



The link between personal entrepreneurial competencies (PECS) and individual and firm level variables: Evidence from micro and small enterprise [MSES] operators in Addis Ababa, Ethiopia

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Abstract

The purpose of this study was to assess the extent of personal entrepreneurial competencies (PECs) of micro and small enterprises' (MSEs) operators as well as to examine the association between individual and firm level variables with PECs of MSEs operators in Addis Ababa, Ethiopia. The 10 basic PECs identified in the EMPRETEC model of UNCTAD are applied. There are several studies conducted in the area of entrepreneurship development in the context of MSEs but they did not sufficiently assess the effect of individual and firm level variables on the development of PECs. The study was underpinned by pragmatism and it applied mixed methods approach. Data were collected from 346 MSEs by employing questionnaire. Besides, key informant interviews (KIIs), document reviews and personal observation were applied. Frequencies, percentages, crosstabs, correlation and thematic analysis constitute the main data analysis techniques employed. The result revealed that nearly two-thirds of MSEs' operators are good at opportunity seeking and utilization. Only below a quarter of the respondents rated their risk taking propensity to be good. Majority of them are concerned for quality and efficiency. The level of persistence, commitment, information seeking, goal setting and systematic planning are rated as good. However, persuasion and networking as well as independence and self-confidence are reported to be low. Firm age, age of respondents and education level are positively related to opportunity identification whereas current experience is negatively associated. Firm age, respondent's age, current experience of operators, previous employment, gender and education are positively associated with risk taking. Firm age is negatively associated with the desire to maintain efficiency and quality. Education is positively linked with persistence. Education and firm size are negatively associated with information seeking. Previous occupation and enterprise type are negatively associated with goal setting whereas enterprise sector is positively associated. The finding can be used by government as well as by other stakeholders endeavoring to foster the development entrepreneurship in general and PECs of people engaged in MSEs in particular.

Keywords: entrepreneurship development, personal entrepreneurial competencies, entrepreneurship development in micro and small enterprises, fostering personal entrepreneurial competencies

Introduction

Although the subject of entrepreneurship is often considered to be relatively new, its historical roots can be linked back to the early economic thinkers of the 18th Century (Bygrave & Zacharakis, 2011; Kuratko, Morris & Schindehutte, 2015) ^[15, 26] and the practice of small scale enterprise is as old as human commercial endeavor (Havinal, 2009; Landstrom, 2005; Schaper, 2014) ^[24, 27, 33]. The term entrepreneurship is derived from the French word 'enterprander' meaning to undertake something (Landstorm, 2005; Werotaw, 2005) ^[43]. In the 18th century, Cantillon applied entrepreneur to business to designate a person who purchases the means of production for combining them into marketable products (Desai, 2009) ^[19]. Say (1971) ^[32] broadened Cantillon's thoughts and conceptualized the entrepreneur as an organizer of business firm, responsible to its distributive and production functions. Entrepreneurship, which is often described as the act of being an entrepreneur, denotes the ability and willingness to undertake conception, organization, and management of a productive new venture, assuming all attendant risks and seeking profit as a reward (UN, 2012). Entrepreneurs are described as people who often think big, usually end up making a change in the

world and often have a lot of confidence (Hatten, 2012) ^[23]. Schumpeter views an entrepreneur as a person who destroys the existing economic order by introducing new products and services, by introducing new methods of production, by creating new forms of organization, or by exploiting new raw materials (Bygrave & Zacharakis, 2010, p. 2) ^[14]. Entrepreneurship is strongly linked to MSEs which are the main drivers of development (Stefanovic, Prokic & Rankovic, 2013) ^[38]. MSEs are viewed more than ever as vehicles for entrepreneurship as they boost innovative and competitive power of operators apart from contributing just to employment, social and political stability (Audretsch *et al.*, 2002, p. 9) ^[8]. Small scale enterprises are viewed as breeding ground for entrepreneurship (Desai, 2009; Mulu, 2013) ^[19, 31]. This holds because MSEs often stimulate initiative, invention and overall entrepreneurial spirit of operators (Stefanovic *et al.*, 2013) ^[38]. However, this is not at all to mean that entrepreneurship is exclusively exercised by MSEs; rather to show its pervasiveness in MSEs ensuing their small size which makes practicing entrepreneurship relatively handy. To this effect, it is stated that entrepreneurship is ubiquitous as it appears in different sizes both in large corporations as well as in the small workshops

of artisans (Ahmad & Hoffman, 2007; Ahuja, 2016; Amatori, 2010; Drucker, 1983) ^[4, 5, 6, 20].

The defining features of entrepreneurship mentioned above including risk taking, opportunity identification and utilization, persistence, foresight and others together constitute personal entrepreneurial competencies (PECs). The competence of an entrepreneur is singled out as the distinguishing feature of entrepreneurship (Casson, 2010) ^[16] because it plays indispensable role in the success of the firm (Mitchellmore & Rowley, 2010) ^[29]. To be successful, MSEs operators need to possess PECs that transcend culture, country and continent. In the words of Lackeus (2013) ^[28], entrepreneurial competencies entail knowledge, skills and attitudes that affect the willingness and ability to perform the entrepreneurial job of new value creation. For Boyatzis (2008) ^[12] competencies denote an underlying characteristic of a person which results in effective action and/or superior performance in a job. There are about ten PECs grouped in to three clusters that characterize the behavior of successful entrepreneurs as identified in the EMPRETEC model. EMPRETEC is UNCTAD's flagship capacity-building program that aims to promote entrepreneurship and to enhance productive capacity and international competitiveness of enterprises in developing countries (UNCTAD, 2014) ^[41]. Entrepreneurial competencies have been identified as a specific group of competencies relevant to the exercise of successful entrepreneurship (Mitchellmore & Rowley, 2010) ^[29]. Thus, the development of entrepreneurship in MSEs squarely hinges on the level of PECs possessed by the operators. The development of PECs of MSEs operators, on the other hand, is affected by several factors. There are myriads of individual level variables that immensely govern the development of PECs of people engaged in MSEs. Among these variables, age, gender, education level, previous occupation or work history, marital status and current experience are selected to be the most relevant ones based on intensive literature review. Similarly, there are numerous firm level variables that affect the development of PECs of the operators. The major firm level variables included in the current study are enterprise type, size, age, sector and ownership form. Despite the instrumental role the aforementioned individual and firm level variables play on the development of PECs of MSEs operators, studies that assess them is scanty to the best of my knowledge. Thus, the purpose of this study was to assess the extent of PECs of MSEs operators as well as to examine the association between each of the individual and firm level variables with PECs of MSEs operators.

Statement of the Problem

Entrepreneurship development is in the forefront of policies of countries which intend to achieve significant economic growth and thereby improve the living conditions of millions of poor citizens in their respective country. Concomitant to this, various initiatives, development policies and plans have been launched to spur economic growth in Ethiopia (Berihu, Abebaw & Biruk, 2014) ^[10]. Besides, different business and public development programs that are geared towards promoting MSEs' development and generating employment opportunities have been put in place (EEA, 2015) ^[21]. International and national organizations such as UNDP, the World Bank, EDC, FUJCFSA, TVETs, universities and many others have been

exerting unprecedented efforts to equip the people engaged in MSEs with PECs that are proved to play pivotal role in boosting performance. These organizations facilitate the provision of training, education and consultancies geared towards fostering the PECs. Notwithstanding to all the aforementioned endeavors on the part of government and non-government institutions, the progress of MSEs and entrepreneurship is not adequate. To this effect, Brixiova and Asaminew (2010) ^[13] stress that despite the recent economic growth, productive entrepreneurship and vibrant small and medium-sized enterprises (MSEs) in Ethiopia remain limited even twenty years after the launch of market reforms by the present government. Rosen (2016) adds that Ethiopia has remained an industrial laggard even in the world's least industrialized continent regardless of the economic growth. As per the estimation made by the United Nations Industrial Development Organization (UNIDO), MSEs account for over 90% of private business and contribute to more than 50% of employment and of gross domestic product (GDP) in most African countries (UNIDO, 1999) ^[42]. In Ethiopia, however, the current size or performance of MSEs in terms of their contribution to GDP, employment and export and total manufacturing output is not exactly known as there are marked discrepancies among reports of different offices in this regard (Berihu *et al.*, 2014). EEA's (2015) ^[21] research brief reveals the growth of small scale and cottage manufacturing industries has declined to 4.8 percent during the first three years of GTP-I implementation from the average growth of 6 percent registered during the preceding PASDEP period. The slow growth in the overall manufacturing sector during GTP-I period was ascribed to poor growth performance of micro and small scale manufacturing industries and delay in the implementation of large manufacturing projects (FDRE-National Planning Commission, 2016, p. 28). There are several studies conducted in the area of entrepreneurship development in the context of MSEs but they did not sufficiently assess the effect of individual and firm level variables on the development of PECs. A study conducted by Yimer *et al.* (2018) ^[45], for instance, investigates the critical factors of entrepreneurial competencies for successfully managing MSEs in Ethiopia. This study deals with how the PECs affect MSEs' performance rather than identifying and measuring the effect of individual and firm level variables on the development of PECs. Another study conducted by Bekele (2018) ^[9] focuses on enhancing the development of MSEs as strategy to promote entrepreneurship. Yet another study conducted by Lackeus (2013) ^[28] deals with how action based entrepreneurial education can develop entrepreneurial competencies. This study touched an important issue, how action based education can enhance the PECs but it does not include other relevant variables mentioned above. There are other studies which focus on the varieties of PECs (e.g., Arafah, 2016; Boyatzis, 2008; Morris, Webb, Fu & Singhal, 2013) ^[3, 12, 30]. Finally, a study conducted by Shabudin, Ashenafi and Emnet (2016) ^[36] assessed the prospects of entrepreneurial competencies of MSEs. This study just tried to assess the PECs of MSEs operators. With this backdrop, the current study attempted to bridge the gaps by assessing the level of PECs of MSEs operators as well as the association between PECs and individual and firm level variables with respect to people engaged in MSEs in Addis Ababa. The rationale behind focusing on only individual

and firm level variables is that these variables are more or less controllable by a firm unlike the external environment factors like political/legal, economic and socio-cultural ones. These variables can be relatively easily manipulated which implies that their effect can be fine-tuned as per the desire of a firm. Hence, delineating the extent of PECs of MSEs operators along with their possible association to PECs is believed to immensely contribute to the existing body of knowledge pertaining to PECs. Clearly identifying the link of each of the individual and firm level variables on the development of PECs can also help government and other stakeholders involved in the promotion of entrepreneurship by delineating specific factors which significantly affect the development of PECs. In an effort to assess the aforementioned issues and hence fill the research gap identified so far, the following specific research questions were addressed:

1. Are the MSEs operators well equipped with the fundamental PECs identified in the UNCTAD’s Empretec model?
2. What is the association between each of the individual level variables and PECs?
3. What is the relationship between each of the firm level variables and PECs?

Objectives of the Study

General Objective

This study aimed to investigate the association between Personal Entrepreneurial Competencies (PECs) and individual and firm level variables with particular reference to people engaged in MSEs in Addis Ababa, Ethiopia.

Specific Objectives

In order to attain the above general objective, the following specific objectives are set:

1. To investigate the extent of PECs of MSEs operators
2. To assess the association between individual level variables and PECs
3. To assess the relationship between firm level variables and PECs

Materials and Methods

Introduction

This section of the proposal covers issues that inform relevant methodological foundation for designing a research such as philosophical assumptions/paradigms, research approaches (qualitative, quantitative or mixed methods), research design (cross sectional or longitudinal), research methods (techniques of data collection and analysis), definition of the target population, sampling and sample size determination and ethical considerations.

Research Design and Approaches

There are different worldviews that guide the choice of methods in conducting research (Blessing & Chakrabarti, 2009) [11]. Among the competing paradigms that underpin the overall research undertakings such as positivism, post positivism, constructivism, interpretivism, advocacy, participatory and pragmatism, pragmatism is chosen as the overarching worldview of this study. This choice is principally informed by the fact that mixed methods approach calls for holding pragmatism as the dominant paradigm that guides the entire research endeavor. Three major approaches of research are identified as quantitative,

qualitative and mixed methods (Creswell, 2007, 2014;) [18]. Out of these three research approaches, mixed methods approach which enables to apply both quantitative and qualitative methods of data collection and analysis in a single study is chosen. There are different alternative research designs that can be used in mixed methods research. The major ones include convergent, explanatory sequential, and exploratory sequential approaches (Creswell, 2014) [18]. There are also advanced mixed methods designs such as embedded mixed methods, transformative mixed methods and multiple mixed methods. Out of these alternative designs, the embedded mixed methods design which nests one or more forms of data (quantitative or qualitative or both) within a larger design (e.g., a narrative study, an ethnography, an experiment) is selected for the current study (Creswell, 2014) [18]. Moreover, data for the proposed study were collected by employing cross sectional design which entails collection of data from the designated sources only at one point in time unlike its longitudinal counterpart which calls for gathering data repeatedly from the same source.

Study Population, Sampling Techniques and Sample Size Determination

All MSEs in the five sectors—manufacturing, construction, trade, service and urban agriculture—located in the ten sub cities of Addis Ababa city constitute the study population of this study. However, due to the infeasibility of collecting data from all ten sub cities on account of limited budget, time and other logistics, the target population of the study is reduced to those MSEs operating in the three sub cities—Yeka, Bole and Lideta—as justified below. Besides those people who are working in offices that facilitate the development of entrepreneurship and MSEs in Addis Ababa city are also considered as pertinent source of information. Since mixed methods approach is to be used in this study, the sampling method to be used also includes the mix of probabilistic and non-probabilistic sampling techniques. According to the data obtained from Addis Ababa City Administration’s Micro and Small Enterprises Development Bureau [AACAMSEDB], in the ten sub cities there are a total of 25, 399 MSEs (AACAMSEsDB & Ethiopian Civil Service University, 2017, p. 39). Data regarding the prevalence of MSEs in the three selected sub cities is presented in table 3.1 below.

Table 1: Distribution of MSEs in the selected sub cities in each sector

Sub city	The sector MSEs are engaged in					Total
	Manufacturing	Construction	Urban agric.	Service	Trade	
Yeka	858	3441	129	606	1007	6041
Bole	531	1561	97	538	395	3122
Lideta	367	994	35	206	517	2119
	1756	5996	261	1350	1919	11,282

Source: Addis Ababa City Administration Micro and Small Enterprises Development Bureau (AACAMSEsDB) & Ethiopian Civil Service University, 2017, p. 39.

Among the alternative ways of determining sample size, in this study a formula was employed. Given finite target population of the study, a sample size formula for finite population developed by Krejcie & Morgan (1970, p. 607) was used. The formula is given as follows:

$$S = \frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

$$\frac{X^2 NP (1-P)}{d^2 (N-1) + X^2 P (1-P)}$$

Where:

S = Required Sample size

$$S = \frac{1.96^2 \times 11021 \times 0.5(1-0.5)}{0.05^2(11021-1) + (1.96^2 \times 0.5(1-0.5))} = \frac{3.8416 \times 11021 \times 0.25}{(0.0025 \times 11020) + (3.8416 \times 0.25)} = \frac{10584.5684}{28.5104} = 371.25 \approx 371$$

Moreover, to compensate for possible non-responses, 37 (37/371 ≈ 10%) more respondents were considered and this turns the sample size of the study to be 408.

Table 2: Share of each sub city (%) and number of MSEs to be surveyed in each sub city

Sub city	Sub city's share	No. of MSEs to be surveyed
Yeka	5912/11021= 53%	408 x 0.53=216
Bole	3025/11021=28%	408 x 0.28= 114
Lideta	2084/11021=19%	408x 0.19=78
Total	100%	408

Source: Computed by the researcher (2016)

Data Types, Sources and Methods of Collection

In the course of conducting the study, both primary and secondary data sources were utilized. Primary data are to be collected from those individuals who are engaged in MSEs activities in the selected sub cities of Addis Ababa and also from those officials who are working in areas that are directly or indirectly related to the subject of interest. The methods of data collection applied in the research include questionnaire, key informant interview, document analysis and observation.

Methods of Data Analysis and Interpretation

Both inferential and descriptive statistics were employed to analyze the data to be gathered via the above discussed methods. Besides, the data to be secured through key informant interview, document review and observation are expected to be predominantly qualitative and thus thematic analysis which is the most frequently employed qualitative data analysis technique was used. Finally, having analyzed the data, the results were presented through such tools as tables, graphs or charts. Then data presented in such a way shall be interpreted by employing appropriate narrations. This entails summary of results, comparison of results with extant theoretical and empirical literature.

Results and Discussions

Introduction

This chapter investigates the possible effect of individual and firm level characteristics on the Personal Entrepreneurial Competencies (PECs) of MSEs operators. In this light, six individual level variables and four firm related variables were identified. The six individual characteristics of the study are gender, age, previous occupation, education level, marital status and current experience whereas the four firm level variables are ownership form, enterprise type, sector of the enterprise and years the firm has been in operation. The PECs to be assessed, on the other hand, are adopted from the

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50%)

d = Degree of accuracy (5%), expressed as a proportion (.05); It is margin of error

Accordingly,

EMPRETEC Model developed by UNCTAD. EMPRETEC is UNCTAD’s flagship capacity building program that aims to promote entrepreneurship and to enhance productive capacity and international competitiveness of enterprises in developing countries (UNCTAD, 2014) [41]. As described in the literature review section, PECs denote key characteristics that an entrepreneur ought to possess so as to be successful. To this effect, emphasis is given to the PECs identified in the EMPRETEC model. In this model, PECs are grouped in to three clusters as achievement, planning and power clusters. There are five PECs under the achievement cluster: opportunity seeking and initiative, risk taking, demand for efficiency and quality, persistence and commitment to the work contract. The planning cluster has got three PECs: information seeking, goal setting and systematic planning and monitoring. The last cluster, power cluster, consists of two PECs: persuasion and networking, and independence and self-confidence (UNCTAD, 2014) [41].

Hence, the three clusters of PECs together encompass 10 dimensions that are measured on a 5point Likert type scale and designated as the dependent variables. The 10 dimensions are:

1. I take advantage of opportunities
2. I don’t hesitate to take risks related to creating and operating an enterprise
3. It bothers me when things are not done very well
4. When faced with difficult problems, I spend a lot of time trying to find a solution
5. I work long hours and make personal sacrifice to complete jobs on time
6. I go to different sources to get relevant information
7. I set short and long term goals for my business
8. I plan a large project by breaking it down into many smaller tasks
9. Convincing others about my idea is not a problem
10. I feel confident that I will succeed at whatever I try to do

Perception of MSEs Operators about their Personal Entrepreneurial Competencies

It is important to assess the distribution of responses for each of the independent as well as dependent variables. Doing so greatly simplifies the interpretation of results generated through ordinal logistic regression. Unlike the logistic regression, there is no option in SPSS to directly specify the reference category for ordinal logistic regression and as a result, the last category – strongly agree – is automatically taken by SPSS as reference category. The distribution of responses for each of the dependent variables is presented below. As it can be inferred from table 7.2

below, 159 (46.0%) and 65 (18.8%) of the respondents proved that they are good at seizing opportunities that arise in their business environment by respectively choosing “agree” and “strongly agree” to the statement: “I take advantage of opportunities in the business environment”. These two response categories together account for nearly closer to two –thirds of the total which is something promising. However, risk taking propensity of MSEs operators is found to be rather low as 255 (73.7%) of the respondents declared that they lack the courage to involve in activities that are risky. This divulges that majority of the people engaged in MSEs lack one of the core qualities to be successful entrepreneur. Hence, it is essential to strengthen the provision of training and consultancy services aimed at enhancing the PECs of individuals engaged in MSEs. Another essential competency of successful entrepreneurs is

their desire to maintain the highest level of quality and efficiency at what they do. To this end, 217 (62.7%) of the respondents stated that they are bothered when something goes wrong in the course of conducting their business. This finding begs the question: why MSEs’ products are criticized for low quality if the operators are really worried about the quality of what they produce? As it has been thoroughly discussed in chapter eight, failure to produce high quality and competitive products is underscored to be one of the major internal challenges of MSEs. The inconsistency of answers obtained regarding quality of MSEs’ products by applying different approaches can be linked to the tendency to positively rate own goods and services. This sheds light on the importance of building the confidence and skills of MSEs operators so as to enable them produce quality goods and rate them accordingly.

Table 3: Frequency of Responses

Items (Outcome Variables)	Case Processing Summary (5 point Likert type)					Total
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
1) I take advantages of opportunities in my environment	11(3.2%)	101(29.2%)	10(2.9%)	159(46.0%)	65(18.8%)	346
2) I don’t hesitate to take risks when doing business	108(31.2%)	147(42.5%)	11(3.2%)	68(19.7%)	12(3.5%)	346
3) It bothers me when things are not done very well	11(3.2%)	108(31.2%)	10(2.9%)	148(42.8%)	69(19.9%)	346
4) I spend much time trying solutions for difficulties	21(6.1%)	121(35.0%)	10(2.9%)	142(41.0%)	52(15.0%)	346
5) I work long hours and make personal sacrifice	10(2.9%)	115(33.2%)	15(4.3%)	120(34.7%)	86(24.9%)	346
6) I gather relevant information from several sources	8(2.3%)	102(29.5%)	12(3.5%)	154(44.5%)	70(20.2%)	346
7) I set short and long term goals for my business	12(3.5%)	95(27.5%)	8(2.3%)	164(47.4%)	67(19.4%)	346
8) I plan a large project by breaking it into smaller tasks	7(2.0%)	97(28.0%)	12(3.5%)	152(43.9%)	78(22.5%)	346
9) Convincing others about my idea is not a problem	97(28.0%)	165(47.7%)	13(3.8%)	66(19.1%)	5(1.4%)	346
10) I feel confident that I can succeed at what I do	16(4.6%)	95(27.5%)	11(3.2%)	151(43.6%)	73(21.1%)	346

Source: Field survey, 2018

Persistence despite the odds is another crucial competence that immensely determines the prosperity of MSEs. Nonetheless, only slightly higher than half, 194 (56.1%), of the survey respondents witnessed that they are persistent. This implies that there is an obvious need of building this quality of MSEs operators through training and consultancy. Another competency which is closely related to persistence is commitment that entails being dedicated and working for long hours so as to finish a given task. Comparable to the case of persistence, only 206 (59.5%) of the respondents stated that they are committed to their work. This finding also reinforces the need to impart training and consultancy to MSEs operators so as to boost their PECS as success is highly unlikely without mastering these well-established competencies. Successful entrepreneurs often gather sufficient information from various sources before starting a new venture. To this effect, the proportion of respondents who substantiated that they collect enough relevant information before embarking on some activities amounts to 224 (64.7%). This is promising but it is not sufficient as information plays indispensable role in the success of MSEs. Goal setting is another area of competency that immensely contributes towards the success of enterprises. It helps the operators utilize the available resources effectively and efficiently. Accordingly, a bit higher than two–thirds, 231 (66.8%), of the survey respondents verified that they often set goals and work hard to attain them. This is somewhat promising given the small size and lack of specialization in MSEs that deters them from applying various business management principles unlike the big organizations with a separate departments dedicated to each

of the various functions of management. Goal setting is part and parcel of planning as every plan entails description of activities to be done and the desired targets or goals to be achieved. Those who run MSEs are required to have the habit of setting short and long term plans and focus on the specified targets so as to be successful. Closer to two – thirds, 230 (66.5%), of the MSEs operators pointed out that they apply planning in their enterprises. This is interesting since planning helps them to be focused and in that greatly paves the way for success. However, the need to strengthen provision of training and consultancy on how to prepare business plans is yet an area that ought to be given much attention. Persuasion and self-confidence are other highly important areas of competencies that need to be mastered by people who want to be successful entrepreneurs. The need for the ability to convince others about one’s idea or opinion is straightforward in the business arena. In this light, a little bit higher than three –fourths, 262 (75.7%), of the respondents proved that they lack the competency of persuasion. Since undertaking business activities inevitably entails negotiating with different parties including customers, suppliers and government officials, lack of the ability to persuade these different parties obviously hinders success. Therefore, much emphasis should be placed on facilitating the provision of training and consultancy services aimed at improving the communication skills of MSEs operators. Independence and self-confidence are also among the most important PECs need to be possessed by the people aspiring to be successful entrepreneurs. In this vein, near to two – thirds, 224 (64.7%), of the MSEs operators stressed that they are confident. Self-confidence, which is an

individual's belief that he is capable to accomplish what he wishes to do, greatly influences success. Therefore, helping MSEs operators build their self-confidence and independence is also an area that should be emphasized in the trainings and consultancy programs delivered by various stakeholders.

Exploring the Relation between Individual and Firm Characteristics on Personal Entrepreneurial Competencies (PECs) of MSEs Operators

Here, attempts are made to explore the relationship between individual as well as firm level characteristics and PECs of MSEs operators. To this effect, correlation analysis which describes the strength and direction of the linear relationship between two variables (Gujarati & Porter, 2009; Pallant, 2011) has been conducted. Basically, there are two major types of correlation coefficients: Pearson's product moment correlation coefficient and Spearman's rank correlation coefficient (ρ). The former is designed for continuous variables whilst the latter is used with ordinal level or ranked data that do not meet the criteria for Pearson correlation (Pallant, 2011, p. 128). Hence, Spearman's ρ was used to assess the strength as well direction of the relationship between individual and firm level variables and PECs. The strength of relationship is determined based on the guideline proposed by Cohen (1988, pp. 79–8 cited in Pallant, 2011, p. 134). Accordingly, when the computed relationship lies between $r=.10$ to $.29$, $r=.30$ to $.49$ and $r=.50$ to 1.0 , it is respectively interpreted as small, medium and large. The correlation matrix showing the strength as well as direction of relationship between each of the PECs dimensions and individual and firm level variables is generated through SPSS version 20 and annexed here with. As it can be inferred from the correlation matrix, persistence is found to be negatively correlated with age. The strength of relationship is somewhat weak ($r = -.106$) but it is significant. This divulges that as age increases the determination of MSEs operators to continue doing something despite the setbacks decreases. This is expected given persistence, as a quality of successful entrepreneurs, needs exerting significant amount of time and energy to complete an activity. As age increases, people's stamina naturally tends to decline and this makes being persistent a bit difficult. Similarly, opportunity seeking is found to be positively correlated with previous occupation of MSEs operators, yet the strength of relationship is weak but statistically significant. Entrepreneurs are those people who identify and seize opportunities. To this end, people who worked in family business or in some other businesses as employees are found to be better equipped with the ability to identify and capitalize on opportunities. This is straightforward since previous occupation enables the MSEs operators to have accumulated experience that helps them in identifying and utilizing business opportunities. Moreover, education is found to be negatively correlated with the propensity to take risk. Risk taking is designated as one of the core characteristics of successful entrepreneurs. However, the study revealed that as people attain higher level of education, they tend to be more risk averse. This can be attributed to the fact that when people attain higher education, their capacity to make detailed analysis of the pros and cons of an opportunity increases. This may hinder them from pursuing an opportunity as they tend to thoroughly investigate the situation before acting upon it.

Risk taking is also found to be negatively correlated with marital status implying that married people are more risk averse than their unmarried counterparts. Since married people are responsible to their marriage partner, children and dependents, they become more cautious about every decision they make. Thus, it can be logically inferred that marriage decreases the propensity to take risk. This is true because if perusing a risky activity results in loss, the individual's decision affects not only him but also his marriage partner, children and others. Therefore, cognizant of this, the person often chooses not to pursue an activity that seems to be risky.

Another interesting result is that there is positive correlation between the years a person has spent in the current business and his inclination to involve in risky activities. This means as people work for longer time period in their current business, their knowledge and skills related to that business increases. This gives them confidence and they become more inclined to engage in activities whose outcomes are uncertain. This finding is consistent to what has been found in relation to previous occupation discussed above. Generally, it can be inferred that the higher the accumulated experience of MSEs operators, the higher their propensity to take risk. Closely related to individual operator's experience is firm experience. To this end, firm age or experience is found to be positively correlated with risk taking propensity; i.e., older firms are more ready to pursue risky activities than their younger counterparts. There is established truth that risk and return are positively correlated in that whenever an activity entails higher risk, the corresponding return is almost always higher. This means that older firms are better situated to earn better returns than the younger ones. Therefore, creating awareness with younger firms about the possibility of reaping higher returns by involving in activities that seem to be risky is an area that warrants actions of government and other stakeholders. Another result that is worth analyzing is the correlation between firm size and its demand to maintain quality and become efficient. There is positive relationship between firm size and the desire to maintain quality of goods and services. This reveals that as firm size increases, the desire to maintain quality also increases and vice versa. Accordingly, smaller firms are found to be more quality oriented than the micro counterparts. This can be ascribed to relatively better resource availability in small MSEs than in micro ones. It is presumed that small enterprises are better in terms of the availability of crucial resources required to maintain the quality of goods and services they produce. This implies that medium enterprises are again somewhat better than small enterprises and the like. Hence, the quality problem of MSEs' goods and services mentioned as one of the stumbling blocks hindering their progress can be partly mitigated by improving the supply of necessary resources such as machineries.

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