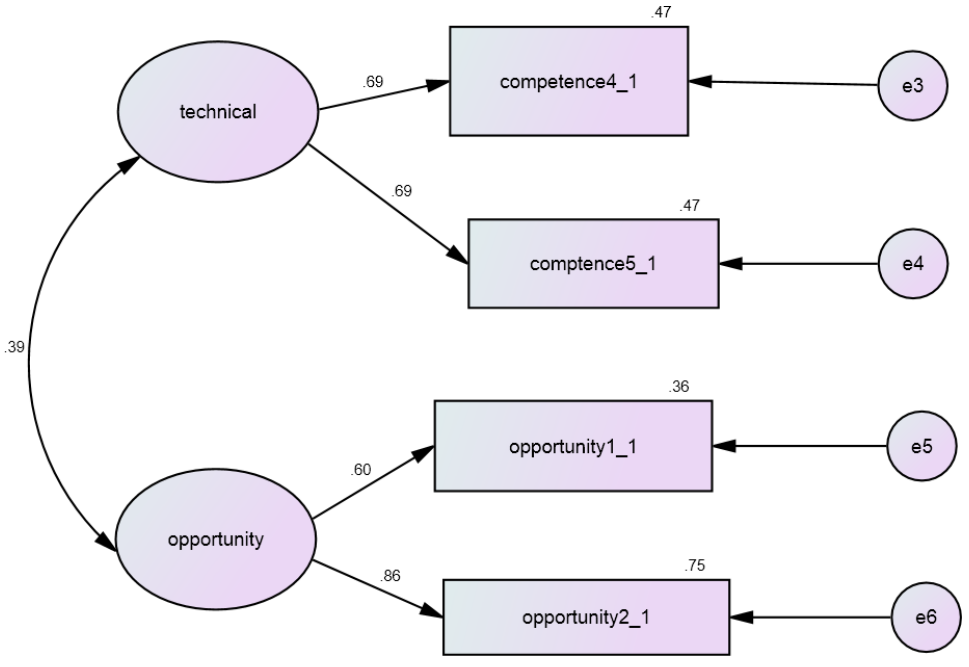
Chi-square = 3.2; df = 2; p = 0.198; RMR = 0.075; GFI = 0.995; AGFI = 0.974; NFI = 0.987; TLI = 0.984; CFI = 0.995; RMSEA = 0.045; PCLOSE = 0.420.

informaleduc1_1	I have worked under supervision of a more experienced person before
informaleduc4_1	I always read different materials on how to succeed as an entrepreneur
formaleduc1_1	I have attended a specific education course on how to do business
formaleduc2_1	I always attend specific short-term training programs on how to do business

Path Coefficients for Intrapersonal Resources

			Unstandardized Path Coeff.	S.E.	C.R.	P	Standardized Path Coeff.	R^2
informaleduc1_1	—	Intrapersonal	1.000				0.320	0.102
informaleduc4_1	—	Intrapersonal	1.387	0.309	4.496	***	0.485	0.235
formaleduc1_1	—	Intrapersonal	2.557	0.526	4.863	***	0.863	0.744
formaleduc2_1	—	Intrapersonal	2.099	0.423	4.968	***	0.727	0.528

Appendix 5: Measurement Model for Entrepreneurial Competence



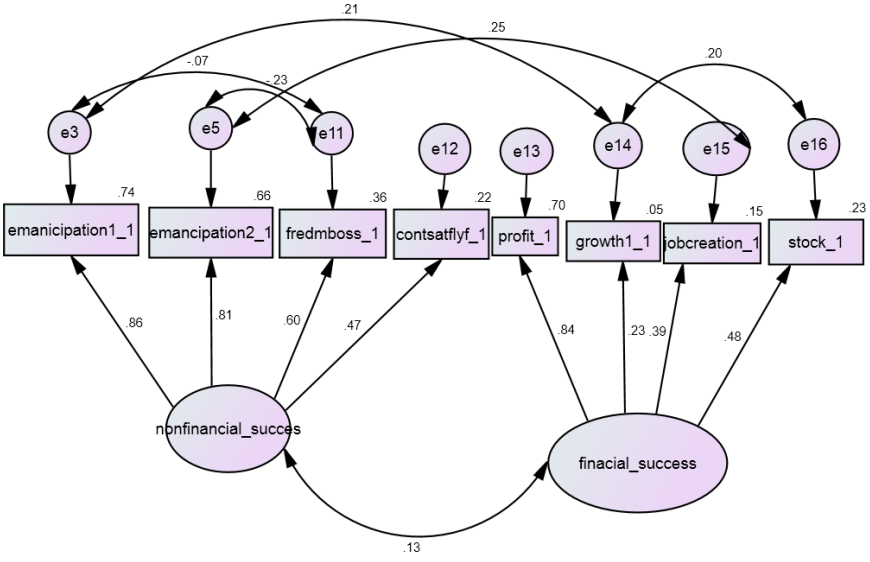
Chi-square = 0.012; Df = 1; P = 0.914; RMR = 0.003; GFI = 1.000; AGFI = 1.000; NFI = 1.000; TLI = 1.031; CFI = 1.000; RMSEA = 0.000; PCLOSE = 0.941.

competence4_1	When negotiating deals, I come out successful many times.
comptence5_1	I have a large network of people I know.
opportunity1_1	I can easily assess whether an opportunity is viable or not on my own
opportunity2_1	I can easily identify a business opportunity.

Path Coefficients for Entrepreneurial Competence

			Unstandardized Path Coeff.	S.E.	C.R.	P	Standardised Path Coeff.	R^2
competence4_1	—	technical	1.000				0.689	0.474
comptence5_1	—	technical	0.999	0.247	4.040	***	0.689	0.475
opportunity1_1	—	opportunity	1.000				0.596	0.355
opportunity2_1	—	opportunity	1.347	0.362	3.727	***	0.864	0.747

Appendix 6: The Measurement Model for Enterprise Success



Enterprise Success

Chi-square = 19.9; df = 14; p = 0.135; RMR = 0.069; GFI = 0.984; AGFI = 0.959; NFI = 0.962; TLI = 0.976; CFI = 0.988; RMSEA = 0.037; PCLOSE = 0.688.

emanicipation1_1	Looking after myself and my children
emancipation2_1	Paying school fees for my children
fredmboss_1	Freedom from having a boss
contsatflyf_1	Being content and satisfied with life
profit 1_1	Making a lot of profit
growth 1_1	Keeping the business up and running
jobcreation 1_1	Recruiting more employees
stock 1_1	Increasing the stock in business

Appendix 7: ANOVA for Formal Schooling and Perceptions of Non-Financial Success

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36.867	2	18.433	12.261	0.000
Within Groups	446.528	297	1.503		
Total	483.394	299			

Post-Hoc Test for Formal Schooling and Perceptions of Non-Financial Success

(I) Formal Education	(J) Formal Education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Primary education	Secondary education	0.19822	0.18057	0.273	−0.1571	0.5536
	Tertiary and university	0.87379*	0.19527	0.000	0.4895	1.2581
Secondary education	Primary education	−0.19822	0.18057	0.273	−0.5536	0.1571
	Tertiary and university	0.67557*	0.16480	0.000	0.3512	0.9999
Tertiary and university	Primary education	−0.87379*	0.19527	0.000	−1.2581	−0.4895
	Secondary education	−0.67557*	0.16480	0.000	−0.9999	−0.3512

*The mean difference is significant at the 0.05 level.