

**PERSONALITY ATTRIBUTES AS INFLUENCERS OF MICRO-ENTERPRISE
GROWTH AT KAMUKUNJI IN NAIROBI, KENYA**

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ABSTRACT

Several studies indicate significant relationship between personality attributes and micro-enterprise growth. A correlational survey on 354 micro-enterprises manufacturing metallic products at Kamukunji stipulate positive and negative influences between personality attributes and vertical plus horizontal growth in employees, sales, departments and divisions. Data collection using structured questionnaire administered face to face signifies that desire to be boss and desire to succeed propels growth. Personality attributes model (60.85% variance explained), Kaiser-Meyer-Olkin (KMO = .82) measure of sampling adequacy, and Bartlett's test of sphericity (.001) remain statistically significant. The 13 hypotheses designate 61.54% acceptance and provides the relationship between personality attributes and micro-enterprise growth. The study implies that there exists a positive relationship between personality attributes of an entrepreneur and growth of micro-enterprises.

Key Words: Personality Attributes, Growth, Micro-enterprises, Manufacturing, Metallic Products, Kamukunji

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INTRODUCTION

In Sub-Saharan Africa, growth of micro-enterprises varies from country to country depending on social, economic, and political conditions. Biesebroeck (2005) study on nine Sub-Saharan Africa countries indicates that Kenya, Ghana, Cote d'Ivoire, and Burundi experience positive economic growth while Zambia, Ethiopia, Cameroon, and Zimbabwe show negative economic growth rates between 1985 and 1995. During the decade, generally manufacturing micro-enterprises in Kenya, Ghana, and Cote d'Ivoire experience positive growth and specifically high productivity in the manufacturing of metallic products occurs in Kenya and Ghana. Teal (1998) indicates a positive relationship between employees and micro-enterprise growth. Tanzania's economy middles between positive and negative growth rates.

In Kenya, the metal products component of the manufacturing sector contributes 0.03% to Gross Domestic Product (Republic of Kenya, 2006). An average of 13.8% micro-enterprises in Kenya portends manufacturing (Central Bureau of Statistics, International Center for Economic Growth & K-Rep Holdings Ltd., 1999). Bigsten, Kimuyu, and Lundvall (2000) indicate that Kenyan manufacturing micro-enterprises are dynamic as they change location often. Overall, growth of manufacturing micro-enterprises in Kenya has been influenced by versatile jua kali sectoral reforms (King, 1996; International Labour Organisation, 1972). As the jua kali sector grows, sub-

sectors like metallic products manufacturing emerge.

The specific objective of the study examines the relationship between personality attributes of an entrepreneur and growth of micro-enterprises. To achieve the stated specific objective and maintain consistency with the conceptual framework for this study, non-directional alternative hypotheses are tested (Mugenda & Mugenda, 1999; Cooper & Schindler, 2001; Sekaran, 2003). The 13 hypotheses tested by Spearman rho or correlation coefficients emphasise the relationship between personality attributes, growth, and moderators.

LITERATURE REVIEW

Personality attributes are characteristics of a person seen as a whole (Macmillan Education, 2002). Previous studies indicate that personality attributes influences growth (Perren, 1999; Tonge, 2001). Entrepreneurs are endowed with natured/born and nurtured/acquired/made personality attributes. Gaebler Ventures (2007) lists 26 commonly agreed entrepreneurial personality attributes that influences growth which can be impacted by education and training. Factors that nurture entrepreneurship are varied and include education, training and environment.

On the other hand, natured personality attributes indicate that entrepreneurs are born. The Profile on Resources and Aptitudes Detector for Human Activities Review (2006) model based on cerebral typologies matches an entrepreneur profile with certain types of enterprises supporting

the natured assumption. The finding implies that certain natured personality attributes influence growth of certain types of enterprises. Notably, entrepreneurship is a balance between nurtured and natured personality attributes.

Other researchers tend to agree that the human personality traits namely: manifest needs, risk-taking propensity, locus of control, and preference for innovation determines entrepreneurs' characteristics. The Big Five model (Norman, 1963) consists of constructs of emotional stability, extraversion, culture, agreeableness, and conscientiousness even though they subsume more specific personal attributes, dispositions, habits, and behaviours. The model pre-eminence in personality research exists because of being free from any gender role, self-reporting, or instrument biases. Personality attributes tend to vary or balance between nurtured and natured according to entrepreneurs and enterprise.

Perren (1999) indicates four personality attributes: desire to be boss, desire to succeed, risk-taking, and innovativeness that influences growth classified as nurtured/acquired. First, the desire to be boss is the aspiration of working for oneself and making own decisions (Macmillan Education, 2002). Potential entrepreneurs after working for others quit and become owner-managers because it inspires them to think, decide and be in control. Studies suggest that successful owner-managers have high internal locus of control and low external locus of control (Caird, 1990). Desire to be boss develops internal locus of

control, influences on entrepreneur's self-motivation which accelerates micro-enterprise growth, and can be sharpened through education and training.

Further, the desire to be boss increases an entrepreneur's need to be self-employed and independent (Mambula & Sawyer, 2004). Entrepreneurs want to be in charge of their destiny. The overriding factor that inspires entrepreneurs, especially the self-employed, is the desire to be independent. Most (52%) entrepreneurs value being their own bosses because it enables them to make decisions (Gray, 2002). Most (53.3%) entrepreneurs want to be their own bosses (Oroko, 1992). Men-owned micro-enterprises have a higher growth rate because of the enormous desire to be boss while women are concerned with issues of personal challenge and satisfaction which might not immensely contribute to growth (Greene, Hart, Gatewood, Brush & Carter Accessed on November 10, 2005). An entrepreneur's desire for independence increases micro-enterprise growth whereas more and more autonomy signifies an entrepreneur's strong desire for responsibility.

Second, the desire to succeed is aspiration to have quick gains in intended activity (Macmillan Education, 2002). The desire to succeed has an influence on entrepreneur's motivation. An entrepreneur having a strong desire, willingness, and equating success with growth increases growth. On the contrary, an entrepreneur having modest expectations of success decreases growth. Namusonge (1998) indicates that need for achievement determines rate of growth. It is

true that desire to succeed influences micro-enterprise growth.

Third, the risk-taking is the practice of doing things that involves perils in order to achieve something (Macmillan Education, 2002). Propensity to take risk has influences on motivation and resources access. Mambula and Sawyer (2004) describe successful entrepreneurs as individuals who are not afraid of taking risks. Risk-taking by an entrepreneur determines the willingness to obtain necessary resources. An entrepreneur being willing to accept personal financial risk to obtain resources increases micro-enterprise growth. Entrepreneurs are propelled to take calculated but not cut-throat risks especially at the start-up phase to enable them to steadily achieve high growth rates.

Risk-taking propensity is perceived probability of receiving rewards associated with success (Macmillan Education, 2002). Definitions of entrepreneurship centre on willingness of entrepreneurs to take calculated risks. Manimala (1999) investigates pioneering innovative entrepreneurs' heuristics in India and concludes that calculated risk-taking contributes to micro-enterprise growth. Risk-taking enables reduction of uncertainty through management and testing of outcomes. Risk-taking capacities lead to two categories of entrepreneurs: the charismatic and the pragmatist (McCarthy, 2003). The management style of the charismatic is visionary, intuitive, and creative while the pragmatist is planned, rational, and reactive.

During goal setting, the charismatic is ambitious and idealistic while the pragmatist is conservative, down-to-earth, and slow. Regarding attitude to risk and degree of commitment to the micro-enterprise, the charismatic are risk-prone, committed, and obsessive while the pragmatist are risk-averse, calculated, and committed. Dedicating the best personality attributes of the charismatic and the pragmatist entrepreneurs to enterprise influences growth.

Fourth, the innovativeness is creating a new idea, method, or piece of equipment that results in creativity and latest technological innovations (Macmillan Education, 2002). It is the ability to boldly initiate change. Other scholars define innovativeness as a set of five activities that includes introduction of new products, introduction of new methods of production, opening of a new market, introduction of new material or sources of supply, and developing new micro-enterprise structures. Manimala (1999) improves the previous definitions by providing types of innovation as product innovation, process innovation, management innovation, supply source innovation, personnel innovation, finance innovation, cultural innovation, structural innovation, and government relations innovation. Innovative entrepreneurs are more likely to introduce new products to the market, increase customers, reduce competitors, and therefore, increase micro-enterprise growth.

Innovative means that an entrepreneur must have the ability to produce solutions in new situations (Littunen, 2000). Innovativeness is generally demand driven (Caputo,

Cucchiella, Fratocchi, Pelagagge&Scacchia, 2002). Innovation networks expand growth capabilities due to new abilities (Macpherson, Jones & Zhang, 2005). Ofafa (1999) indicate that the industrial group entrepreneurs are more innovative than estate group entrepreneurs because location and environment increases creativity. Namusonge (1998) specifies that one of the determinants of enterprise growth is innovativeness and truly innovativeness is the heart of economic growth. An entrepreneur innovatively influences demand. On an upbeat note, micro-enterprises at Kamukunji are innovative, embrace change, and responds to challenges of a rapidly changing environment (King 1996; McCormick 1998). An entrepreneur actively searching and developing ability to spot market opportunities increases growth (Perren 1999). In contrast, an entrepreneur's lack of knowledge, ability to search, and spot market opportunities decreases micro-enterprise growth. As a micro-enterprise grows, effective entrepreneurs extend their networks to draw in new customers and maintain existing ones through innovative ways.

Boyle (2003) establishes that innovation needs to be crowned by entrepreneurial brand building. The concept of branding theory has long been an accepted part of brand personality. Aaker (1997) develops a set of Big Five dimensions for brand personality to parallel the acknowledged Big Five dimensions of human personality. The five brand personality dimensions are sincerity, excitement, competence, sophistication, and ruggedness. The brand values play an important part in the creation

of brand personality. Brand personality consist two sets of characteristics: First, those relating to values like sincerity, excitement, competence, and sophistication and second, those relating to demographics like age, gender, culture, and country. Advertised brands are nowadays endowed with such values as commitment, pride, and friendliness such as Kenyatta University is committed to creativity, excellence, and self reliance; British Airways is keeping the Flag Flying; Kenya Airways is the Pride of Africa; and Kenya Tea Packers popularly known as KETEPA loose tea blended, packed, and distributed is Fahariya Kenya or the Pride of Kenya emphasising that anytime tea time globally. Branding creatively and innovatively influences growth as it brings out how consumers perceive the product or service.

Due to limitations on the availability of resources, entrepreneurs need to take unconventional approach to brand building. When developing a brand image, the role of product attributes and brand's personality needs to be incorporated. The brands personality attributes portrays inventors as heroes. These entrepreneurial heroes promote the idea that can be achieved through initiative, innovation, and invention. Witt (2002) indicates that innovativeness have been appreciated as a core concept in Schumpeterian economics. Innovativeness is preserved in the form of an increase in the flow of goods and services, reorganised production, reduced production costs, and promoter's profits being transformed into real income growth. Innovativeness led to the development of wheelbarrow production at Kamukunji (McCormick, 1998). These

inventors are acknowledged as heroes in wheelbarrow innovation that influence growth of micro-enterprises at Kamukunji.

The Conceptual framework consists of the independent, moderating, and dependent variables. Independent variables are numbered Factor (F) 1 to 7. Entrepreneur and enterprise profiles are the moderating variables numbered moderator (M) 1 to 13. The dependent variable consists of four variables numbered growth (G) 1 to 4. Each straight single-headed arrow indicates a hypothesised fundamental relationship in the direction of the arrow. The variables happen to be identified from theoretical frameworks developed by previous studies (Greiner, 1979; Churchill & Lewis, 1983; Scott & Bruce, 1987; Penrose, 1995; Perren, 1999). These variables used by other studies which are not specifically reviewed for this study are also adapted by this study. The study expects results on factors influencing growth of micro-enterprises at Kamukunji and findings are useful to entrepreneurs, consultants, researchers, and policy makers who mainstream growth. The conceptual framework is summarised in Figure 1.

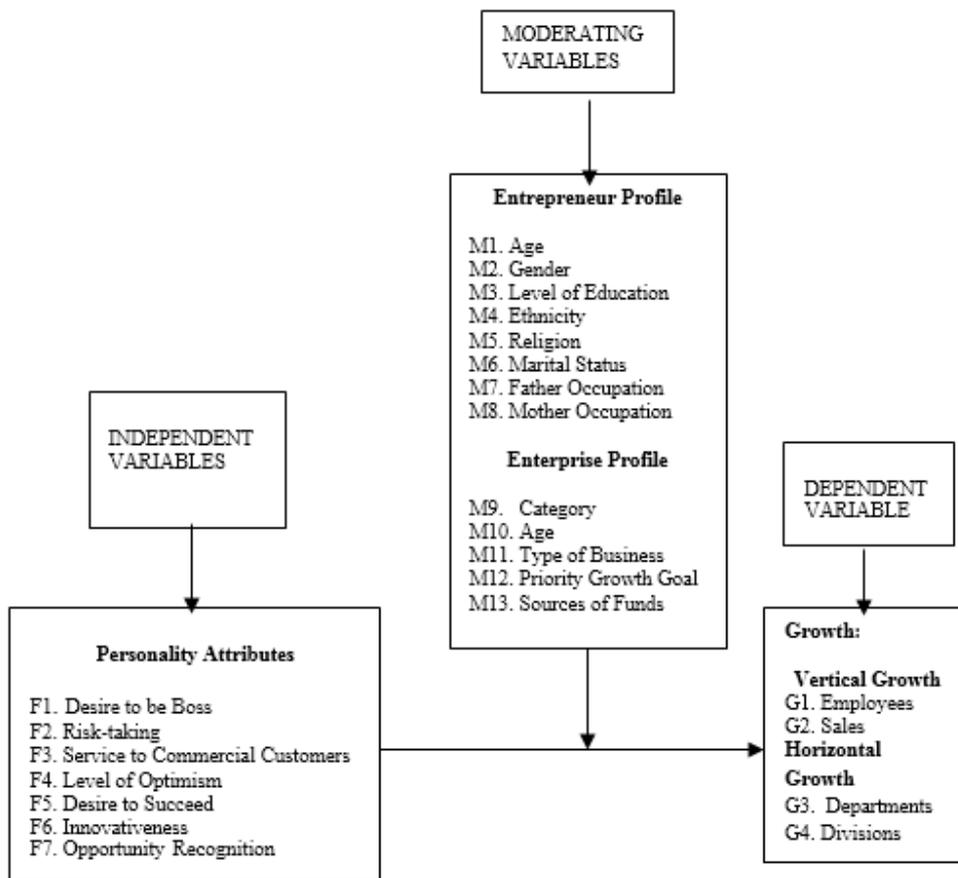


Figure 1: Conceptual Model

METHODS

The target population for the study was micro-enterprises manufacturing metallic products at Kamukunji in Nairobi. The micro-enterprises consisted of sheet metal, metalwork, painting, welding, and scrap metal categories which were started by entrepreneurs. The micro-enterprises were sole proprietorships and partnerships owned by Kenyans of various ethnicities. There were 1,118 micro-enterprises in the KamukunjiJua Kali Association membership register for the year 2006. These micro-

enterprises formed the universe of the study. The sampling methodology involved the selection of the sample from micro-enterprises that fell under the definition of a micro-enterprise and were registered by the KamukunjiJua Kali Association (2006) as metallic product manufacturers. The study used systematic sampling to select 354 micro-enterprises who participated in the study.

The survey was confined to the local area of Kamukunji metallic products manufacturing zone. Surveys are often

carried out in a limited area and at one point in time (Johnson&Duberley, 2000). Data were collected using a structured questionnaire for six months, between July and December 2006 and field notes made when important issues not in the questionnaire surfaced. Data were analysed largely using quantitative with the support of qualitative techniques. Quantitative data were analysed using descriptive statistics, factor analysis, and Spearman rhos. The results of data analysis were presented in two ways: the textual presentation and Statistical Packages for Social Sciences outputs in tabular presentation showing exact numerical values in columns and rows. The outputs were in form of tables for easier interpretation, drawing of conclusions, and making appropriate recommendations. The qualitative techniques involved content analysis.

RESULTS

The objective of the study examines the relationship between personality attributes of an entrepreneur and growth of micro-enterprises. Data were collected, analysed, and reported according to the conceptual framework in Figure 1. Results on factor analysis and descriptive statistics on personality attributes are presented in this section. Factor analysis determines the underlying dimensions that account for the patterns of collinearity among the variables. It determines the number of independent factors that are actually being measured by extracting latent factors from the variables. Further, summaries of univariate normality results are presented as descriptive statistics.

Twenty six items measures personality attributes such as desire to be boss, desire to succeed, risk-taking, and innovativeness using a five-point Likert-type scale questions. The number is above the set minimum of 10 items per variable which avoids computational difficulties. The Likert scale options are strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly disagree = 1. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) indicates that the degree of common variance in the data set is meritorious ($KMO = .82$) as it ranges between 0.80 and 0.89. KMO value is above the minimum threshold of 0.60. First, the sample size of 354 micro-enterprises is adequate for factor analysis. Second, the Bartlett's test of sphericity is very highly significant at 0.001 level ($\chi^2 = 2528.20$, $df = 325$, $p = .00$) showing that factor analysis using principal component analysis is relevant for data set and the correlation matrix is an identity matrix.

Rotations converge in 16 iterations and through factor analysis, the 26 measures reduce to eight components which have eigenvalues greater than 1 ($\lambda > 1$). The selected variables account for more than 1 unit of variance. The cumulative percentage of variance explained (R^2) by the eight variables is 60.85% above the threshold of 50%. The results indicate that 60.85% of the common variance shared by the 26 variables is accounted for by the eight factors. The eight-component factor model measures a goodness-of-fit which accounts for substantial amount of variance. Eight components are extracted out of seven target variables. The personality attributes total

variance explained are summarised in Table 1.

Table 1: Personality Attributes Total Variance Explained

Components	Initial Eigenvalues			Extraction Loadings			Rotation Loadings		
	Total	%	Cum.%	Total	%	Cum.%	Total	%	Cum.%
1	5.93	22.81	22.81	5.93	22.81	22.81	3.00	11.55	11.55
2	1.84	7.07	29.86	1.84	7.07	29.88	2.92	11.25	22.80
3	1.73	6.65	36.52	1.73	6.65	36.52	1.95	7.51	30.31
4	1.58	6.09	42.61	1.58	6.09	42.61	1.87	7.20	37.51
5	1.38	5.30	47.91	1.38	5.30	47.91	1.66	6.38	43.89
6	1.26	4.83	52.74	1.26	4.83	52.74	1.52	5.83	49.72
7	1.09	4.21	56.95	1.09	4.21	56.95	1.48	5.70	55.43
8	1.02	3.91	60.85	1.02	3.91	60.85	1.41	5.43	60.85

Source: Survey data (2006)

The first variable has high eigenvalues ($\lambda = 5.93$). As the most important variable, it is greater than 1 and explains more variance than a single variable, in fact 5.93 as much. The percentage variance explained (R^2) is 22.81%. The least important variable has low eigenvalues ($\lambda = 1.02$). It is also greater than 1 and explains more variance than a single variable. The variance explained (R^2) by the least variable is 3.91%. The practical implication of this finding is that the remaining factors 9 – 26 have eigenvalues less than 1 and explain less variance than a single variable. To avoid ambiguous interpretation, the Varimax rotation method with Kaiser Normalisation, construct validity is established and verified. The orthogonal rotation reduces data from eight to five components and preserves the independence of factors as they remain 90° apart. Rotated results happen to be factor loadings (FL) above 0.30.

Varimax rotation attempts to achieve loadings of ones and zeros. Results indicate that each

variable load a high of one on a factor and approximately zero on all the others. The factor loadings indicate correlation between each variable and each component. Variables loading greater than 0.30 for each component combine to reduce the components from eight to seven rotated factors namely: desire to be boss, risk-taking, service to commercial customers, level of optimism, desire to succeed, innovativeness, and opportunity recognition. The concepts within the items guide factor labelling. Results capture seven out of seven target variables due to the fact the 26 items are highly above the threshold of 10 observations. A summary of the descriptive statistics and assessment of normality are presented in Table 2.

Table 2: Assessment of Normality for Personality Attributes

Personality Attributes (<i>N</i> = 354)	Min.	Max.	Mean	Std. Deviation	Skew	Kurtosis
Desire to be Boss	8.00	30.00	23.63	4.94	-.82	.26
Risk-taking	6.00	30.00	21.45	5.45	-.57	-.02
Service to Commercial Customers	3.00	15.00	11.27	2.86	-.41	-.82
Level of Optimism	3.00	15.00	10.99	2.55	-.34	-.08
Desire to Succeed	2.00	10.00	6.71	2.43	-.36	-.99
Innovativeness	3.00	15.00	9.63	3.11	-.25	-.56
Opportunity Recognition	2.00	10.00	6.25	2.13	-.15	-.67

Personality attributes skew turn out to be negative indicating that the indices are below the standard error ($SE = 0.13$). Results show negative frequency distribution which departs from symmetry. Kurtosis results indicate that all variables are negative except the desire to be boss and below the standard error ($SE = 0.26$). The practical implication of this finding is that the peak of the frequency distribution becomes mesokurtic. The negative skew and neutral kurtosis frequency distributions indicate that the distribution of scores depart from normality as signified by the mean and standard deviation.

The first component factor extracted is Desire to be boss (Factor 1) which comprise of personality attributes like: I have desire for independence ($FL = 0.74$), I feel good delegating aspects of the enterprise ($FL = 0.72$), my enterprise has to be large for me to feel secure ($FL = 0.65$), I need to grow the enterprise greatly to achieve this size ($FL = 0.63$), desire to succeed ($FL = 0.56$), and desire to be boss ($FL = 0.54$). These six items are summated to form an interval scale of a low of 8.00 ($n = 8, 0.3\%$) to a high of

30.00 ($n = 30, 8.5\%$) scores with mean of 23.63 ($SD = 4.94$). A score closer to 8.00 indicate a low desire to be boss while a higher score of 30.00 indicates a high desire to be boss. The majority of the micro-enterprises score 24.00 ($n = 35, 9.9\%$) seconded by 29.00 ($n = 33, 9.3\%$) scores. The results indicate that the micro-enterprises are owned and managed by entrepreneurs who are domineering. So, Factor 1 highly influences growth. Reliability test score on these items show internal consistency ($\alpha = 0.64$). The Cronbach's alpha stays above the minimum threshold of 0.50.

The second component factor extracted is Risk-taking (Factor 2) which consist of personality attributes such as: I often take great risk when making decisions related to my enterprise ($FL = 0.78$), I would rather run the risk of facing losses now than realise afterwards I missed great opportunity ($FL = 0.77$), If I am not prepared to take calculated risks in the enterprise, I cannot expect to make large profits ($FL = 0.65$), I am willing to take on challenging orders ($FL = 0.56$), and I am willing to accept personal financial

risk in order to obtain resources ($FL = 0.49$). These five items are summated to form an interval scale of a low of 6.00 ($n = 6, 1.7\%$) to a high of 30.00 ($n = 17, 4.8\%$) scores. A score closer to 6.00 indicate low propensity to take risks while a higher score of 30.00 indicate a high level of risk-taking. The mean stands at 21.45 ($SD = 5.45$) where the majority of micro-enterprises score 26.00 ($n = 34, 9.6\%$) seconded by 24.00 ($n = 29, 8.2\%$) scores. The results indicate that the micro-enterprises are controlled by entrepreneurs who are risk-takers. The finding implies that Factor 2 highly influences growth. Reliability coefficients ($\alpha = 0.65$) for the items is above the set limit of 0.50.

The third component factor extracted is Service to commercial customers (Factor 3) which comprise of personality attributes involving: I like serving commercial customers because they bring a lot of cash ($FL = 0.83$), I like to serve commercial customers even if there are more lucrative customers somewhere ($FL = 0.77$), and I think enterprise growth is more important than other measures of enterprise success ($FL = 0.31$). These three items are summated to form an interval scale of a low of 3.00 ($n = 1, 3\%$) to a high of 15.00 ($n = 49, 13.8\%$) scores. A score closer to 3.00 indicates low service to commercial customers while a higher score of 15.00 signifies high intensity service to commercial customers. The mean is 11.27 ($SD = 2.86$) with the majority of micro-enterprises scoring 14.00 ($n = 65, 18.3\%$) seconded by 15.00 ($n = 49, 13.8\%$) scores. Results have two implications: First, the

Factor 3 highly influences growth. Second, the micro-enterprises at Kamukunji mainly deal with other micro-enterprises than directly with customers. The Cronbach's coefficient alpha ($\alpha = 0.63$) stays above the set limit of 0.50.

The fourth component factor extracted is Level of optimism (Factor 4) which contains personality attributes such as: I actively search for market opportunities ($FL = 0.59$), I have great hopes for my enterprise over the next 10 years ($FL = 0.58$), and I need to take on larger orders to stimulate growth ($FL = 0.47$). These three items are summated to form an interval scale of a low of 3.00 ($n = 3, 8\%$) to a high of 15.00 ($n = 37, 10.5\%$) scores. A score closer to 3.00 indicate low level of optimism while a higher score of 15.00 signifies high rank of optimism. The mean turns out to be 10.99 ($SD = 2.55$) with the majority of micro-enterprises scoring 10.00 ($n = 60, 16.9\%$) seconded by 11.00 ($n = 53, 15\%$) scores. Results have two implications: First, the Factor 4 moderately influences growth. Second, the exogenous factors like buoyant economy increases level of optimism for the micro-enterprises. Reliability test with the alpha shows an internal consistency of the items ($\alpha = 0.54$).

The fifth component factor extracted is Desire to succeed (F5) which consist personality attributes that include: I have strong desire to succeed in directions that are contrary to the growth of enterprise ($FL = 0.79$), I have strong desire for enterprise to operate in a market that is contrary to the market needs ($FL = 0.75$), and I mind if a micro-enterprise implements my original

idea ($FL = 0.31$). These three items are summated to form an interval scale of a low of 2.00 ($n = 22, 6.2\%$) to a high of 10.00 ($n = 50, 14.1\%$) scores. A score closer to 2.00 indicate low desire to succeed while a higher score of 10.00 reveal a high desire to succeed. The mean becomes 6.71 ($SD = 2.43$) with majority of the micro-enterprises scoring 8.00 ($n = 64, 18.1\%$), seconded by 9.00 and 10.00 ($n = 50, 14.1\%$) scores each. Results imply that Factor 5 highly influences growth. The micro-enterprises are run by entrepreneurs who have developed win-win strategies. The Cronbach's alpha coefficient of internal consistency of the items is significant ($\alpha = 0.62$).

The sixth component factor extracted is Innovativeness (F6) which comprise of personality attributes encompassing: I am more focused on the technical side of the enterprise compared to marketing ($FL = 0.70$), I often mobilise financial resources from outside the enterprise ($FL = 0.69$), and I mind if a micro-enterprise implements my original idea ($FL = 0.56$). These three items are summated to form an interval scale of a low of 3.00 ($n = 16, 4.5\%$) to a high of 15.00 ($n = 21, 5.9\%$) scores with mean of 9.63 ($SD = 3.11$). A score closer to 3.00 indicate low innovativeness while a higher score of 15.00 displays high innovativeness. The majority of micro-enterprises score 10.00 ($n = 51, 14.4\%$) and seconded by 11.00 ($n = 49, 13.8\%$) scores. The results indicate that Factor 6 highly influences growth. It seems that innovativeness is the mother of

creativity. The Cronbach's coefficient alpha ($\alpha = 0.65$) is above the set limit of 0.50.

The seventh component factor extracted is Opportunity recognition (Factor 7) consisting of personality attributes that cover: risk-taking ($FL = 0.81$) and innovation ($FL = 0.72$). These two items are summated to form an interval scale of a low of 2.00 ($n = 24, 6.8\%$) to high of 10.00 ($n = 21, 5.9\%$) scores. A score closer to 2.00 indicates low opportunity recognition while a higher score of 10.00 show high opportunity recognition. The mean is 6.25 ($SD = 2.13$) with the majority of micro-enterprises scoring 6.00 ($n = 76, 21.5\%$) seconded by 8.00 ($n = 59, 16.7\%$) scores. These results have two practical implications. First, the Factor 7 moderately influences growth. Second, it takes considerable amount of experience for micro-enterprises to spot an opportunity and develop confidence to act on their intuition. Reliability score show that the items have internal consistency ($\alpha = 0.76$).

Non-parametric tests determine the relationship between personality attributes and growth. Personality attributes variables are desire to be boss, risk-taking, service to commercial customers, level of optimism, desire to succeed, innovativeness, and opportunity recognition. Growth variables include employees, sales, departments, and divisions. Spearman's rhos verify the relationship between the variables as shown in Table 3.

Table 3: Correlation Between Personality Attributes and Growth of Micro-enterprises

Personality attributes	N = 354	Growth			
		Employees	Sales	Departments	Divisions
Desire to be Boss	<i>r</i>	-.04	-.18**	-.09	.15**
Risk-taking	<i>r</i>	-.02	-.11*	-.07	.08
Service to Commercial Customers	<i>r</i>	-.16**	-.08	-.13*	-.02
Level of Optimism	<i>r</i>	.02	-.03	-.09	.13*
Desire to Succeed	<i>r</i>	-.05	-.01	-.08	-.04
Innovativeness	<i>r</i>	-.01	.08	-.17*	.03
Opportunity Recognition	<i>r</i>	-.03	-.03	.00	-.07

** 0.01 * 0.05

Results of Spearman rhos on the relationship between personality attributes and growth indicate generally negative results. Significant relationship exists between service to commercial customers, and employees' growth. As service to commercial customers' decreases, employees increases. Significant relationship exists between desire to be boss, risk-taking, and sales growth. As desire to be boss and risk-taking decreases, sales increases. Significant relationship happens to be between service to commercial customers, innovativeness, and departments' growth. As service to commercial customers and innovativeness decreases, departments increases. Significant relationship exists between desire to be boss, level of optimism, and divisions' growth. As desire to be boss and level of optimism increases, divisions increases.

Conclusion

The set of 13 hypotheses tested using Spearman rank correlation coefficients portrays acceptance and rejection. Acceptance in nine hypothesis characterises micro-enterprises with older (36 – 45 years) than younger entrepreneurs (26 – 35 years); male than female entrepreneurs; entrepreneurs possessing

primary than secondary school level of education; Luo than Kikuyu entrepreneurs; entrepreneurs born by farming than enterprise managing mothers; sheet metal than metalwork categories; micro-enterprises aged 1 – 10 years than 11 – 20 years; proprietorships than partnerships; and micro-enterprises emphasising sales than divisions' priority growth goal. The four hypothesis rejections portend micro-enterprises managed by Protestant than Catholics, married than unmarried entrepreneurs, entrepreneurs with farming than enterprise managing fathers; and personal than family savings.

The objective of the study examines the relationship between personality attributes of an entrepreneur and growth of micro-enterprises. Four personality attributes discussed includes: desire to be boss, desire to succeed, risk-taking, and innovativeness (Perren, 1999). Results indicate that as desire to be boss by an entrepreneur decreases, growth increases. Other studies indicate that desire to be boss can be a positive influence (Caird, 1990; Perren, 1999; Mambulaand Sawyer, 2004; Profile on Resources and Aptitudes Detector for Human Activities Review, 2006; Gaebler,

2007). Therefore, entrepreneurs having high desire to be boss decreases growth while low desire to be boss increases growth.

Results indicate that as desire to succeed by an entrepreneur decreases, growth increases. Perren (1999) indicates that an entrepreneur having a strong desire and will to succeed and equating success with growth of micro-enterprise can be a positive influence. Entrepreneurs having high desire to succeed in directions that are contrary to the growth decreases growth. Hence, entrepreneurs who do not mind if other micro-enterprises implement their original idea decrease growth.

Results indicate that as risk-taking attribute of an entrepreneur decreases, growth increases. Perren (1999), Manimala (1999), and McCarthy (2003) indicates that an entrepreneur being willing to accept personal financial risk to obtain resources can be a positive influence. Entrepreneurs not willing to accept personal financial risks in order to obtain resources decrease growth. Consequently, entrepreneurs taking great risk when making decisions decreases growth.

Results indicate that as innovativeness by an entrepreneur decreases, growth increases. Studies point out that a micro-enterprise actively searching for and able to spot market opportunities can be a positive influence (King, 1996; Namusonge, 1998; McCormick, 1998; Perren, 1999; Littunen, 2000; Witt, 2002; Boyle, 2003; Macpherson et al., 2005). Entrepreneurs focusing on technical than marketing aspects decrease

growth. Entrepreneur not often mobilising financial resources from outside the micro-enterprise increases growth. Subsequently, micro-enterprises at Kamukunji tend to be innovative because of modification and invention of technologies.

Results indicate that personality attributes of an entrepreneur moderately influences growth at Kamukunji. The study borrowed heavily from Perren (1999) growth model which has four personality attributes factors namely: desire to be boss, desire to succeed, risk-taking, and innovativeness. Factor analysis improved Perren's model by adding three factors. These three emerging factors namely service to commercial customers, level of optimism, and opportunity recognition signify contributions to literature and growth theories by this study.

The cumulative percentage of variance explained (R^2) of 60.85% remains above the threshold of 50%. Results indicate that 39.15% of variance point to a sizable proportion of micro-enterprises owned by entrepreneurs not nurtured in desire to be boss, risk-taking, service to commercial customers, optimism, desire to succeed, innovativeness, and opportunity recognition. The education system in Kenya need to improve personality attributes by developing entrepreneurial personality traits during the formative years of the potential entrepreneurs.

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