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**2019001-EEF**

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**February 2019**

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# Drivers of Women Entrepreneurs in Tourism in Tanzania: Capital, Goal Setting and Business Growth

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# Drivers of women entrepreneurs in tourism in Tanzania: capital, goal setting and business growth<sup>1</sup>

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February 2019

## Abstract

Tourism in Tanzania is one of the most important sectors in terms of its contribution to the nation's GDP, employment and investment. Women entrepreneurs play a substantial role in the tourism sector in Tanzania. To find out what drives them, we study the women's socio-economic background (mother education, role models and family support), (cultural, social capital and economic) their capital, their goal setting (perceptions and aspirations) and the business growth of their firms. Using a survey questionnaire, we assemble data on 120 small tourism firms. The research findings provide ample evidence that the capital of the women entrepreneurs drives their goal setting and ultimately their firm's business growth. Therefore, when strengthening the capital of the women entrepreneurs in tourism, professional organisations and government policies can become more beneficial to the Tanzanian society.

**Keywords:** women entrepreneurs, Tanzania, survey questionnaire

**JEL Classifications:** D23, J16, L21, L25, L26, L83, M21, O17, O55, Z32

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<sup>1</sup> The authors are indebted to Luchien Karsten and Clemens Lutz of the University of Groningen, who helped us to refine our ideas and thoughts. We are thankful to Florian Noseleit of the University of Groningen for his valuable support and advices.

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## **1. Introduction**

Tanzania is endowed with great natural, cultural, historic, and archeological tourism assets. Among the best-known areas are seven world heritage sites: Ngorongoro Conservation Area, Serengeti National Park, Lake Manyara, Selous Game Reserve, Mount Kilimanjaro and its national park, Stone Town of Zanzibar, and the ruins of Kilwa Kisiwani and Songo Mnara (URT, 2010). The tourism sector accounted for US \$5.9 billion in direct and indirect contributions (equivalent to 13.3% of GDP), generated the bulk of the exports and provided direct employment to over 470,000 people in 2016 (WTTC, 2017). The extensive demand on the tourism sector has stimulated many small and medium sized businesses to invest in it.

Due to the potential for employment creation and making money, women entrepreneurs create and operate their own tourism ventures. Whereas the tourism sector in Tanzania is regarded as male-dominated, the number of women who own and manage tourism firms has been increasing (URT, 2012). The influx of women entrepreneurs into tourism is important for Tanzania. On the one hand, the women play a substantial role fostering local development, generating employment and creating wealth. On the other hand, they are important in linking tourism benefits with the local economy and encouraging the development of local enterprises (Carlisle et al., 2013).

Women entrepreneurs play a significant role in contributing to the nation's economy, yet many of these women are hidden within the informal sector (Mordi et al., 2010). While women form the majority in Tanzania, they also form the majority of the poorest of the poor. A study by the ILO in Tanzania (Stevenson & St-Onge, 2005) indicated that most women entrepreneurs engage in business as a way of creating employment for themselves, meeting household needs, supplementing income, security, autonomy, and enjoyment in their work.

Women entrepreneurs in tourism in Tanzania are dispersed all over the country where tourism attractions and destinations are available. Tourism provides various entry points for women's social and economic development and offers opportunities for creating self-employment in small and medium sized income generating activities. While some women manage large, successful tourism businesses, many others manage small businesses. A significant number of

these women's businesses are not documented or registered within the Ministry of Natural Resources and Tourism (MNRT) or in any other authoritative bodies.

Since tourism in Tanzania is an important sector in the economy and for social development, the involvement of women entrepreneurs in this sector becomes indispensable. However, their position in tourism has been neglected in academic research (Ateljevic & Peters, 2009; Thien, 2009). In order to understand their genesis, growth, or articulation with the wider socio-economic environment that they inhabit (Thomas et al., 2011), this study addresses the role of women entrepreneurs in tourism in Tanzania.

To support the promising developments, it becomes relevant to address the socio-economic background of the women, the cultural, social and financial capital they are gifted with, their entrepreneurial goal settings and the business growth of their tourism firms. Using a survey questionnaire, we assemble data on 120 small tourism firms. Our research findings provide ample evidence that the capital of the women entrepreneurs drives the goal setting and ultimately the business growth of their firms.

In the following sections, we first provide theory formation and build hypotheses on capital, goal setting and business growth. We describe how we measure cultural, social and economic capital, perceptions and aspirations as parts of goal setting, as well as business growth. We discuss the testing method and describe the findings, which culminate in a conceptual model that highlights influences of socio-economic background on capital, effects of capital on goal setting and how the former affect business growth. We conclude with our main findings, policy implications and suggestions for further research.

## **2. Capital, goal setting and business growth**

In this section, we develop the key concepts for the hypotheses and measurements. Firstly, we discuss how entrepreneurial goal setting in terms of their perceptions and aspirations relates to business growth. Next, the cultural, social and economic capital of the entrepreneurs are related to setting of the goals.

## 2.1 Goal setting and business growth

People differ in terms of their socialization, gender, and race as well as class and socio-economic backgrounds. Thus, there are variations among women entrepreneurs in their ability, need, responses to challenges, catching of opportunities and performance. In accordance with Bourdieu (1993), we expect that such issues can be explained by differences in perceptions, aspirations, and actions. We concentrate on the former two concepts and refer to these in terms of goal setting.

For the purpose of this study, we define the two concepts of goal setting (perceptions and aspirations) as follows. First, we define perceptions as a “process by which people translate sensory impressions into a coherent and unified view of the world around them. In fact, perception is equated with reality for most practical purposes and guides human behavior in general”<sup>4</sup>. Aspiration is defined as “a desire or ambition, an aim, a longing for which a person is motivated to achieve”<sup>5</sup>. Actions are practices of individuals that solve business challenges. In addition, business growth is the subjectively value contribution of the entrepreneur’s business. However, this study limits itself to financial measures thereof.

We propose the following relationship between goal setting and business growth:

*(H1a) Women entrepreneurs with positive aspirations regarding their business achieve higher business growth;*

*(H1b) Women entrepreneurs with positive perceptions regarding their ability to manage their business achieve higher business growth.*

## 2.2 Capital and goal setting

Perceptions and aspirations of an individual are influenced by social relationships and the context in which they originate, to be referred to here in terms of capital. The perceptions and aspirations of women entrepreneurs from socio-economic backgrounds that encourage women entrepreneurship will be different from those of women from socio-economic backgrounds that discourage this. We examine and discuss how access to capital and its translation into goal setting enables women entrepreneurs to achieve business growth.

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<sup>4</sup> <http://www.businessdictionary.com/definition/perception.html>

<sup>5</sup> <http://www.dictionary.com>

**i. Cultural capital: Socio-economic background and education**

Cultural capital, according to Bourdieu (1986), is socialized within the family and is later reinforced within the educational system. Bourdieu (1984) highlights the roles played by cultural capital: as an indicator and a basis of class position, an informal academic standard, a basis for social selection, and a resource for power facilitating access to organizational positions. To gauge the socio-economic background, we use three variables: parents' formal education, family role models, and family support. Cultural capital is conceptualized in terms of the entrepreneurs' level of education.

**- Parents' formal education**

The parental education background is important for enhancing growth aspiration because the socio-economic background of an individual is formed within a family context. Thus, women entrepreneurs whose parents are highly educated have more opportunities for accessing formal education, learning different skills, and acquiring knowledge just like their parents.

Previous studies on socio-economic background have used key indicators such as income, education level, and occupation (White 1982; Tundui, 2012). However, the Tundui study (2012) did not obtain reliable information about parents' income. In this study, therefore, we use the parents' education level as well as whether the parents owned a small business and received family support as our measurement of socio-economic background. We expect that the parents' (especially the mother's) education background may influence the education level of the entrepreneur.

Thus, we propose:

*(H2a) The mother's education level is positively correlated with access of cultural capital of her daughter (the entrepreneur).*

**- Family role models**

Research on family business reports that early exposure to entrepreneurial experiences in the family business (see Carr & Sequeira, 2007; Dyer & Handler, 1994) will affect the family members' attitudes and intentions towards entrepreneurial action. Equally important, parents as business owners can influence their children's entrepreneurial orientation by serving as role models (Aldrich et al., 1998) and by providing cultural, social, and economic capital to their children.



Alternatively, previous experiences of an entrepreneur in a family firm may contribute to growth aspirations of an entrepreneur. Working in a family firm at a younger age provides an entrepreneur with different types of entrepreneurial skills, such as those in management, and sharpen entrepreneurial knowledge of doing business and technical know-how and who to contact (knowledge of accessing and accumulation of capital).

Bennedsen et al. (2007) emphasizes that entrepreneurs with previous experiences in a family firm can perform better than other managers because they have hard-to-obtain firm-specific knowledge and higher levels of trust from key stakeholders. Moreover, parents who owned a business served as role models to their children and may have influenced them to become entrepreneurs. Also, family role models may influence access to capital and help to motivate children into entrepreneurship.

Gibson (2004:149) identifies the functions and importance of role models as “provide learning, motivation and inspiration to help others”. Similarly, presence of entrepreneurs with experience and successful role models transmits positive messages to potential entrepreneurs (Noguera et al., 2013). Moreover, family members with an entrepreneurship background become role models and mentors to aspiring entrepreneurs not only during the venture preparation process but also during the business creation process (Aldrich & Cliff, 2003; Chang et al., 2009). We expect that family role models may influence women entrepreneurs’ access to social networks and funding for business.

Therefore, we propose:

*(H2b) Women entrepreneurs whose parents or close relatives own a business (family role model) have easier access to capital.*

- ***Family support***

Support from family and friends is a key element of the socio-economic background and a motivation for entrepreneurs in some African countries. It is an important factor for many women’s entrepreneurial orientation and growth aspirations. For instance, support in terms of encouragement to start a business, financial support for startup capital, and the approval to establish a business are key elements for enabling women to access markets, resources, and other business opportunities (Chang et al., 2009).

Family is an important source of encouragement and support for entrepreneurs (Chang et al., 2009; Anderson et al., 2005). Family members may provide entrepreneurs with use of financial capital or help in securing external funding sources (Chang et al., 2009; Aldrich & Cliff, 2003; Anderson et al., 2005; Dyer & Handler, 1994). They also constitute a source of labor and support that can be used before, during, and after start-up (Chang et al., 2009).

Thus, we propose:

*(H2c) Women entrepreneurs who receive support from family and friends have easier access to capital*

**- Entrepreneur's education background and previous experiences**

Formal education offers technical knowledge that is conducive for managing business and equips an entrepreneur with knowledge and skills needed to manage their firms. Formal education also equips entrepreneurs with abilities to handle challenges that are faced, to seize business opportunities, and it may enhance business aspirations. Furthermore, formal education is important and may help entrepreneurs to accumulate explicit knowledge for useful skills (Brush et al., 2017, Davidsson & Honig, 2003). Moreover, some studies have positively reported on the relationship between education and growth aspirations (Tundui, 2012; Olomi, 2001; Davidsson, 1991).

Therefore, we propose:

*(H3a) Women entrepreneurs with higher levels of education have stronger positive perceptions towards their ability to manage their businesses;*

*(H3b) Women entrepreneurs with higher levels of education have stronger aspirations towards business growth.*

**ii. Social capital and goal setting**

Social capital has been defined as the resources and power that people obtain through their social networks and connections (Bourdieu & Wacquant, 1992). Having extensive social networks is a valuable asset that can help entrepreneurs to obtain access to information for business opportunities and resources (Nichter & Goldmark, 2009), economic capital, and business advice (Wiklund et al., 2009).

However, social networks have a number of downsides for growth aspirations of women entrepreneurs. For instance, they may be too expensive or inaccessible to the poorest entrepreneurs or may systematically exclude some marginalized entrepreneurs such as women (Nichter & Goldmark, 2009). For example, the costs involved for a person to join formal tourism professional associations make some women entrepreneurs to avoid them.

Moreover, the network type can determine entrepreneurs' participation in and access to business opportunities offered by the social network. A formal professional association requires an entrepreneur to have a formal business entity, pay annual membership fees, and offers access benefits such as training on business management and skills, participation in local and international trade fairs, networking, form alliances with formal institutions to address challenges that are faced, and many other opportunities.

For the purpose of this study, we distinguish three groups of professional business associations with which our respondents are either affiliated or associated: (i) a formal women professional association in tourism (AWOTTA); (ii), formal professional associations in tourism affiliated with the government (TATO, ZATO, HAT, ITTA, TACTO) and (iii) MFIs: micro-finance institutions (VICOBA, FINCA, TUNAKOPESA).

Therefore, we propose:

*(H4a) Women entrepreneurs who affiliate with professional associations have stronger positive perceptions towards their ability to manage business growth;*

*(H4b) Women entrepreneurs who affiliate with professional associations have stronger aspirations towards business growth.*

### **2.3 Economic capital and goal setting**

Economic capital is another important type of capital that is needed for an entrepreneur to establish and manage her firm. A shortage of economic capital can be a major barrier to an SME's growth (Orser et al., 2000). Moreover, it is indicated that women entrepreneurs are more reluctant than men to apply for loans (Coleman, 2007). However, entrepreneurs in developing countries have limited access to bank loans. They typically rely on other types of credit such as MFIs and informal loans (Nichter & Goldmark, 2009).

Therefore, we propose:

*(H5a) Women entrepreneurs who have access to a bank loan, MFIs, or family or friends to finance their start-up and ongoing business have stronger positive perceptions towards their ability to manage business growth;*

*(H5b) Women entrepreneurs who have access to a bank loan, MFIs, or family or friends to finance their start-up and ongoing business have stronger aspirations towards business growth.*

The socio-economic backgrounds of women entrepreneurs influence their goal setting and access to capital. In order for women entrepreneurs to realize business growth, they must have positive perceptions of their ability to pursue and handle it. Yet, perceptions alone are not enough; positive aspirations towards growth also matter to achieve business growth.

<Insert Figure 1 here>

### **3. Data**

We first provide a detailed description of the measurement of key concepts in our study. Our quantitative analysis focuses on three key variables: capital (cultural, social, and economic capital), goal setting (perceptions and aspirations) and business growth. Table 1 below provides information regarding variables for the analysis and measures.

<Insert Table 1 here>

#### **3.1 Measuring perceptions, aspirations and actions**

To measure perceptions towards business growth we employed questions previously used by Davidsson (1989). In a Likert scale, we asked respondents to respond to different statements concerning perceptions towards ability, need and opportunity.

Initially, we used these three variables of perceptions towards ability on business growth to obtain a value for the latent variable ‘perceptions’. However, when we ran a Structural Equation Model (SEM) with this latent variable, the model failed to converge. Therefore, we decided to run the model with one variable (variable ii as presented in Table 1: "A capable

entrepreneur can always run her firm at a profit even if the industry at large has problems”). As all three proxies for “perceptions” are strongly correlated, we hold that this is acceptable.

Aspirations are treated as a latent variable. We again used questions previously used by Davidsson (1989). We asked women entrepreneurs about their future aspirations for the next five years regarding turnover and number of employees. We also enquired about the consequences that growth would have on workload, work tasks, future aspirations, firm survival, and well-being. The respondents filled in a five-point Likert scale (1: “strongly disagree”, and 5: “strongly agree”).

Although seven questions deal with growth aspirations, we selected only the three of them that fit best (see Table 1 for details). These are: “I have specific future plans to grow my business”, “I have always wanted to be successful and to accomplish something in my life”, and “A person who leads a growing business will, at the same time, develop as a human being and thus gain a richer life”.

To measure actions, we asked our respondents to indicate the major challenges they faced at start-up. Subsequently, we asked to what extent their entrepreneurial action solved this major challenge. The latter information was taken as a proxy for the effectiveness of the entrepreneurial action.

### **3.2. Measuring capital: cultural capital, social capital and economic capital**

#### ***- Cultural capital***

In the Tanzanian context, women play a significant role in rearing and socializing children and specifically in socializing girl children. Responsibilities of raising children and socializing them to become respected members of society belong to women. Some of our respondents were raised by single, divorced, or widowed mothers. Based on this, we examine the socio-economic background of a woman entrepreneur from the perspective of the educational background of her mother.

A role model can be a family member or a close friend. A woman entrepreneur with parents, close relatives, or close friends who owns a business is likely to have high growth aspirations. In Tanzania, the extended family is important and a way that a family transmits cultural roles to its generations. Learning by doing, especially from family members, is a way of life. A

dummy variable is whether an entrepreneur has anyone in her family or a close friend who owned a small business before she started her own business.

Family support is another variable employed. Generally, in the Tanzanian context, support from family as well as extended family is a way of life and very important. It is believed that when you support your fellow kinsman, you are supporting the community. Another variable of cultural capital we measure in our study is the education attainment of the entrepreneur. Some scholars have previously used education with regards to business growth in their analysis (Tundui, 2012; Bennedsen et al., 2007; Davidsson, 1991, 1989).

#### ***- Social Capital***

This study draws from the Bourdieu and Wacquant (1992) definition of social capital to develop a count variable (see Table 1) of whether an entrepreneur is a member of a professional association and whether they are aware of formal/informal tourism professional associations. This reflects that membership in a business professional association plays an important role in the growth aspirations of women entrepreneurs.

#### ***-Economic capital***

Economic capital is the ability to command over economic resources and is that which is immediately and directly convertible into money (Bourdieu, 1990). It is a count variable (see Table 1). Wiklund and Shepherd (2003) operationalized access to economic capital on a seven-point scale anchored by insufficient and full satisfactory for business development. We asked our respondents whether family and friends were involved in financing the business and if they applied/accessed a bank loan and/or micro finance institutions (MFIs).

### **3.3 Control variables**

From previous studies, we derive that an entrepreneur's age is significantly related to growth aspirations (Manolova et al., 2008). We also control for marital status because many of the tourism businesses in our sample are family businesses and we wanted to investigate whether marital status had a significant effect on growth aspirations.

### **3.4 Descriptive statistics**

Table 2 shows that cultural capital of the women entrepreneurs is not high. Especially the mother's education and the existence of family role models are low. Family support and

personal education are considered to be moderate though. Social capital (the relationship to a professional association) is low, while economic capital (access to financing) is moderate. Aspirations (future plans, growing business and accomplishment of success) and business growth (net income change, sales growth and profit growth) are quite high, indicating a positive outlook of women entrepreneurs. Table 2 also lists skewness and kurtosis outcomes for our variables. Normality is rejected for all variables, except Mother education and Education. Table 3 shows that except for the last three variables, Net income changed, Sales growth and Profit growth, correlations between the variables are not very high.

< Insert Table 2 here >

< Insert Table 3 here >

#### **4. Method**

We apply Structural Equation Modeling (SEM) in order to specify and estimate our model, and verify our hypothesis. SEM is a powerful statistical modelling technique, which is widely used in the behavioral sciences. For a short and non-technical introduction, see e.g. Hox & Bechger (1998). SEM can be viewed as a combination of factor analysis and path analysis. In our application, the theoretical constructs and the associated concepts are represented by latent variables. The relationships between the latent variables are represented by regression or path coefficients between the factors. SEM implies a structure for the covariances between the observed variables.

Structural equation models are often visualized by a graphical path diagram. The software we use in our application, the SEM package of Stata (StataCorp., 2013), allows us to specify the model directly as a path diagram. Path analysis was invented by the geneticist Sewall Wright (Wright, 1921). A path diagram consists of boxes and circles, which are connected by arrows. Observed or measured variables are represented by rectangular or squared boxes, while latent or unmeasured variables factors by circles or ellipses. Single headed arrows or paths denote causal relationships in the model, with the variable at the tail of the arrow causing the variable at the point. Double arrows, which we do not use here, indicate covariances or correlations

without a causal interpretation. Statistically, the single headed errors represent regression coefficients, and double-headed arrows covariances.

To estimate our structural equation models we adopt Maximum Likelihood, the method most widely used for this type of models. Taking into account the limited number of observations and the complexity of the model, we applied general-to-specific-modelling. We eliminate the least significant variables and stop as soon as all of the retained variables in the models fulfill the minimum requirement of p-values being smaller than 0.20.

## 5. Results

We report the analysis in three steps. First, we do a partial analysis of the relationship between the socio-economic background and access to capital. Subsequently, the relationship between capital and goal setting is investigated. Finally, we analyze the relationship between capital, goal setting and realized growth.

### 5.1 Socio-economic background and capital

The results of the Structural Equation Model (SEM) reported in Table 2 and in Figure 2 depict the relationships of socio-economic background and capital. The outcomes show that the education of the entrepreneur (her cultural capital) is strongly related to her mother's education. This is in line with the literature (see Dumais 2002; De Graaf et al., 2000) and it supports H2a: *the mother's education level is positively correlated with the access of cultural capital of her daughter (the entrepreneur)*.

<Insert Table 4 here>

Family or parental role models through the ownership of a family business or previous entrepreneurial experiences at the family firm have a positive effect on the education of the entrepreneur. This result supports H2b: *Women entrepreneurs whose parents or close relatives own a business (family role model) have easier access to cultural capital*. However, we were not able to ascertain evidence for a relationship between role models and access to social and economic capital.



We also observe support for H2C as family support is significantly influencing social capital. Further, family support has a significant effect on economic capital, in line with Carr & Sequeira (2007). In Tanzania, the socio-economic background is crucial for an individual to access other than cultural capital, in this case, social and economic capital. For example, family is an important source of social capital. In addition, start-up capital is a scarce resource. Due to a lack of collateral, most start-ups do not have access to formal bank loans and simply depend on their family and friends.

The outcome also suggests that gender relationships are playing a role here whereby family support for female entrepreneurs is important. Parents and other family members would support their female entrepreneurs in terms of start-up capital, sharing experiences, firm specific information, knowledge, and introducing them to social networks in order to access markets, networking, and other business opportunities.

Our findings support H2c: *Women entrepreneurs who receive support from family and friends have easier access to cultural, social, and economic capital.* In this case, the results confirm that family support is important for facilitating easy access to the social and economic capital, which is in line with Bourdieu's theory of practice (1990).

However, the mother's education and being a role model have no significant effect on social and economic capital. Nevertheless, the socio-economic background of women entrepreneurs, in terms of family support received, is influencing access to capital in Tanzania.

Figure 2 presents relationships of the socio-economic background and capital if we apply general-to-specific modelling (all of the retained variables fulfill the condition: p-value > 0.20). The coefficients included in Figure 2 are in accordance with the results presented in Table 2, indicating that these are quite robust findings.

<Insert Figure 2 here>

## **5.2. Capital and goal setting**

In the second part of our model, we analyzed the relationships between elements of goal setting, capital, and socio-economic background. The SEM results presented in Table 3 show

the direct relations between the variables. Capital and socio-economic background variables have an effect on aspirations and perceptions (goal setting), but not on actions.

<Insert Table 5 here>

The socio-economic background of a mother's education has a direct relationship with aspirations, and family support is directly related to perceptions. In addition, we observe that family support has a significant effect on aspirations.

Moreover, social and economic capital has the a priori expected positive effect on aspirations. The level of education of an entrepreneur is related to aspirations, but the effect is negative. This result contradicts our expectations. Intuitively, we may argue that the better-educated entrepreneurs may be more aware of the risks involved in the uncertain weak institutional setting. Therefore, they can be more prudent in a risky institutional environment.

The results provide support for H3b, H4b, and H5b. The findings reveal that women entrepreneurs with higher levels of education and those who affiliate with professional associations have stronger aspirations towards business growth. Further, entrepreneurs who have access to a bank loan, MFIs, or family or friends to finance their start-up and ongoing business have stronger aspirations towards business growth. These findings are in line with Bourdieu's framework on the importance of the socio-economic backgrounds for accessing capital and the translations of capital into goal setting.

Action is not related to capital or socio-economic background. A possible explanation for this is the weakness of institutions with regard to business environment uncertainties. Even if individuals address the challenges being faced, they do not control the uncertainties of institutions nor is there any guarantee that it will work out. Moreover, we acknowledge that the data collection process regarding this variable faced major challenges.

Results with regard to perceptions show only weak relationships. Family support is playing a significant role and directly impacts on perceptions. It is important in regard to members' reliance, not only on moral support but also to access other economic, social, and cultural capital. Perception has a weak relationship to capital, but through family support it facilitates

socializing family members to have an ability for managing tourism firms. This is in line with Carr & Sequeira (2007).

From these results, we conclude that aspirations confirm most of the expected results while the effect on perception is weakly related, and actions fail to give evidence. We conclude that these results provide at least some support for Bourdieu's theory of practice that an individual's practice is the product of the socio-economic background, access to capital, and incorporation/translations of capital into goal setting (perceptions and aspirations).

Figure 3 presents the significant relationships between goal setting, capital, and socio-economic background if we apply general to specific modelling (all of the retained variables fulfill the condition:  $p\text{-value} > 0.20$ ). The coefficients noted in Figure 3 are in line with the results presented in Table 3, indicating that the results are quite robust.

<Insert Figure 3 here>

### **5.3 Goal setting and business growth**

The results presented in Table 4 and Figure 4 show that elements of goal setting (both perceptions and aspirations) have no significant effect on business growth. Therefore, H1a and H1b are rejected.

<Insert Table 6 here>

<Insert Figure 4 here>

However, in line with Davidsson (1991) and Olomi (2001), the variables on the education level of the entrepreneur and economic capital show a direct significant effect on business growth. Remarkably, these two variables also mediate the effect of socio-economic background factors on business growth. We observe in Table 4 and Figure 4 an indirect effect of the education level of the entrepreneur mediating the effect of the mother's education and the family role model on business growth. Similarly, economic capital mediates indirect effects of family support on business growth.

Figure 4 presents the significant relationships of goal setting, capital, socio-economic background, and business growth (if we apply general to specific modelling; all of the retained variables fulfill the condition:  $p\text{-value} > 0.20$ ). The coefficients noted in Figure 4 are in line with the results presented in Table 4, again indicating that these are quite robust.

From these findings, we conclude that education attainment of women entrepreneurs and their economic capital has an impact on business growth. However, these findings do not support the expected relationship between goal setting and growth.

Nevertheless, the findings also indicate that, in order to realize business growth, the socio-economic background plays two important major roles. It facilitates access to capital for women entrepreneurs and the incorporation of capital into goal setting. In effect, the socio-economic background plays the role of cultural capital (through the mother's education), social capital (through family support with regards to networking or introducing women entrepreneurs to relevant profession associations) and, on the economic capital, the socio-economic background plays the role of family support with regard to providing financial support for start-up capital and for business growth.

## **6. Conclusion**

This paper has focused on investigating the relationships of the socio-economic background on cultural, social, and economic capital; translation of these types of capital into the elements of goal setting (perceptions and aspirations); and lastly on business growth with women-owned firms in the Tanzanian tourism sector. Below, we describe our main findings first and elaborate on policy and research implications subsequently.

### **6.1 Main findings**

Our findings revealed that the socio-economic background is indeed important for accessing cultural, social, and economic capital, but the relationship with business growth of the firms of women entrepreneurs in the Tanzanian tourism sector is indirect.

A mother's education level and role models facilitate the women entrepreneurs' education. Educated mothers of entrepreneurs have the capacity to pass along their intellectual trait to their daughters. In addition, family role models ensure access to formal education.

Meanwhile, family support facilitates the access of social and economic capital for the women entrepreneurs. It is likely that the family provides them with start-up capital and introducing them to networking business associations and other business opportunities.

Cultural capital serves two roles. First, it provides socio-economic background through the education level of the mother of a woman entrepreneur, role models, and family support that facilitates the access of other capital. Secondly, cultural capital, through the education of an entrepreneur, plays a major role for an entrepreneur to translate her education into aspirations (goal setting) and then with positive aspirations towards business growth. Further, we observed that social capital is also important for women entrepreneurs for incorporating their social networking from business associations into positive aspirations towards business growth. Although not having a direct relationship with business growth, social capital is incorporated into positive aspirations of women entrepreneurs.

Economic capital has an impact on goal setting and business growth of women-owned firms in the tourism sector and is therefore a factor that does matter as well. Goal setting in terms of aspirations has an indirect effect on business growth through cultural capital (education level of the entrepreneur) and economic capital.

## **6.2 Policy implications**

Examining the mechanism by which the socio-economic background influences capital, goal setting, and business growth can help policy makers to consider the following. First, they should formulate policies that lead to a lower regulative burden and greater ease of doing business. The focus of policies should be on facilitating entrepreneurial initiatives. This requires the implementation of a structure that allows small start-ups to settle all of the formal requirements and to enforce those rules in a transparent non-corruptive manner. Our study shows that women-owned tourism businesses are seriously constrained by a lack of enforcement of regulative institutions. Moreover, normative institutions rooted in religion and gender differences further weaken the position of women.

Second, education and training play a key role. Policy initiatives should focus on providing women entrepreneurs in the tourism sector with greater levels of education and training. This knowledge can be disseminated through women business associations, information, and through web-based portals, provided that internet access is available (Terjesen et al., 2016).

Third, policy initiatives can also be directed towards mainstreaming entrepreneurship education and skills to young women and men in Tanzania. This can be disseminated through teaching entrepreneurship skills and practices in secondary schools and colleges.

Fourth, policy initiatives could promote women entrepreneurs businesses by introducing successful women entrepreneurs in formal education courses and lectures to motivate entrepreneurial aspirations in the tourism sector. Such initiatives are meant to stimulate an entrepreneurial career option amongst young people (Kwong & Thompson, 2016) and to later increase their start-up and entrepreneurial capabilities (Johannisson, 1991).

Concerning social capital, policy initiatives can be directed towards facilitating small and medium sized tourism businesses at the local level. This can be done through facilitating access to formal professional associations that cater to women as well as exposing women to entrepreneur mentors (Terjesen et al., 2016). Moreover, government policies should facilitate a supportive institutional environment of small businesses.

A major contribution of this study is its attention towards the socio-economic background and the important role it plays on accessing capital that is important for start-ups and ongoing businesses to realize business growth in the Tanzanian tourism sector. Policy makers should consider the implementation of policies that support the smaller informal start-ups. This investment may pay off in the long run as women entrepreneurs consider societal factors in their business as equally important as financial success.

### **6.3 Further research**

This study provides interesting insights into the socio-economic background of women entrepreneurs in Tanzania and how it influences their growth aspirations. However, it covered a just small sample of women entrepreneurs who are active only in the tourism business. We call on future research to extend the scope of research to other sectors.

Moreover, methodological challenges we faced during the survey study may have played a role for the little effect of goal setting on business growth. Further research should pay close attention on how to conduct research in Tanzania, as well as Africa in general, taking into consideration the recipient cultural context when using Western methodology.

Further research should also pay attention on how to measure perceptions and aspirations to fit into the cultural setting of respondents and how these elements shape business growth.

Finally, one may want to find out how the women entrepreneurs in tourism in Tanzania studied do fare in time as well as versus their male counterparts (cf. Bardasi et al., 2011).

## **References**

- Aldrich, H., Renzulli, L.A. and Langton, N., 1998. Passing on privilege: Resources provided by self-employed parents to their self-employed children. *Research in social stratification and mobility*, 16, 291-318.
- Aldrich, H.E. and Cliff, J.E., 2003. The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573-596.
- Anderson, A.R., Jack, S.L. and Dodd, S.D., 2005. The role of family members in entrepreneurial networks: Beyond the boundaries of the family firm. *Family Business Review*, 18(2), 135-154.
- Ateljevic, I., and Peeters, L.W.J., 2009. Women empowerment - entrepreneurship nexus in tourism: processes of social innovation. In J. Ateljevic & S.J. Page (Eds.), *Tourism and entrepreneurship: international perspectives*. Oxford: Butterworth-Heinemann Ltd.
- Bardasi, E., Sabarwal, S. and Terrell, K., 2011. How do female entrepreneurs perform? Evidence from three developing regions. *Small Business Economics*, 37(4), 417-441.
- Bennedsen, M., Nielsen, K.M., Pérez-González, F. and Wolfenzon, D., 2007. Inside the family firm: The role of families in succession decisions and performance. *The Quarterly Journal of Economics*, 122(2), 647-691.
- Bourdieu, P., 1984. *Distinction: A Social Critique of the Judgement of Taste*, London: Routledge.
- Bourdieu, P., 1986. Forms of capital. In Richardson, J. (ed.), *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood, 241-58.
- Bourdieu, P., 1990. *The Logic of Practice*. Stanford, CA: Stanford University Press.

- Bourdieu, P. and Wacquant, L.J., 1992. *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Bourdieu, P., 1993. *Sociology in question* (Vol. 18). London: Sage.
- Brush, C., Ali, A., Kelley, D. and Greene, P., 2017. The influence of human capital factors and context on women entrepreneurship: Which matters more? *Journal of Business Venturing Insights*, 8, 05-113.
- Carlisle, S., Kunc, M., Jones, E. and Tiffin, S., 2013. Supporting innovation for tourism development through multi-stakeholder approaches: Experiences from Africa. *Tourism Management*, 35, 59-69.
- Carr, J.C. and Sequeira, J.M., 2007. Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory of planned behaviour approach. *Journal of Business Research*, 60(10), 1090-1098.
- Chang, E.P., Memili, E., Chrisman, J.J., Kellermans, F.W. and Chua, J.H., 2009. Family social capital, venture preparedness, and start-up decisions: A study of Hispanic entrepreneurs in New England. *Family Business Review*, 22(3), 279-292.
- Coleman, S., 2007. The role of human and financial capital in the profitability and growth of women-owned small firms. *Journal of Small Business Management*, 45(3), 303-319.
- Davidsson, P., 1989. *Continued Entrepreneurship and Small Firm Growth*. Doctoral dissertation. Stockholm, Stockholm School of Economics.
- Davidsson, P., 1991. Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405-429.
- Davidsson, P. and Honig, B., 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331
- De Graaf, N.D., De Graaf, P.M. and Kraaykamp, G., 2000. Parental cultural capital and educational attainment in the Netherlands: A refinement of the cultural capital perspective. *Sociology of Education*, 92-111.
- Djankov, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A., 2002. The regulation of entry. *The Quarterly Journal of Economics*, 117(1), 1-37.
- Dumais, S.A., 2002. Cultural capital, gender, and school success: The role of habitus. *Sociology of education*, 44-68.
- Dyer Jr, W.G. and Handler, W., 1994. Entrepreneurship and family business: Exploring the connections. *Entrepreneurship: Theory and Practice*, 19(1), 71-84.
- Gibson, D.E., 2004. Role models in career development: New directions for theory and research. *Journal of Vocational Behaviour*, 65(1), 134-156.



- Hox, J.J. and Bechger, T.M., 1998. An introduction to Structural Equation Modeling. *Family Science Review*, 11, 354-373.
- Johannisson, B., 1991. University training for entrepreneurship: Swedish approaches. *Entrepreneurship & Regional Development*, 3(1), 67-82.
- Kweka, J., Morrissey, O. and Blake, A., 2003. The economic potential of tourism in Tanzania. *Journal of International Development*, 15(3), 335-51.
- Kwong, C. and Thompson, P., 2016. The when and why: student entrepreneurial aspirations. *Journal of Small Business Management*, 54(1), 299-318.
- Manolova, T.S., Brush, C.G. and Edelman, L.F., 2008. What do women entrepreneurs want? *Briefings in Entrepreneurial Finance*, 17(3-4), 69-82.
- McClelland, K., 1990. Cumulative disadvantage among the highly ambitious. *Sociology of Education*, 63, 102-121.
- Mordi, C., Simpson, R., Singh, S. and Okafor, C., 2010. The role of cultural values in understanding the challenges faced by female entrepreneurs in Nigeria. *Gender in Management: An International Journal*, 25(1), 5-21.
- Nichter, S. and Goldmark, L., 2009. Small firm growth in developing countries. *World Development*, 37(9), 1453-1464.
- Noguera, M., Alvarez, C. and Urbano, D., 2013. Socio-cultural factors and female entrepreneurship. *International Entrepreneurship and Management Journal*, 9(2), 183-197.
- Olomi, D.R., 2001. Entrepreneurial Motivation in a Developing Country Context: Incidence, Antecedents and Consequences of Growth-Seeking Behavior among Tanzanian Owner-Managers. Doctoral dissertation, University of Dar Es Salaam.
- Orser, B.J., Hogarth-Scott, S. and Riding, A.L., 2000. Performance, firm size, and management problem solving. *Journal of Small Business Management*, 38(4), 42-58.
- StataCorp., 2013. Stata: Release 13. Statistical Software. College Station, TX: StataCorp LP.
- Stevenson, L. and St-Onge, A., 2005. Support for growth-oriented women entrepreneurs in Tanzania. Tunis: African Development Bank.
- Terjesen, S., Bosma, N. and Stam, E., 2016. Advancing public policy for high-growth, female, and social entrepreneurs. *Public Administration Review*, 76(2), 230-239.
- Thien, O.S., 2009. Women empowerment through tourism — from social entrepreneur perspective, <http://edepot.wur.nl/11305>.
- Thomas, R., Shaw, G. and Page, S.J., 2011. Understanding small firms in tourism: A perspective on research trends and challenges. *Tourism Management*, 32(5), 963-976.

- Tundui, H.P., 2012. Gender and small business growth in Tanzania: the role of habitus. University of Groningen.
- URT, 2010. Poverty and Human Development Report. Dar es Salaam: Mkuki na Nyota Publishers.
- URT, 2012. Tanzania Ministry of Natural Resources and Tourism. Tourism Development in Tanzania, Government Printers, Dar es Salaam.
- White, K.R., 1982. The relation between socioeconomic status and academic achievement. *Psychological bulletin*, 91(3), 461.
- Wiklund, J. and Shepherd, D.A., 2003. Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of Management Studies*, 40(8), 1919-1941.
- Wiklund, J., Patzelt, H. and Shepherd, D.A., 2009. Building an integrative model of small business growth. *Small Business Economics*, 32(4), 351-374.
- Wright, S., 1921. Correlation and causation. *Journal of Agricultural Research*, 20, 557-585.
- WTTC, 2017. Travel & Tourism Economic Impact Tanzania, London: World Travel & Tourism Council, March.

**Table 1: Key variables for the analysis**

| <b>Variable</b>                                    | <b>Description</b>   | <b>Code</b>  |   |   |
|--|--|--|---|---|
| <b>Perceptions</b>                                 | i. "I'd rather take a chance and face a loss now and then than withdraw and afterwards realize that I missed a good business deal."  | Latent variable<br>1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree   |   |   |
|  | ii. "A capable entrepreneur can always run her firm at a profit, even if the industry at large has problems."  |  | 1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree                         |   |
|  | iii. "I am probably better than most people at making judgments in uncertain situations."  |  | 1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree                         |   |
|  | <b>Aspirations</b>   | iv. "I have specific future plans to grow my business."  | Latent variable<br>1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree      |   |
|  |  | v. "I have always wanted to succeed and to accomplish something in my lifetime."   |   | 1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree |
|  |  | vi. "A person who leads a growing business will, at the same time, develop as a human being and thus gain a richer life"   |   | 1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree |
|  | <b>Actions</b>   | vii. Extent to which action solved the biggest challenge faced.  | Likert scale<br>1. Completely unsolved 2. Not Successful 3. Somehow solved 4. Completely solved |   |
| <b>Social capital Membership</b>                   | i. Whether a woman entrepreneur is a member of one of the three types of professional business associations<br>- Formal women professional association in tourism (AWOTTA)<br>- Formal tourism professional associations affiliated with the MNRT, government (TATO, ZATO, ITTA, HAT, TACTO),<br>- Women micro finance associations (VICOBA, TUNAKOPESHA, FINCA) | Count variable<br>0- Non member<br>1- Member of three types of indicated Associations<br>2- Member of the two types of indicated variables<br>3- Member of one type of indicated association   |   |   |
| <b>Economic capital Source of economic capital</b> | ii. Whether family and friends of women entrepreneurs were the source of startup capital<br>iii. Whether women entrepreneurs applied for/accessed a bank loan or MFIs to finance the ongoing business  | Count variable<br>0- Both questions were replied with a NO answer<br>1- Only with one of the two questions the answer was positive<br>2- Both questions were answered positively   |   |   |
| <b>Business growth</b>                             | iv. How has your net income, compared to other people, changed over the last three years of your business operation?<br>v. My business has generated sales growth over the last three years<br>vi. Over the last three years, my business profit has grown   | Likert scale<br>1. Strongly decreased 2. Decreased 3. Stayed the same 4. Increased 5. Strongly increased<br>1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree<br>1. Strongly disagree 2. Disagree 3. Not sure 4. Agree 5. Strongly agree |   |   |

**Table 2: Descriptive statistics**

| Variable              | Obs. | Mean  | Std. Dev. | Min. | Max. | Skewness | Kurtosis |
|-----------------------|------|-------|-----------|------|------|----------|----------|
| Mother education      | 120  | 2.667 | 1.133     | 1    | 5    | 0.332    | 2.445    |
| Role model            | 120  | 1.408 | 0.494     | 1    | 2    | 0.373    | 1.139    |
| Family support        | 120  | 3.633 | 1.053     | 1    | 5    | -0.528   | 2.514    |
| Education             | 120  | 3.033 | 1.092     | 1    | 5    | -0.144   | 2.290    |
| Social capital        | 120  | 1.350 | 1.113     | 0    | 3    | 0.160    | 1.677    |
| Economic capital      | 120  | 0.342 | 0.542     | 0    | 2    | 1.289    | 3.683    |
| Future plans          | 120  | 4.292 | 0.771     | 1    | 5    | -1.874   | 9.073    |
| Growing business      | 120  | 3.792 | 0.961     | 1    | 5    | -1.060   | 4.235    |
| Success to accomplish | 120  | 4.058 | 0.823     | 1    | 5    | -1.561   | 6.788    |
| Net income changed    | 120  | 4.133 | 0.766     | 2    | 5    | -1.130   | 4.736    |
| Sales growth          | 120  | 4.067 | 0.796     | 2    | 5    | -0.921   | 3.891    |
| Profit grown          | 120  | 4.025 | 0.814     | 2    | 5    | -0.889   | 3.706    |

**Table 3: Correlations**

|                       | Mother education | Role model | Family support | Education | Social capital | Economic capital | Future plans | Growing business | Success to accomplish | Net income changed | Sales growth | Profit grown |
|-----------------------|------------------|------------|----------------|-----------|----------------|------------------|--------------|------------------|-----------------------|--------------------|--------------|--------------|
| Mother education      | 1                |            |                |           |                |                  |              |                  |                       |                    |              |              |
| Role model            | 0.035            | 1          |                |           |                |                  |              |                  |                       |                    |              |              |
| Family support        | 0.129            | -0.178     | 1              |           |                |                  |              |                  |                       |                    |              |              |
| Education             | 0.560            | 0.177      | 0.113          | 1         |                |                  |              |                  |                       |                    |              |              |
| Social capital        | 0.093            | -0.079     | 0.218          | 0.053     | 1              |                  |              |                  |                       |                    |              |              |
| Economic capital      | -0.018           | -0.055     | 0.148          | -0.048    | 0.037          | 1                |              |                  |                       |                    |              |              |
| Future plans          | 0.016            | -0.051     | 0.091          | -0.181    | 0.125          | 0.222            | 1            |                  |                       |                    |              |              |
| Growing business      | -0.095           | 0.021      | -0.085         | -0.210    | 0.022          | 0.170            | 0.389        | 1                |                       |                    |              |              |
| Success to accomplish | 0.084            | -0.101     | 0.112          | -0.114    | 0.244          | 0.124            | 0.609        | 0.430            | 1                     |                    |              |              |
| Net income changed    | 0.168            | 0.077      | 0.051          | 0.246     | 0.191          | 0.132            | 0.090        | 0.061            | 0.028                 | 1                  |              |              |
| Sales growth          | 0.193            | 0.101      | 0.009          | 0.210     | 0.173          | 0.180            | 0.160        | 0.095            | 0.071                 | 0.784              | 1            |              |
| Profit grown          | 0.155            | 0.016      | 0.079          | 0.216     | 0.129          | 0.209            | 0.189        | 0.093            | 0.035                 | 0.735              | 0.853        | 1            |

**Table 4: Socio-economic background influence on capital**

|                         | Cultural capital<br>(education) | Social capital | Economic<br>capital |
|-------------------------|---------------------------------|----------------|---------------------|
| <b>Mother education</b> | .524** (.0720)                  | .067 (.0881)   | -.017 (.0436)       |
| <b>Role model</b>       | .378** (.1666)                  | -.102 (.2037)  | -.029 (.1008)       |
| <b>Family support</b>   | .076 (.0787)                    | .212** (.0962) | .076* (.0476)       |

\*\*\*significant at 1%      \*\*significant at 5%      \*significant at 10%

**Table 5: Capital and goal setting**

|                         | Aspirations<br>N=120 | Perceptions<br>N=120 | Actions<br>N=118 |
|-------------------------|----------------------|----------------------|------------------|
| <b>Education</b>        | -0.174* (.0679)      | -.124* (.0835)       | -.065 (.0844)    |
| <b>Social capital</b>   | .0.108* (.0524)      | .040 (.0681)         | .060 (.0697)     |
| <b>Economic capital</b> | 0.215** (.1136)      | -.055 (.1379)        | -.147 (.1401)    |
| <b>Mother education</b> | 0.106* (.0610)       | .008 (.0791)         | .0151 (.0803)    |
| <b>Role model</b>       | -0.001 (.1193)       | -.032 (.1556)        | -.150 (.1586)    |
| <b>Family support</b>   | 0.020*** (.0568)     | .164*** (.0744)      | .030 (.0761)     |

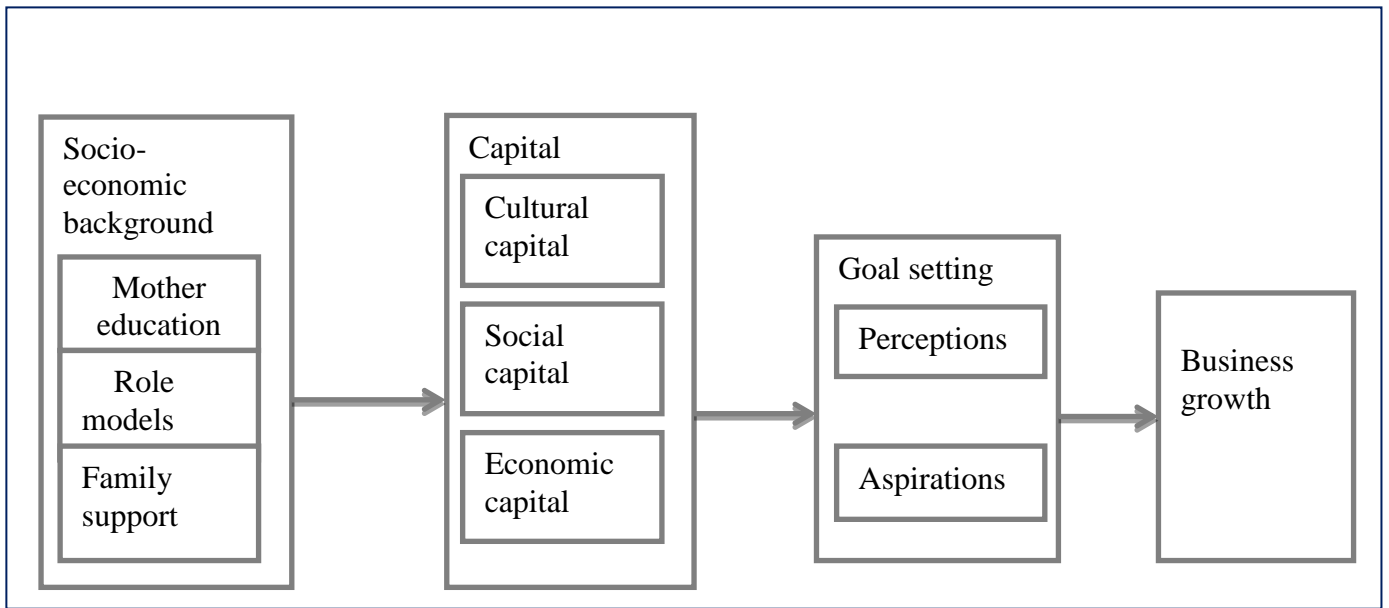
\*\*\*significant at 1%      \*\*significant at 5%      \*significant at 10%

**Table 6: Socio-economic background, capital and goal setting: focus to business growth**

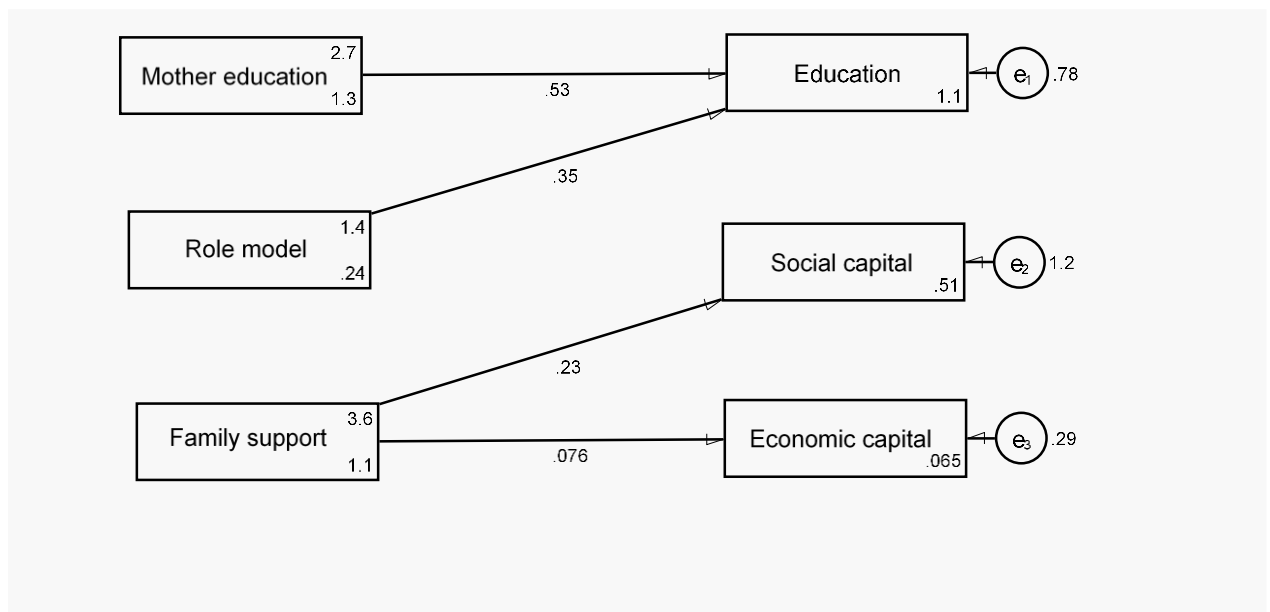
| Variable                | Business growth |
|-------------------------|-----------------|
| <b>Education</b>        | .134** (.0671)  |
| <b>Social capital</b>   | .086 (.0535)    |
| <b>Economic capital</b> | .230* (.1101)   |
| <b>Aspirations</b>      | .118 (.1198)    |
| <b>Perceptions</b>      | .047 (.0711)    |
| <b>Actions</b>          | -.019 (.0681)   |
| <b>Mother education</b> | .030 (.0602)    |
| <b>Role model</b>       | .069 (.1182)    |
| <b>Family support</b>   | -.048 (.0577)   |

\*\*\* significant at 1%      \*\*significant at 5%      \*significant at 10%

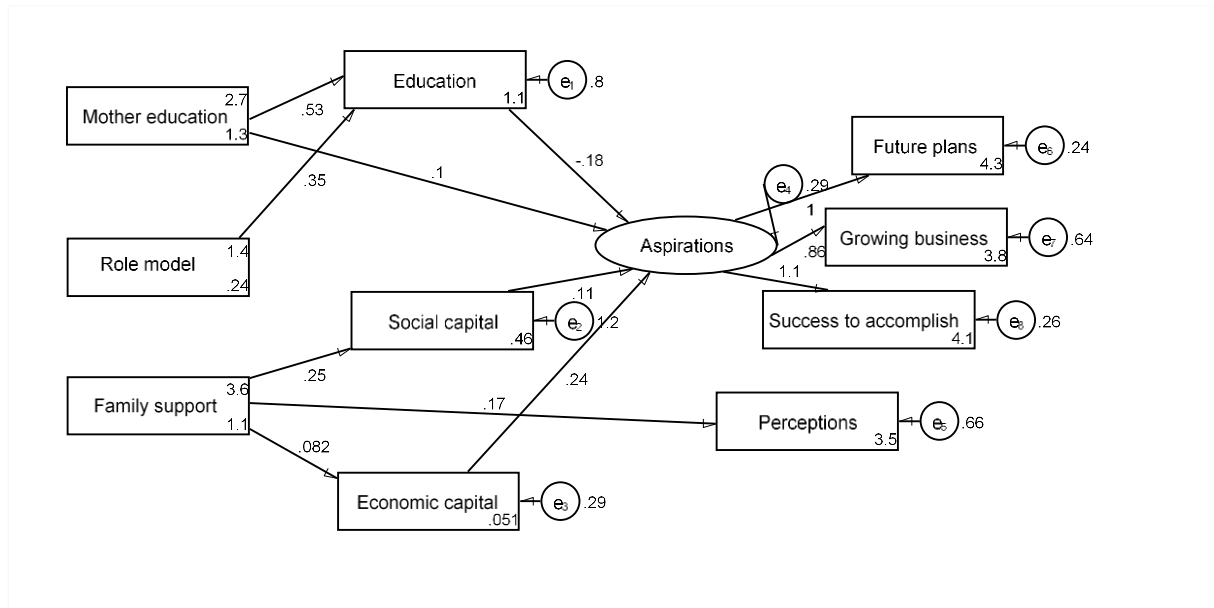
**Figure 1: Conceptual model: socio-economic background influence on capital, goal setting and business growth**



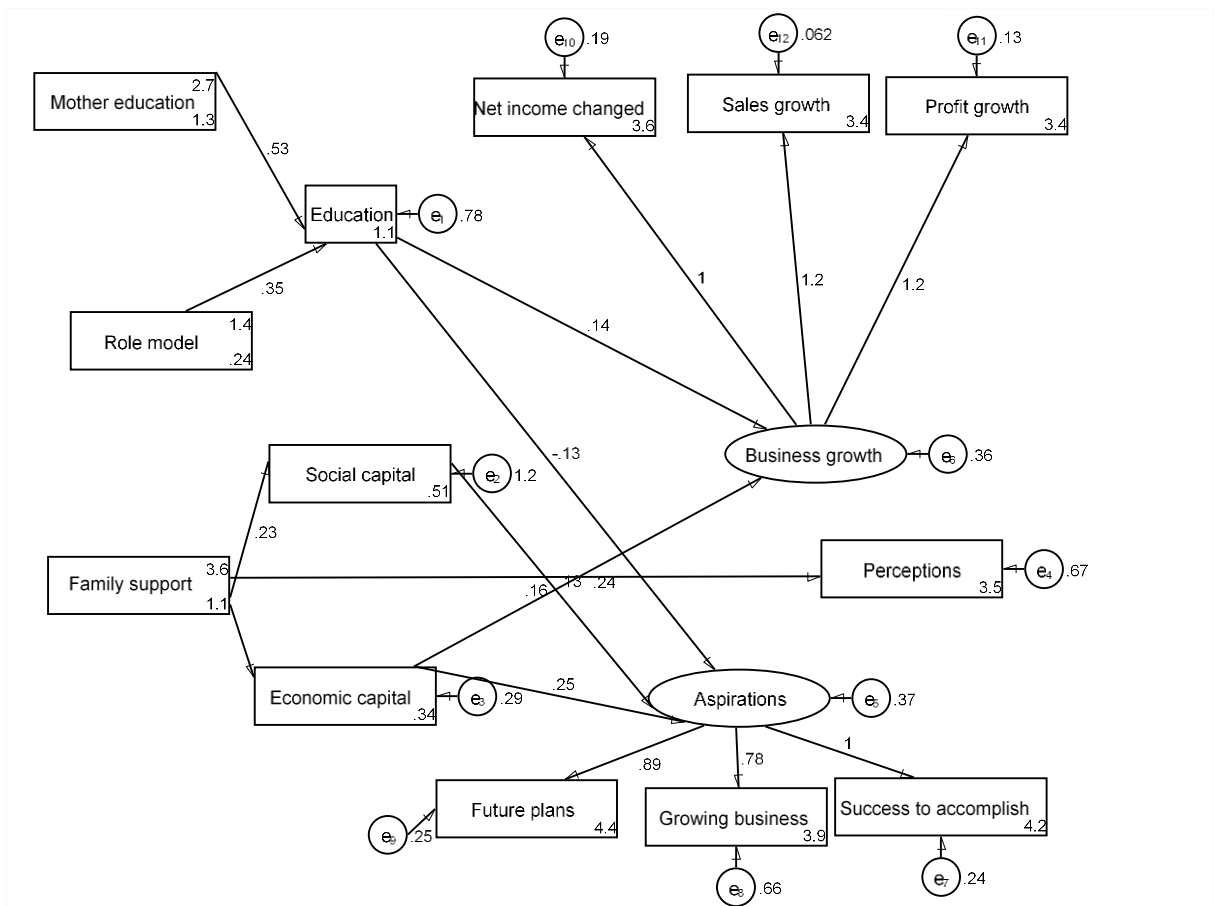
**Figure 2 Socio-economic background and capital**



**Figure 3 Capital and goal setting**



**Figure 4 Goal setting and business growth**







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