

Differential Effects of Gender Groups on Entrepreneurship in a Developing Country Context

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Abstract

Purpose – The purpose of this paper is to examine gender group differential effects on entrepreneurship in western Kenya. The study provides an understanding of the entrepreneurial contextual factors influencing Women and Youth entrepreneurship. The study was undertaken in Bungoma and Uasin Gishu Counties which were Project sites for Sustainable Approach to Livelihood Improvement project in Kenya. **Design/methodology/approach**- A survey methodology was designed to collect primary data on the entrepreneurship of women and youth owned small enterprises. Data was collected and analysed with the assistance of Kruskal Wallis test. **Findings** -The results show that the hypotheses were supported on gender group differential effects on the socio-economic profiles, on the nature of firm profile and on entrepreneurial profiles. The study concludes that gender group differential effects on various variables were statistically significant. Gender differences between adult Women and youth categories were statistically significant on most aspects, while within the youth group there were no differences. **Research limitations/implications**- Limitations of this study were firstly, reliance on a sample instead of undertaking a complete census and secondly, relying on self-reported data. **Practical implications** -This paper will be of practical value to entrepreneurs, policy-makers and practitioners interested in the complex interactive relationship between women and youth entrepreneurship. **Originality/value**- The methodological framework developed for this study constitutes a foundation for extending and developing literature on gender differential effects on entrepreneurship research

Keywords: Contextual factors, impact, Gender, entrepreneurs, sustainable livelihood, entrepreneurship.

Introduction

Entrepreneurship offers opportunities to many of the world's vulnerable segments of the society so as to earn a sustainable livelihood (United Nations, 2014). In Kenya 46 per cent of the population lives below the poverty line (World Bank, 2013). Female and youth entrepreneurial activities contribute substantially to economic development in the developing world thus drawing a lot of attention in literature. As a result, there is enhanced research on female and youth entrepreneurship. The Kenyan Government and other stakeholders have supported female and youth entrepreneurship and innovation development through various interventions. Female and youth entrepreneurs are key stakeholders in the Kenyan economy who represent a valuable but largely untapped resource. Hence, emphasis on female's entrepreneurship development is highly relevant to the implementation of the Kenyan Micro and Small Enterprises Act (2012).

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The Kenya Vision 2030 mainstreams gender equity in all aspects of society (Ministry of Planning and National Development, Kenya National Economic and Social Council, 2007). The Vision identifies opportunities, empowerment, capabilities, and vulnerabilities as core in addressing gender equity. Female and youth tend to be among the most vulnerable in society. The vulnerability is caused by among other factors limited (or no) access to the labour market and those assets essential for enterprise capitalization (e.g. knowledge, land, credit). Women have been disempowered at the household, community and national levels of economic participation which further complicates their situation. This scenario has affected their potential to engage in entrepreneurial activities in order to improve their livelihoods. Kenya's population is predominantly young with the age group 15-35 years accounting for approximately 38 per cent of the total population (Ministry of state for planning, National Development and Vision 2030, 2012). Youth aged 15 to 34 constitute two thirds of the workforce (Omondi, 2013). Similarly, female across all ages constitute about 52% of the population (Ministry of state for planning, National Development and Vision 2030, 2012). The Kenyan Government hence, faces a significant unemployment problem with youth being hit hardest. Accelerators in Kenya include entrepreneurial contextual factors and entrepreneurial culture among others. Kenya like other developing countries faces a serious unemployment problem which can appropriately be addressed through entrepreneurial activities. Female and youth face serious unemployment challenges hence, entrepreneurship could be an important vehicle in enhancing the desired employment (Langowitz & Minniti, 2007). Nassiuma (2011) alludes that marital status and gender of the respondents has no significant relationship with enterprise performance. This assertion is further supported by a World Bank study which states that formally registered firms led by Women perform as well as - or in some cases better than - male-owned firms in a number of dimensions (OECD, 2012).

In order to fully utilize the human resource capital of Women and youth, it is imperative that their entrepreneurial competences be scaled up. In spite of the various efforts undertaken to date, there is little improvement in the livelihoods of Women and Youth entrepreneurs. Notable challenges facing the youth include limited finances; minimal support from government or failure to reap benefits from existing government initiated youth programs; inappropriate education systems and inadequate skills training opportunities; poor infrastructure, insecurity of persons and property (Katongole, Mulira, & Ahebwa, 2014). Shah & Sarah, (2015) supports the argument regarding challenges facing Women entrepreneurs' such as lack of access to support networks, issues relating to gender or cultural acceptance, lack of basic education, lack of technical skills and knowledge about business and lack of market knowledge. These challenges are among the explanatory factors attributed to inhibitors to entrepreneurial success among Women and youth entrepreneurs. In a study carried out in Uganda and Kenya it was found that the marital status of the majority of the rural youth entrepreneurs in Uganda were married (62%) as compared to Kenya. The study further alludes that Women were not allowed to live on their own because of fear that men could easily impregnate them. Equally over 80 percent of enterprises had no employees in Kenya and Uganda (Katongole, Mulira, & Ahebwa, 2014). According to Katongole et al. (2014) the ultimate goal is to create a business environment where male and Women entrepreneurs have equal access to economic and financial resources (Katongole, Mulira, & Ahebwa, 2014) in order to flourish. Findings on the enterprise age in a study conducted in Kenya and Uganda shows that most of the youth owned enterprises were in the age category of 1-3years (Katongole, Mulira, & Ahebwa, 2014; Namatovu, Dawa, Mulira, Katongole, & Nyongesa, 2012). Gender & Marital status of the majority of the entrepreneurs over 50% were male. Also, most of the respondents were married. In Kenya, the highest educational level was secondary while in Uganda the highest educational level was primary (Katongole, Mulira, & Ahebwa, 2014).

Education and training of Women and youth is vital given that it enhances their idea generation and opportunity search which results in the creation of entrepreneurial ventures (Bhardwaji, 2014). Some of the small holder training programs provided by trainers to entrepreneurs were found to be inadequate owing to lack of proper training needs assessment (Shibanda, Jemymah, & Nassiuma, 2001). Previous work experience is significant when starting an independent enterprise (Sonja, Marija, & Vladislavljev, 2012). This suggests that experiential learning in previous employment may be transferred to the new ventures. Entrepreneurship thrives well within an entrepreneurial environment which is conducive. However, most entrepreneurs especially Women and the youth are seriously affected by the legal and regulatory constraints and limited enterprise support (Nassiuma, 2011). Female entrepreneurs lack an entrepreneurial culture and the resulting experience (Lassithiotaki, 2011) hence cannot effectively operate their ventures.

Arthur, Hisrich, & Cabrera, (2012) suggests the need for finding stability, access to improved infrastructure, entrepreneurship education and training, government policies that support entrepreneurship, self-motivated, positive social image of entrepreneurship, role models, strong entrepreneurship network, access to finance, risk tolerance, ethics and transparency. The optimization of entrepreneurial activities is to a great extent dependent on access and utilisation of resources however, capital accumulation was greatly influenced by the entrepreneurs' age at start-up (Nassiuma, 2011). Access to credit by female entrepreneurs is mostly informal sources of finance (Equality for Growth, 2009). Several authors suggest that entrepreneurial competencies constitute a resource which can influence enterprise performance in specific contexts (Nassiuma, (2011); Sajilan & Tehseen, (2015). In order for female entrepreneurs to grow their enterprises they need to cultivate an entrepreneurial spirit which can stimulate access to greater opportunities for exploitation hence greater prosperity for them and their families. Equally, family support could spur the realization of their potential (Imbaya, 2012; Haseena, 2014). Strategies put in place to *reduce* gender disparities and address vulnerabilities include, provision of financial support to female to raise their incomes and reduce the gap in estimated earned incomes between men and Women; Increase of funds and training available to female and youth entrepreneurs (MPND & Vision 2030, 2012; youth employment, 2012). Lack of resources, vulnerability and poor institutional support were identified as constraints to the long-term sustainability (Kabir, Hou, Akther, & Wang, 2012). In spite of the importance of entrepreneurship as a vehicle for enhancing the quality of life of entrepreneurs, its acceptance alone is not enough hence the need to for an enabling environment that depends on the preparedness of the community and policies promoting entrepreneurship (Kamaruddin & Samsudin, 2014). Family background, entrepreneurial context and necessity motivation are construed to have a relatively strong positive significant effect on small business growth while the owner's age has a negative effect on small business growth (Eijdenberg, Pass, & Masurel, 2015).

This study was conducted in Bungoma and Uasin Gishu Counties in Western Kenya. The study investigated the gender group's differential effects on entrepreneurship. The specific objectives were to; compare firm, female and youth entrepreneurial profiles compare the socio-economic profiles of female and youth entrepreneurs and analyse challenges facing female and youth entrepreneurship. Based on the findings of this study this research draws a set of practical recommendations to enhance female and youth entrepreneurship with the final goal of improving their livelihood outcomes. The Kenyan government has put in place many initiatives to address female and youth entrepreneurship as a strategy to national development. However, there is limited understanding on the initiatives that work and what does not work. Hence, the need to examine the gender groups differential effects on entrepreneurship in western Kenya.

Theoretical foundations

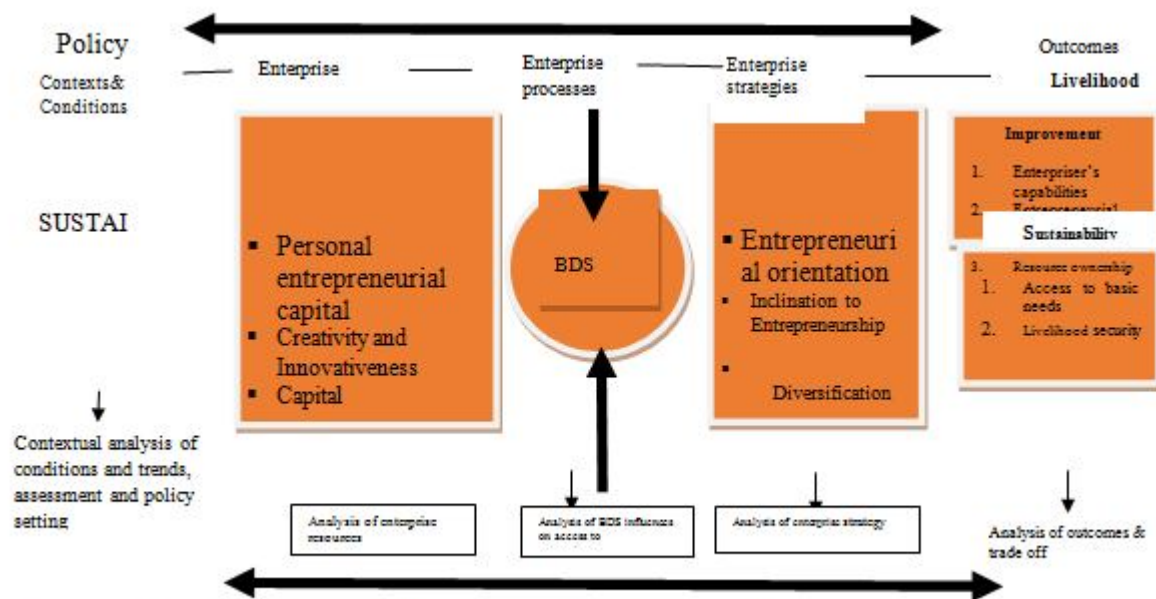
The theoretical foundations of this study were based on the Achievement Motivation Theory by McClelland (1961) and the biological theory of entrepreneurship by Eagly (1995). According to McClelland's theory, there are three types of motivational need, which include achievement motivation, authority/power motivation and affiliation motivation. These needs are found in varying degrees in all people. This mix of motivational needs characterizes a person's behaviour, both in terms of being motivated, and in the management and motivation of others. An achievement motivated person will always seek achievement and attainment of realistic but challenging goals. It can be argued that while most people do not possess a strong achievement-based motivation, those who do, display a consistent behaviour in setting goals which is critical in entrepreneurship development. The motivation to achieve has the potential to unravel the dynamic inclination of an individual towards entrepreneurship. This theory sheds light on elements such as personality characteristics, individual's environment, enterprise's environment, specific business ideas, respondent's goals, access to role models and friends and inclinations to entrepreneurship and success. It also explains how they influence emerging patterns of entrepreneurship and access to information and self-assessment that culminates in the identification and grasping of opportunities. On the other hand, Biological Theory of Entrepreneurship according to Eagly (1995) focuses on the dialogue about gender and entrepreneurship. In literature, several of the academic theories of gender differences offer explanations based on deeply seated cultural or even biological differences between male and female. They also tend to emphasize gender differences, construing them as core aspects of what it means to be a man or a woman in the entrepreneurial process.

A more promising recent line of research has suggested that entrepreneurs differ in cognitive style from others and that they may be more likely to make particular cognitive errors (Baron, 1998 and Palich and Bagby, 1995), especially errors of overconfidence (Busenitz and Barney, 1997). Psychologists have documented moderate and consistent levels of differences between male and female in risk-taking behaviours. Studies have found that men were significantly more likely than female to engage a variety of risky activities. It is argued that males took more risks even when it was clear that it was a bad idea to take a risk and that Female seemed to be disinclined to take risks even in fairly risky situations or when it was a good idea, leading to the speculation that men and boys would tend to encounter failure or other negative consequences more often than female and girls. It is further argued that female and girls would tend to experience success less often than they should (Byrnes et al., 1999, p.378). The above theoretical paradigms provide a context within which we can understand entrepreneurship discourse among female and youth. This is well captured in the conceptual framework discussed below.

Conceptual Framework

The study focuses on three dimensions of entrepreneurship: the individual (i.e. potential entrepreneur), the context/ environment which encompasses the bundle of external factors that may stimulate/ hinder the emergence of an enterprise and the enterprise. Based on literature, the demographic, entrepreneurial competencies and challenges were identified as key in the study. For each element, a number of indicators were used. The conceptual framework of this study is presented in Figure 1.

Figure 1: Conceptual framework



Source: Adopted from Scoones' (1998) and modified (Scoones, 1998.)

Methods and analysis

The methods section is presented on the basis of the setting of the study site, data collection instruments, data analysis and limitations of the study. Collecting primary data in contexts such as Africa can have major difficulties for researchers (Kolk & Van, 2010). However, data was collected from all the respondents targeted in the study. This study adopted a survey research method anchored on the qualitative and quantitative approaches. The research sites were Uasin Gishu and Bungoma Counties in Western Kenya which were purposively selected being the project focus. The study sites in Bungoma County comprised of urban and peri-urban areas, mainly where Female and youth entrepreneurs had set-up innovative enterprises to improve their livelihoods; namely; Bungoma town, Bumula, Chwele, Kimilili and Webuye. In Uasin Gishu the study sites included the central business District, Soy, Turbo, Moiben and Ainabkoi. Most of the respondents were identified in the central business District of Eldoret town owing to the high population of Female and youth entrepreneurs.

The study sample was a representative of the study sites and comprised of female and youth entrepreneurs who had operated their enterprises for a period of over one year. The entrepreneurial activities in which the respondents were engaged included; trade, service and manufacturing. Study respondents were within the category of micro and small enterprises.

Primary and secondary data sources were used in this study. Data was collected from respondents, checked for errors, summarized and analysed using descriptive statistics. Data was presented using tables, frequencies and graphs. The questionnaire and interview guides were developed basing on a literature review and a pre-study consisting of expert interviews before the main study. The data was collected between February and March 2016. In the main study 698 questionnaires were completed by respondents. Study tools were administered by research assistants who were recruited and trained. Research assistants had to meet the minimum threshold of either pursuing a degree in entrepreneurship or business related area and had either graduated or substantially progressed in the degree programs. Questionnaire contents were structured to address the objectives in the study. Data collection instruments were tested for reliability using cronbach alpha, (.951) for items on entrepreneurial competencies and .908 for challenges facing entrepreneurs. Descriptive statistics was used focusing mainly on proportions (Alan, 2012). Non parametric statistical tests conducted on differences among groups, was Kruskal Wallis test. This study faced some limitations including; reliance on a sample instead of undertaking a complete census of enterprises or increasing the number of clusters. It is the view of the researchers that the number of female and youth respondents in the areas not covered are expected to be insignificant and do not seriously influence the outcomes of this study.

Findings and discussion

The results are presented on the basis of the study objectives to; compare firm, female and youth entrepreneurial profiles, compare the socio-economic profiles of female and youth entrepreneurs and analyse challenges facing female and youth entrepreneurship.

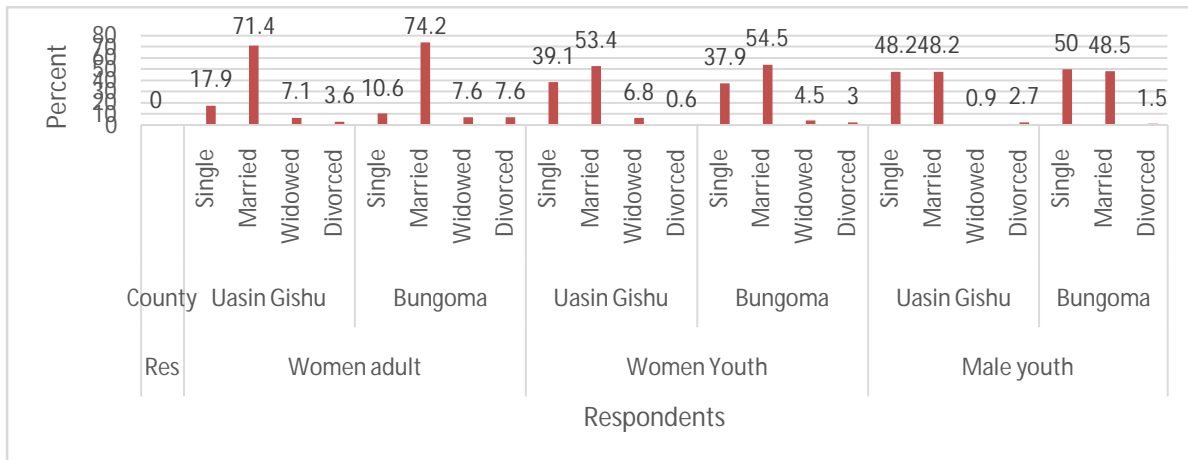
Firm, socio-economic profiles of female adult, female youth and male youth entrepreneurs

Female and youth entrepreneurs' profile elements were marital status, age, educational level, entrepreneurial experience and employment status before start-up of the entrepreneurial ventures.

Marital status

Based on data collected and analyzed, (Table 2) the marital status of adult female respondents showed that the majority (Uasin Gishu, 71%; Bungoma, 74%) were married followed by single and the least were widowed or divorced. Youth female respondents equally, had the majority (53%, 55%) in the married category in Uasin Gishu and Bungoma Counties respectively. This was closely followed by single persons and the least were in the category of widowed and divorced.

Figure 2: Presents the respondents by county, location and marital status



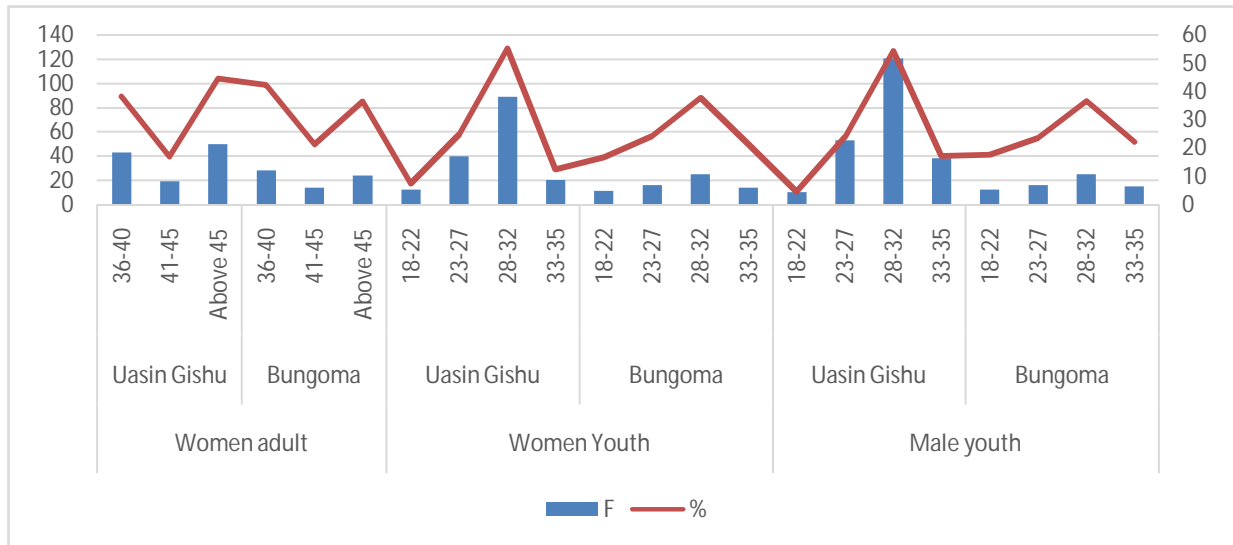
Gender of the Respondents

The results on the gender of respondents indicate that the majority (58.3%) were Female while male youth constituted 41.7 %.

Age of Respondents

The enterprise owner’s age categories (Table 3) show that the mean age of respondents in the study was 33 years. Adult female respondents had a mean age of 47 years in Uasin Gishu County and 45 years in Bungoma County.

Figure 3: Enterprise owners age categories

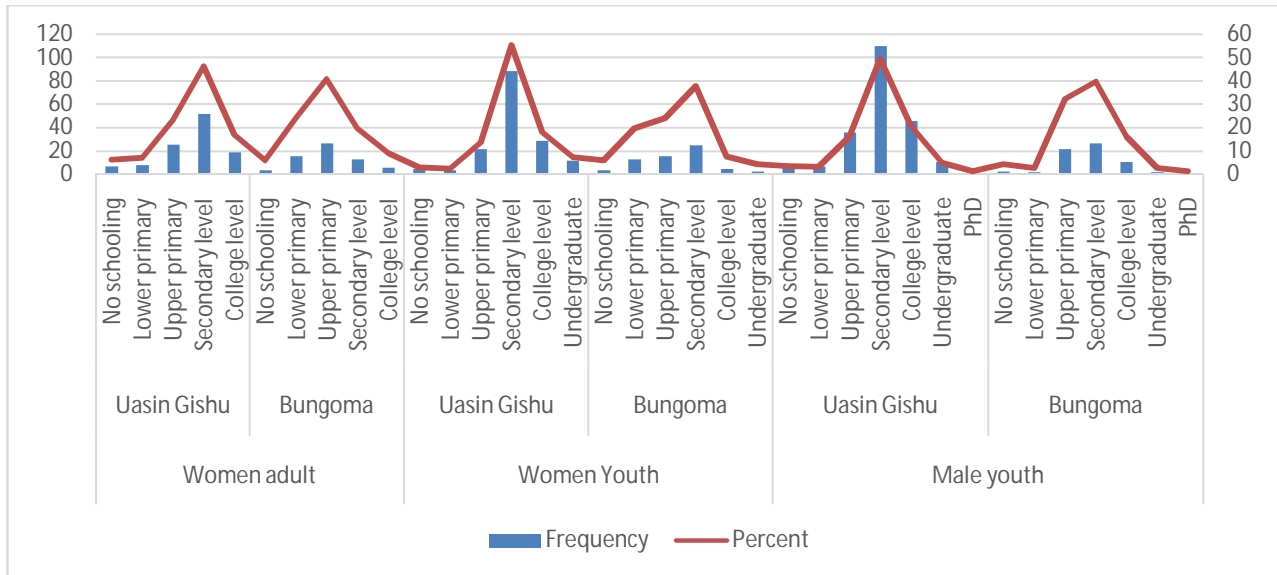


The mean age for Female youth respondents was 29 years in Uasin Gishu while in Bungoma was 28 years. The majority of the Female adult respondents were in the age category of over 50 years and 36-40 years in Uasin Gishu County and Bungoma County respectively. The majority of female and male youth respondents in the two Counties were in the age category of 28-32 years.

Education

The educational level of respondents (Figure 4) indicate that the majority of respondents had attained a secondary school educational level in all the study Counties, with an exception of Female adults in Bungoma County who had the least in this category (19.7%). This was closely followed by primary educational level except for Female youth respondents in Uasin Gishu County, where secondary level was followed by college level (18%).

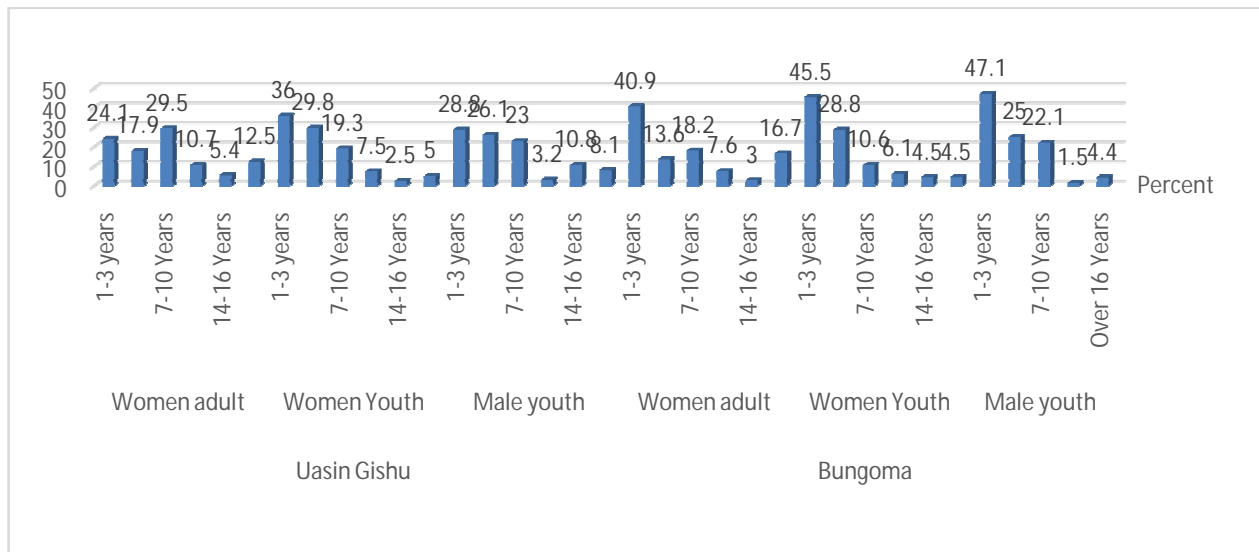
Figure 4: Respondent's educational levels



Entrepreneurial experience

The respondents entrepreneurial experience (Table 5.), shows that female adult respondents in Bungoma and Uasin Gishu Counties were in the experience categories of 7-10 and 1-3 years respectively female and male youth respondents were in the experience categories of 1-3 years respectively.

Figure 5: Respondent's entrepreneurial experience

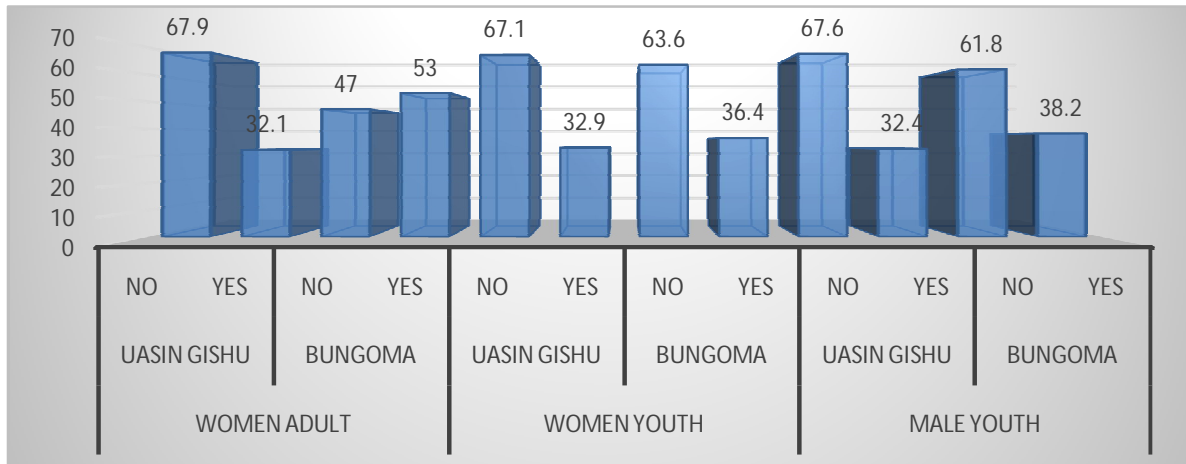


Employment Status before Start-up Enterprises

The employment status of Female and youth before enterprise start-up is presented in Table 6. The majority (68%) of the Female adult respondents in Uasin Gishu County had no previous employment before enterprise start-up.

At the same time, Female youth and male youth in Uasin Gishu and Bungoma Counties equally had no employment before enterprise start-up. In Bungoma County, more Female adults (53%) had previous employment before venturing in start-up enterprises.

Figure 6: Respondent's employment before start-up by percent



Hypotheses tested; H0: Gender of the respondent has no differential effects on the socio-economic profiles

The results on the gender of the respondent and differential effect on the nature of the firm profile are presented in

Table 1. The results indicate that there was a statistically significant difference between gender groups on work experience categories in Uasin ($\chi^2 (2) = 10.140, p = 0.006$) with a mean rank of 236.68 (median = 2.5) for female adult respondents, 227.47 (median = 2.0) for female youth respondents and 268.19 (median = 2.0) for male youth respondents. While in Bungoma County ($\chi^2 (2) = 6.587, p = .037$) with a mean rank of 115.43 (median = 2.0) for female adult respondents, 95.10 (median = 2.0) for female youth respondents and 92.88 (median = 2.0) for male youth respondents. On marital status results indicate that there was a statistically significant difference between gender groups in Uasin Gishu ($\chi^2 (2) = 14.332, p = .001$) with a mean rank of 312.42 (median = 2.0) for female adult respondents, 264.88 (median = 2.0) for female youth respondents and 231.55 (median = 2.0) for male youth respondents. While in Bungoma County there was a statistically significant difference between gender groups on marital status ($\chi^2 (2) = 26.925, p = .000$) with a mean rank of 127.43 (median = 2.0) for female adult respondents, 94.79 (median = 2.0) for female youth respondents and 83.04 (median = 2.0) for male youth respondents. Results on the respondent's educational level in Uasin Gishu indicate that there was a statistically significant difference between gender groups and educational level ($\chi^2 (2) = 7.787, p = .020$) with a mean rank of 175.23 (median = 3.0) for female adult respondents, 251.59 (median = 4.0) for female youth respondents and 253.67 (median = 4.0) for male youth respondents. While in Bungoma there was a statistically significant difference between gender groups and educational level ($\chi^2 (2) = 15.966, p = .000$) with a mean rank of 79.29 (median = 3.0) for female adult respondents, 101.00 (median = 4.0) for female youth respondents and 118.01 (median = 4.0) for male youth respondents.

The results indicate that there was no statistically significant difference between female adult and female youth respondents on work experience categories in Uasin Gishu County. While in Bungoma county there was a statistically significant difference between female adult and female youth on work experience categories ($\chi^2 (1) = 4.186, p = .041$) with a mean rank of 71.20 (median = 2.5) for female adult respondents and 58.40 (median = 2) for female youth respondents. The effect size was 32%. On marital status, there was no statistically significant difference between female adult and female youth in Uasin Gishu County. While in Bungoma there was a statistically significant difference between female adult and female youth on marital status ($\chi^2 (1) = 13.653, p = .041$) with a mean rank of 75.35 (median = 2) for female adults and 54.62 (median = 2) for female youth. On Educational level, there was a statistically significant difference between female adult and female youth ($\chi^2 (1) = 7.958, p = .005$) with a mean rank of 83.85 (median = 2) for female adults and 121.35 in Uasin Gishu County (median = 2) for female youth. While in Bungoma there was a statistically significant difference between female adult and female youth on Educational level ($\chi^2 (1) = 4.363, p = .037$) with a mean rank of 57.57 (median = 2) for female adults and 70.8 (median = 2) for female youth. The results indicate that there was a statistically significant difference between female adult and male youth respondents on work experience categories in Uasin Gishu County.

While in Bungoma county there was a statistically significant difference between female adult and male youth on work experience categories ($\chi^2(1) = 5.715, p = .017$) with a mean rank of 70.69 (median = 2.0) for female adult respondents and 60.02 (median = 2) for male youth respondents. The effect size was 32%. On marital status, there was a statistically significant difference between female adult and male youth in Uasin Gishu County ($\chi^2(1) = 9.417, p = .000$) with a mean rank of 188.17 (median = 2) for female adults and 140.53 (median = 2) for male youth. While in Bungoma there was a statistically significant difference between female adult and male youth on marital status ($\chi^2(1) = 26.577, p = .041$) with a mean rank of 83.08 (median = 2) for female adults and 53.38 (median = 2) for male youth.

Table 1: Kruskal Wallis Test on Differential Effect between Socio-Economic Profiles of Female Adult, Female Youth and Male Youth Entrepreneurs

Profile	Uasin Gishu County			Bungoma County		
	Chi-Square	df	Sign	Chi-Square	df	Sign
Work expcat	10.140	2	0.006	6.587	2	.037
Marital status	14.332	2	.001	26.925	2	.000
Educational level	7.787	2	.020	15.966	2	.000

The post-hoc tests with effect size were conducted are presented in Table 2.

Table 2: Kruskal Wallis test (Post hoc) by county

Profile	Uasin Gishu County			Bungoma County		
	Chi-Square	df	Sign	Chi-Square	df	Sign
<i>Kruskal Wallis test (Post hoc) on differential effect between Socio-economic profiles of female adult and female youth</i>						
Work expcat	.103	1	.748	4.186	1	.041
Marital status	2.819	1	.093	13.653	1	.000
Educational level	7.958	1	.005	4.363	1	.037
<i>Kruskal Wallis test (Post hoc) on differential effect between Socio-economic profiles of female adult and male youth</i>						
Work expcat	1.132	1	.287	5.715	1	.017
Marital status	9.417	1	.002	26.577	1	.000
Educational level	6.922	1	.009	16.861	1	.000
<i>Kruskal Wallis test (Post hoc) on differential effect between Socio-economic profiles of female youth and male youth</i>						
Work expcat	9.902	1	.002	.044	1	.834
Marital status	7.970	1	.005	1.747	1	.186
Educational level	.038	1	.846	2.936	1	.087

The results indicate that there was no statistically significant difference between female adult and male youth respondents on work experience categories in Uasin Gishu County ($\chi^2(1) = 9.902, p = .002$) with a mean rank of 215.94 (median = 2.0) for male youth respondents and 254.65 (median = 2) for male youth respondents. The effect size was 20%. While in Bungoma county there was no statistically significant difference. On marital status, there was a statistically significant difference between female adult and male youth in Uasin Gishu County ($\chi^2(1) = 7.970, p = .005$) with a mean rank of 225.08 (median = 2) for female adults and 223.52 (median = 2) for male youth the effect size was 16%. While in Bungoma there was no statistically significant difference between female adult and male youth on marital status. On educational level, there was no statistically significant difference between female adult and male youth in Uasin Gishu County and Bungoma counties.

Enterprise profile

The aspects examined under enterprise profile included; the organisation mode, the choice of enterprise; location, enterprise age, and ownership arrangement. The majority (66.2% - 85.7%) of the entrepreneurial ventures were sole proprietors' in the two Counties. This is the basic enterprise mode that presents a lot of benefits to the sole proprietor but can limit the growth potential of the venture. The choice of enterprise location by the respondents was based on the factors that can define the success of an enterprise. The mean age of the enterprise which participated in the study was seven (7) years in the two counties, while the minimum was one (1) year and the maximum was forty (40) years. The mean enterprise age for female adult's respondents was nine (9) years; while female youth was six (6) years; and male youth seven (7) years. Ownership arrangements indicate that the majority (66-87%) of the ventures were owned by sole proprietors in the two counties.

H0₂: Gender of the respondent has no differential effect on the nature of firm profile.

The results on the gender of the respondent and differential effect on the nature of the firm profile are presented in Table 3. The results indicate that there was a statistically significant difference between gender groups on Ownership arrangement in Uasin ($\chi^2 (2) = 129.104, p = 0.000$) with a mean rank of 177.38 (median = 21) for female adult respondents, 176.4 (median = 175) for female youth respondents and 313.51 (median = 231).

For male youth respondents. While in Bungoma County ($\chi^2 (2) = 129.104, p = 0.0002$) with a mean rank of 88.41 (median = 42) for female adult respondents, 73.74 (median = 53) for female youth respondents and 135.65 (median = 13) for male youth respondents. On enterprise location the results indicate that there was a statistically significant difference between gender groups in Uasin Gishu ($\chi^2 (2) = 14.942, p = 0.001$) with a mean rank of 131.71 (median = 24) for female adult respondents, 211.16 (median = 132) for female youth respondents and 227.17 (median = 146) for male youth respondents. While in Bungoma County there was no statistically significant difference between gender groups on enterprise location. Results on employment status before start in Uasin Gishu indicate that there was a statistically significant difference between gender groups and employment status before start ($\chi^2 (2) = 17.903, p = 0.000$) with a mean rank of 137.39 (median = 22) for female adult respondents, 247.83 (median = 139) for female youth respondents and 257.81 (median = 171) for male youth respondents. While in Bungoma there was no statistically significant difference. The post-hoc tests with effect size were conducted and the results indicate that there was a statistically significant difference between female adult and female youth on enterprise location in Uasin Gishu County ($\chi^2 (1) = 10.182, p = 0.001$) with a mean rank of 69.75 (median = 24) for female adult respondents and 108.49 (median = 123) for female youth respondents. The effect size was 49%. While in Bungoma County it was not significant. On employment status before start-up in Uasin Gishu County the results indicate that there was a statistically significant difference between gender groups ($\chi^2 (1) = 14.137, p = 0.000$) with a mean rank of 70.41 (median = 70) for female adult respondents and 121.57 (median = 139) for female youth respondents. The effect size was 61%. While in Bungoma there were no statistically significant differences.

Table 3: Gender by Differential Effect on Firm Profile

Firm characteristic	Uasin Gishu			Bungoma		
	Chi-Square	df	Sig.	Chi-Square	df	Sig.
<i>Gender by differential effect on firm profile in Uasin Gishu & Bungoma counties</i>						
Ownership arrangement	129.104	2	.000	48.552	2	.000
Enterprise location	14.942	2	.001	3.299	2	.192
Basis for choice of location	1.608	2	.448	2.886	2	.236
Business organisation	.769	2	.681	.518	2	.772
Employment status before start	17.903	2	.000	2.912	2	.233
Actual engagement	.472	2	.790	5.464	2	.065
<i>Firm characteristic by county for female adult and female youth</i>						
Ownership arrangement	.002	1	.964	2.154	1	.142
Enterprise location	10.182	1	.001	.078	1	.780
Basis for choice of location	.459	1	.498	3.290	1	.070
Business organisation	.665	1	.415	.297	1	.586
Employment status before start	14.137	1	.000	2.649	1	.104
Actual engagement	.219	1	.639	2.080	1	.149
<i>Firm characteristic by county by female adult and male youth entrepreneurs</i>						
Ownership arrangement	30.709	1	.000	22.061	1	.000
Enterprise location	14.313	1	.000	3.267	1	.071
Basis for choice of location	1.381	1	.240	.981	1	.322
Business organisation	.782	1	.376	.011	1	.915
Employment status before start	18.342	1	.000	1.711	1	.191
Actual engagement	.017	1	.896	5.023	1	.025
<i>Firm characteristic by county by female and male youth entrepreneurs</i>						
Ownership arrangement	122.305	1	.000	46.175	1	.000
Enterprise location	1.920	1	.166	1.733	1	.188
Basis for choice of location	.669	1	.413	.411	1	.521
Business organisation	.013	1	.911	.478	1	.489
Employment status before start	.665	1	.415	.098	1	.755
Actual engagement	.378	1	.539	1.146	1	.284

The post-hoc tests with effect size were conducted and the results indicate that there was a statistically significant difference between *female adult and male youth* on Ownership arrangement in Uasin Gishu County ($\chi^2(2) = 30.709, p = 0.000$)

In Bungoma County the results indicate that there was a statistically significant difference between *female adult and male youth* on Ownership arrangement ($\chi^2(2) = 22.061, p = 0.000$) On Enterprise location in Uasin Gishu County the results indicate that there was a statistically significant difference between gender groups and Enterprise location. ($\chi^2(2) = 14.313, p = 0.000$) On employment status before start in Uasin Gishu County the results indicate that there was a statistically significant difference between gender groups on employment status before start ($\chi^2(2) = 18.342, p = 0.000$) The results on actual engagement indicate that there was a statistically significant differences between gender groups ($\chi^2(2) = 18.342, p = 0.000$) While in Bungoma County there was no statistically significant differences between gender groups and actual engagement. The effect size was The post-hoc tests with effect size were conducted and the results indicate that there was a statistically significant difference between female youth and male youth on ownership arrangement in Uasin Gishu County ($\chi^2(2) = 122.305, p = 0.000$) with a mean rank of 164.46 (median = 32) for female youth respondents and 294.92 (median = 231) for male youth respondents. The effect size was 26%. While in Bungoma there were no statistically significant differences.

H0₃: Gender of the respondent has no differential effect on the entrepreneurial profiles

Attitudinal Competency

The results on the Kruskal Wallis test (Table 4) shows that gender groups' differential effects on attitudinal competencies in Uasin Gishu and Bungoma counties were statistically significant. The null hypothesis was therefore rejected. In order to identify the groups that had significant differences post hoc tests and effect size were computed.

Table 4: Summary Kruskal Wallis Test on Gender Group Differences by Attitudinal Competencies in Uasin Gishu and Bungoma Counties

Attitudinal Competency	Uasin Gishu county			Bungoma County		
	Chi square	df	sig	Chi square	df	sig
Self Confidence	21.836	2	.000	17.235	2	.000
Self Esteem	14.592	2	.001	6.859	2	.032
Dealing with Failures	17.623	2	.000	8.236	2	.016
Tolerance for Ambiguity	10.431	2	.005	16.835	2	.000
Performance	15.878	2	.000	16.956	2	.000
Concern for High Quality	23.268	2	.000	11.463	2	.003
Locus of Control	28.605	2	.000	9.063	2	.011

Post-hoc results on gender group differential effects on altitudinal competencies

The results of post-hoc tests are presented in Table 5.

Table 5: Post Hoc Tests of Gender Groups Differential Effects on Attitudinal Competency

Attitudinal Competency	Uasin Gishu county			Bungoma County		
	Chi square	df	sig	Chi square	df	Sig
<i>Female adult/ female youth group differential effects on altitudinal competencies</i>						
Self Confidence	20.683	1	.000	3.555	1	.059
Self Esteem	12.855	1	.000	1.900	1	.168
Dealing with Failures	16.790	1	.000	1.67	1	.196
Tolerance for Ambiguity	10.784	1	.000	4.493	1	.034
Performance	15.716	1	.000	4.315	1	.038
Concern for High Quality	21.583	1	.000	3.032	1	.082
Locus of Control	26.643	1	.000	3.841	1	.050
<i>Post hoc tests: Female adult/ male youth group differential effects on altitudinal competencies</i>						
Self Confidence	20.929	1	.000	16.579	1	.000
Self Esteem	13.752	1	.000	6.156	1	.013
Dealing with Failures	16.664	1	.000	7.020	1	.008
Tolerance for Ambiguity	9.094	1	.003	15.206	1	.000
Performance	14.609	1	.000	15.759	1	.000
Concern for High Quality	21.381	1	.000	11.840	1	.000
Locus of Control	27.532	1	.000	7.899	1	.005
<i>Female Youth and male youth group differential effects on Attitudinal competencies</i>						
Self Confidence	.010	1	.921	5.615	1	.018
Self Esteem	.662	1	.416	2.327	1	.127
Dealing with Failures	.047	1	.828	3.702	1	.054
Tolerance for Ambiguity	.125	1	.723	5.680	1	.017
Performance	.045	1	.832	5.372	1	.020
Concern for High Quality	.885	1	.347	2.464	1	.117
Locus of Control	.012	1	.911	2.027	1	.155

The post-hoc test results on the female adult/ female youth group differential effects on altitudinal competencies in Uasin Gishu indicates that there was a statistically significant difference between female adult and female youth on self-confidence ($\chi^2(1) = 20.683, p = 0.000$), self-esteem ($\chi^2(1) = 12.855, p = 0.000$), dealing with failures ($\chi^2(1) = 16.790, p = 0.000$), tolerance for ambiguity ($\chi^2(1) = 10.784, p = 0.000$), performance ($\chi^2(1) = 15.716, p = 0.034$), concern for high quality ($\chi^2(1) = 21.583, p = 0.000$), Locus of Control ($\chi^2(1) = 4.493, p = .034$). While in Bungoma County apart from tolerance for ambiguity ($\chi^2(1) = 4.315, p = 0.000$), performance ($\chi^2(1) = 4.315, p = .038$) and locus of control ($\chi^2(1) = 3.841, p = .050$) other attitudinal competencies had no statistically significant differences.

Post hoc test results female adult/ male youth group differential effects on attitudinal competencies in Uasin Gishu county indicates that there was a statistically significant difference between female adult and female youth on self-confidence ($\chi^2(1) = 20.929, p = 0.000$), self-esteem ($\chi^2(1) = 13.752, p = .013$), dealing with failures ($\chi^2(1) = 16.664, p = 0.000$), tolerance for ambiguity ($\chi^2(1) = 9.094, p = 0.000$), performance ($\chi^2(1) = 14.609, p = 0.034$), concern for high quality ($\chi^2(1) = 21.381, p = 0.000$), locus of control ($\chi^2(1) = 27.532, p = .034$). Equally in Bungoma County gender had statistically significant differential effects on attitudinal competencies (self-confidence ($\chi^2(1) = 16.579, p = 0.000$), self-esteem ($\chi^2(1) = 6.156, p = 0.000$), dealing with failures ($\chi^2(1) = 7.020, p = 0.000$), tolerance for ambiguity ($\chi^2(1) = 15.206, p = 0.000$), performance ($\chi^2(1) = 15.759, p = 0.034$), concern for high quality ($\chi^2(1) = 11.840, p = 0.000$), locus of control ($\chi^2(1) = 7.899, p = .034$).

Post-hoc results on female youth and male youth group differential effects on attitudinal competencies indicate that there were no statistically significant deferential effects in Uasin Gishu while in Bungoma county self-confidence, ($\chi^2(1) = 5.615, p = .018$) tolerance for ambiguity, ($\chi^2(1) = 5.680, p = .017$) performance ($\chi^2(1) = 5.372, p = .020$).

Behavioural Competency

The results on the gender groups 'differential effects on behavioural competency in Uasin Gishu and Bungoma Counties are presented in Table 6.

The Kruskal Wallis test on gender groups' differential effects on behavioural competency indicates that there was statistically significant difference on Persistence ($\chi^2(1) = 12.071, p = .002$), Need for achievement ($\chi^2(1) = 14.957, p = .001$), Need for autonomy ($\chi^2(1) = 25.628, p = .000$), Risk-taking ($\chi^2(1) = 24.735, p = 0.000$), drive and energy ($\chi^2(1) = 53.326, p = 0.000$), innovation ($\chi^2(1) = 29.767, p = 0.000$), and creativity ($\chi^2(1) = 51.473, p = 0.000$).

Table 6: Gender by Differential Effect on Behavioural Competency in Uasin Gishu and Bungoma Counties

Behavioural competency	Chi square	df	sig
Initiative	3.886	2	.143
Acting on opportunity	5.527	2	.063
Persistence	12.071	2	.002
Assertiveness	10.224	2	.006
Need for achievement	14.957	2	.001
Need for autonomy	25.628	2	.000
Risk-taking	24.735	2	.000
Drive and energy	53.326	2	.000
Innovation	29.767	2	.000
Creativity	51.473	2	.000

The results indicate that female adults and male youth had significant deferential effects on behavioural competence as presented in Table 7.

Table 7: Gender Groups Differential Effects on Behavioural Competency in Uasin Gishu and Bungoma Counties

Behavioural competency	Uasin Gishu			Bungoma		
	Chi square	df	sig	Chi square	df	sig
<i>Female adult/female youth groups</i>						
Initiative	6.629	1	.010	2.168	1	.141
Acting on opportunity	5.943	1	.015	1.630	1	.202
Persistence	3.852	1	.050	3.884	1	.049
Assertiveness	2.498	1	.114	5.558	1	.018
Need for achievement	1.548	1	.213	1.680	1	.195
Need for autonomy	1.539	1	.215	3.620	1	.057
Risk-taking	2.803	1	.094	2.392	1	.122
Drive and energy	.498	1	.480	3.793	1	.051
Innovation	.133	1	.715	2.216	1	.137
Creativity	.935	1	.333	7.258	1	.007
<i>Female adult/male youth groups</i>						
Initiative	7.807	1	.005	6.982	1	.008
Acting on opportunity	6.327	1	.012	8.631	1	.003
Persistence	2.267	1	.132	12.807	1	.000
Assertiveness	4.367	1	.037	14.516	1	.000
Need for achievement	3.146	1	.076	9.582	1	.002
Need for autonomy	1.730	1	.188	12.458	1	.000
Risk-taking	.969	1	.325	8.422	1	.004
Drive and energy	1.581	1	.209	18.410	1	.000
Innovation	.986	1	.986	10.395	1	.001
Creativity	.077	1	.077	15.261	1	.000
<i>Female Youth/ Male Youth groups</i>						
Initiative	.058	1	.809	1.637	1	.201
Acting on opportunity	.007	1	.934	4.598	1	.032
Persistence	.918	1	.338	3.743	1	.053
Assertiveness	.273	1	.601	3.543	1	.060
Need for achievement	1.255	1	.263	3.660	1	.056
Need for autonomy	.007	1	.931	4.843	1	.028
Risk-taking	3.980	1	.046	3.159	1	.076
Drive and energy	1.458	1	.227	9.428	1	.002
Innovation	.941	1	.332	4.627	1	.031
Creativity	2.439	1	.118	1.092	1	.296

Managerial competency

The results on gender groups differential effect on managerial competency in Uasin Gishu and Bungoma counties is presented in Table 8. The results indicate that all managerial competency elements were statistically significant.

Table 8: Kruskal Wallis Test on Gender by Differential Effect on Managerial Competency in Uasin Gishu and Bungoma Counties

Managerial Competency	Chi square	df	sig
Information seeking	37.156	2	.000
Systematic planning & monitoring	37.839	2	.000
Problem solving	34.851	2	.000
Persuasion and Networking	35.481	2	.000
Goal setting & Perseverance	50.418	2	.000
Communication Skill	40.684	2	.000
Technical knowledge	33.019	2	.000
Social skill	31.848	2	.000
Commitment	15.679	2	.000
Decision Making Capabilities	6.262	2	.044

Comparison of the Kruskal Wallis results on managerial competency (Table 9) shows gender groups differential effects on in Uasin Gishu and Bungoma respectively: Persuasion and Networking ($\chi^2(1) = 8.936, p = .011$) and ($\chi^2(1) = 15.762, p = .000$); Technical knowledge ($\chi^2(1) = 14.770, p = .001$), and ($\chi^2(1) = 6.606, p = .037$); Social skill ($\chi^2(1) = 7.630, p = .022$), and ($\chi^2(1) = 6.869, p = .032$). Bungoma county had additional gender groups differential effects on; Information seeking, ($\chi^2(1) = 8.802, p = .012$). Systematic planning & monitoring ($\chi^2(1) = 14.391, p = .001$). Goal setting & Perseverance ($\chi^2(1) = 15.265, p = .000$). Communication Skill ($\chi^2(1) = 12.906, p = .002$).

Table 9: Gender Group Differential Effect on Managerial Competency by County

Managerial competency	UG			Bungoma		
	Chi square	df	sig	Chi square	df	sig
Information seeking	3.817	2	.148	8.802	2	.012
Systematic planning & monitoring	.849	2	.654	14.391	2	.001
Problem solving	6.628	2	.036	10.162	2	.006
Persuasion and Networking	8.936	2	.011	15.762	2	.000
Goal setting & Perseverance	5.637	2	.060	15.265	2	.000
Communication Skill	1.118	2	.572	12.906	2	.002
Technical knowledge	14.770	2	.001	6.606	2	.037
Social skill	7.630	2	.022	6.869	2	.032
Commitment	3.160	2	.206	10.331	2	.006
Decision Making Capabilities	3.305	2	.192	2.407	2	.300

Post hoc tests on Gender groups differential effects on managerial competency by county

The post-hoc test results on female adult and female youth groups differential effects on managerial competency indicates that there were no statistically significant results in Uasin Gishu on all managerial competency elements. While in Bungoma the statistically significant differentials were on Goal setting & Perseverance ($\chi^2(1) = 6.328, p = .012$) and Communication skills ($\chi^2(1) = 5.030, p = .025$). The post-hoc test results on *female adult and male youth groups* differential effects on managerial competency indicates that there were no statistically significant results in Uasin Gishu on all managerial competency elements.

In Bungoma County all elements had statistically significant differential effects except decision making capabilities. The post-hoc test results (Table 10) on female youth and male youth groups in Uasin Gishu indicates statistically significant differential effects on; Problem solving ($\chi^2(1) = 6.295, p = .012$) Persuasion and Networking ($\chi^2(1) = 8.707, p = .003$) Goal setting & Perseverance ($\chi^2(1) = 5.210, p = .022$) Technical knowledge ($\chi^2(1) = 14.732, p = .000$) while in Bungoma Information seeking ($\chi^2(1) = 5.299, p = .021$) had statistical differential effects.

Table 10: Post Hoc Tests on Gender Groups Differential Effects on Managerial Competency by County

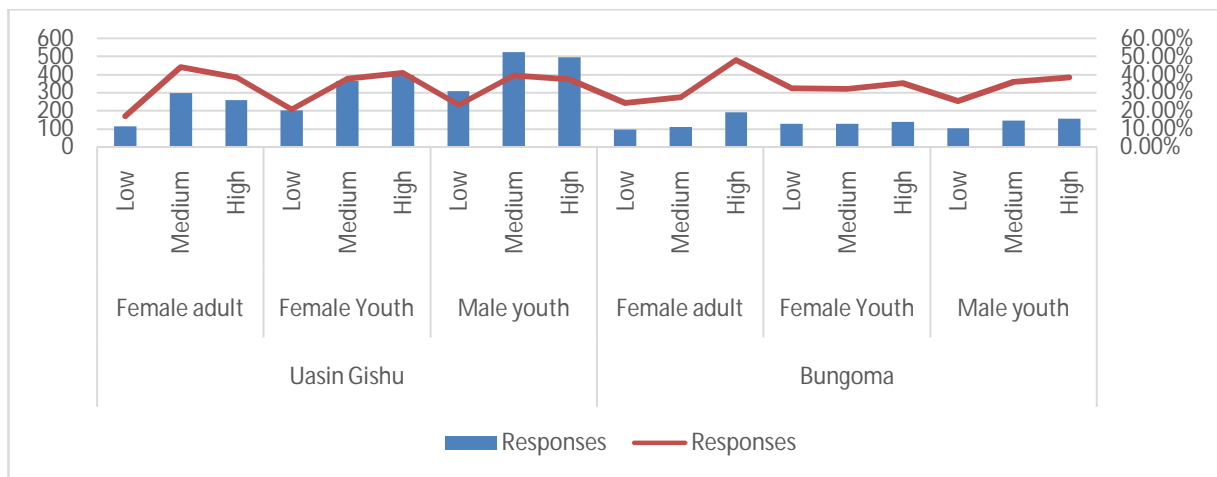
Managerial competency	Uasin Gishu County			Bungoma		
	Chi square	df	sig	Chi square	df	sig
<i>Female adult and female youth groups</i>						
Information seeking	.368	1	.544	2.378	1	.123
Systematic planning & monitoring	.024	1	.878	3.477	1	.062
Problem solving	1.306	1	.253	2.060	1	.151
Persuasion and Networking	1.303	1	.254	1.709	1	.191
Goal setting & Perseverance	.001	1	.982	6.328	1	.012
Communication Skill	.001	1	.971	5.030	1	.025
Technical knowledge	.649	1	.420	3.397	1	.065
Social skill	.337	1	.562	2.687	1	.101
Commitment	.068	1	.068	3.497	1	.061
Decision Making Capabilities	.186	1	.186	1.554	1	.213
<i>Female adult and male youth groups</i>						
Information seeking	2.037	1	.154	8.312	1	.004

Systematic planning & monitoring	.040	1	.842	12.851	1	.000
Problem solving	.000	1	.989	9.908	1	.002
Persuasion and Networking	.039	1	.843	14.141	1	.000
Goal setting & Perseverance	1.261	1	.262	14.551	1	.000
Communication Skill	.249	1	.618	12.472	1	.000
Technical knowledge	.781	1	.377	5.950	1	.015
Social skill	.462	1	.497	6.185	1	.013
Commitment	2.427	1	.119	10.686	1	.001
Decision Making Capabilities	3.123	1	.077	2.081	1	.149
<i>Female youth and male youth groups</i>						
Information seeking	2.600	1	.107	2.527	1	.112
Systematic planning & monitoring	.861	1	.353	5.299	1	.021
Problem solving	6.295	1	.012	3.237	1	.072
Persuasion and Networking	8.707	1	.003	7.626	1	.006
Goal setting & Perseverance	5.210	1	.022	2.131	1	.144
Communication Skill	1.026	1	.311	1.937	1	.164
Technical knowledge	14.732	1	.000	.661	1	.416
Social skill	7.581	1	.006	1.520	1	.218
Commitment	.213	1	.644	.242	1	.242
Decision Making Capabilities	.721	1	.396	.861	1	.861

Analysis of the Challenges faced by female and youth Respondents

An analysis of the challenges faced by respondents were categorized into resource based challenges, entrepreneurial orientation challenges, management related challenges, corruption related challenges, Legal & political, start-up and family related. Resources constitute an integral component in the entrepreneurial process hence could determine the success of the venture. Resource based challenges facing female and youth respondents are presented in Figure7.

Figure 7: Respondent’s resources-based challenges by frequency



The aspects in the analysis of resource based issues included, access to reliable sources of funding, Lack of personal property rights, Access to good market information, Infrastructure (Poor, Roads & Electricity), Problem with bank’s attitude towards female and Technological Advancements.

The success or failure of an entrepreneurial venture and by extension to the sustainability of livelihoods. The results show that the challenges were of medium (44%) impact on female adult respondents in Uasin Gishu, Female youth respondents was high (41%) and male youth respondents’ medium (39%). In Bungoma county female adult respondents indicated resource challenges to be high (48%), female youth medium (35%) and male youth respondents’ medium (36%). This could justify why most of these ventures are sole proprietorships.

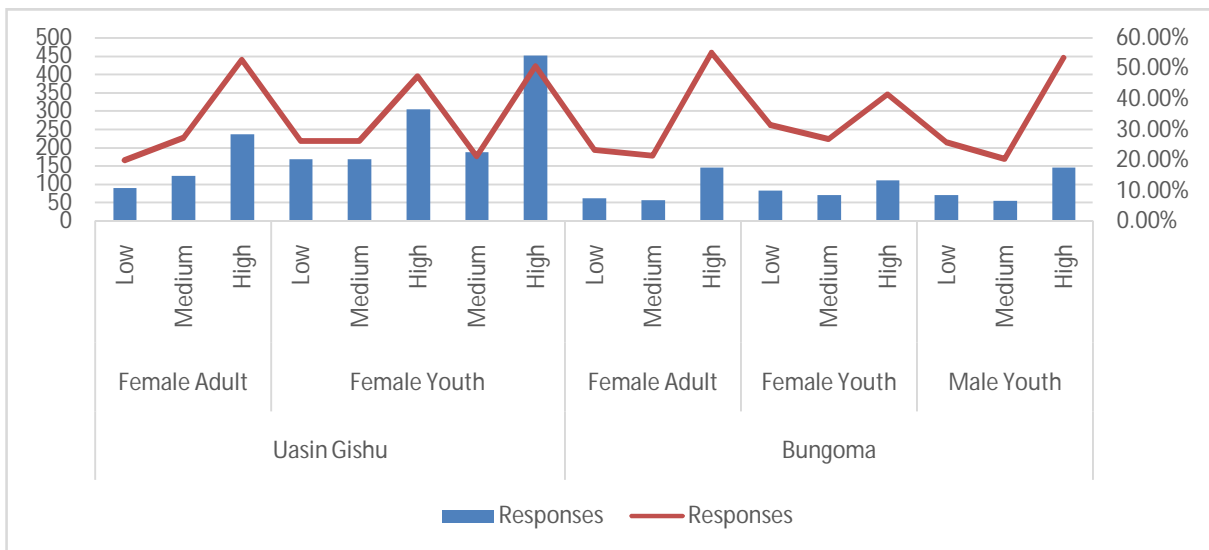
Entrepreneurial orientation challenges

The challenges covered under entrepreneurial orientation included negative attitudes towards female/youth in business and Lack of ability to take calculated risks. The results of this study show that adult female respondents in Uasin Gishu considered the challenge high (45%), female youth medium (42%), and male youth medium (36%). While in Bungoma female adult respondents considered the challenge to be high (50%), female youth low (42%) and male youth medium (44%).

Management related challenges

Management challenges in this study (Figure 8) included, ability to delegate authority to staff, inadequate management experience, managing accurate record-keeping and hiring and keeping good, and reliable staff.

Figure8: Respondents' management related challenges

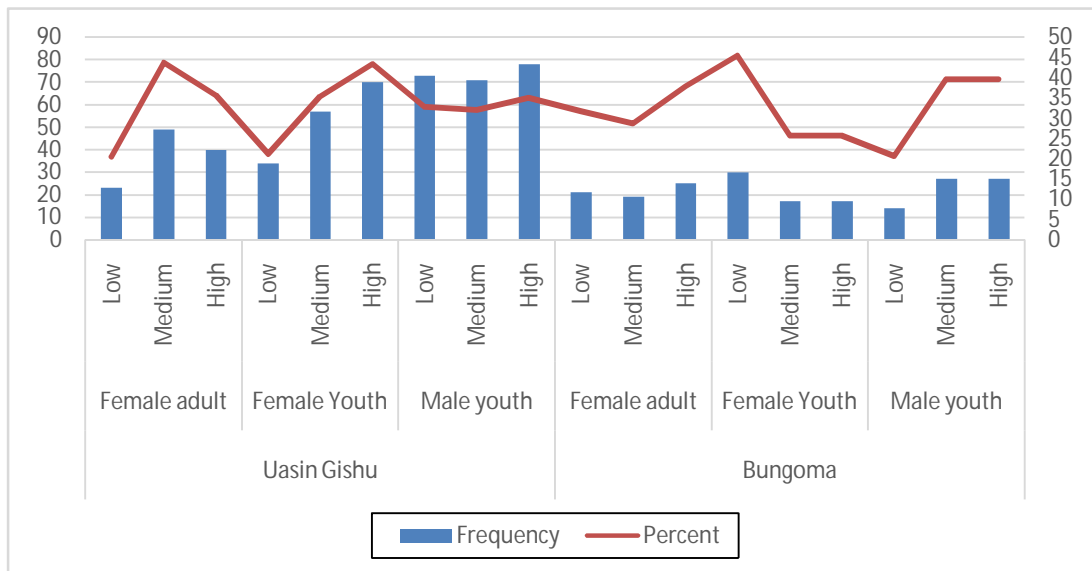


The management challenges were in all counties and to respondent's categories high. This can be related to the organizational modes, and perceptions regarding human capital and an empowerment tool to the operation of entrepreneurial ventures. Inappropriate management could result in lack of sustainable livelihoods improvement in the study counties

Corruption related challenges

Figure 9: Corruption related challenges by frequency

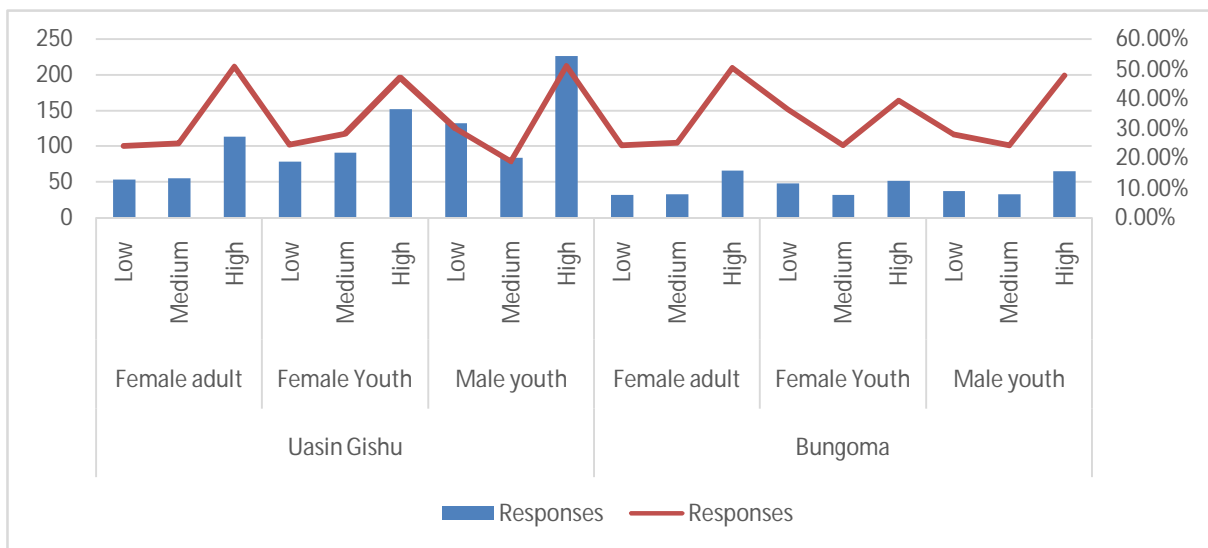
The results on corruption challenges (Figure 9) show that female adult respondents in Uasin Gishu considered the challenges to be medium, female youth respondents considered it low (44%), and male youth high (35%). In Bungoma county female adults rated corruption high (38%), female youth rated low (46%) and male youth rated high (40%).



Legal & political

The legal and political challenges included political trends and lack of policy for entrepreneurship. The results on the legal and political issues are presented in Figure 10. The results in Uasin Gishu and Bungoma counties show that all respondents rated legal and political challenges to be high.

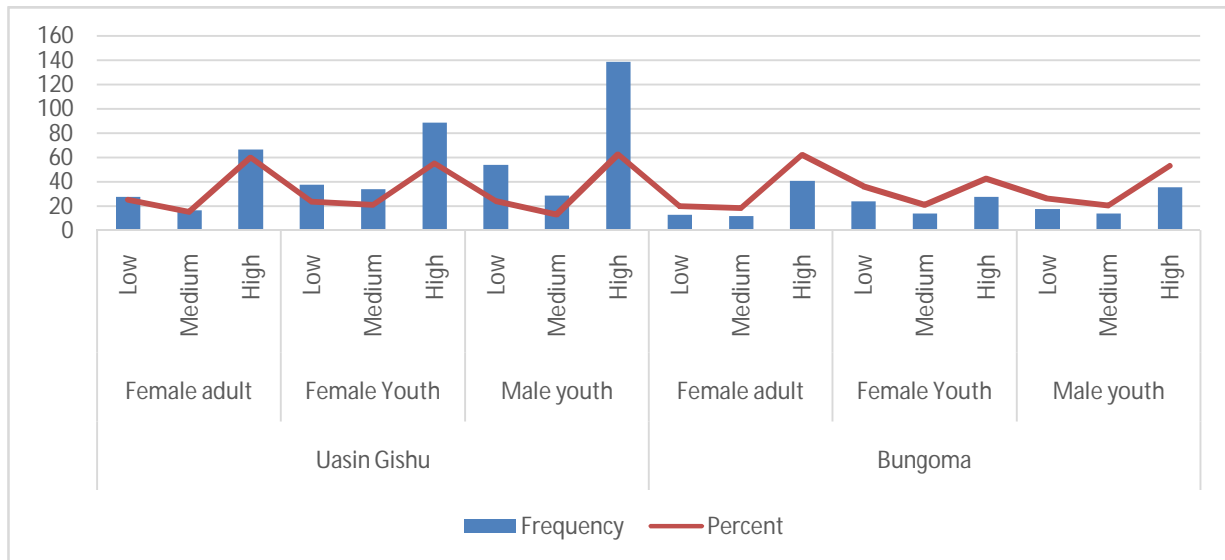
Figure 10: Legal & political challenges by severity



Start-up challenges

The results in Uasin Gishu and Bungoma counties show that the start-up challenges were high as presented in Figure 11.

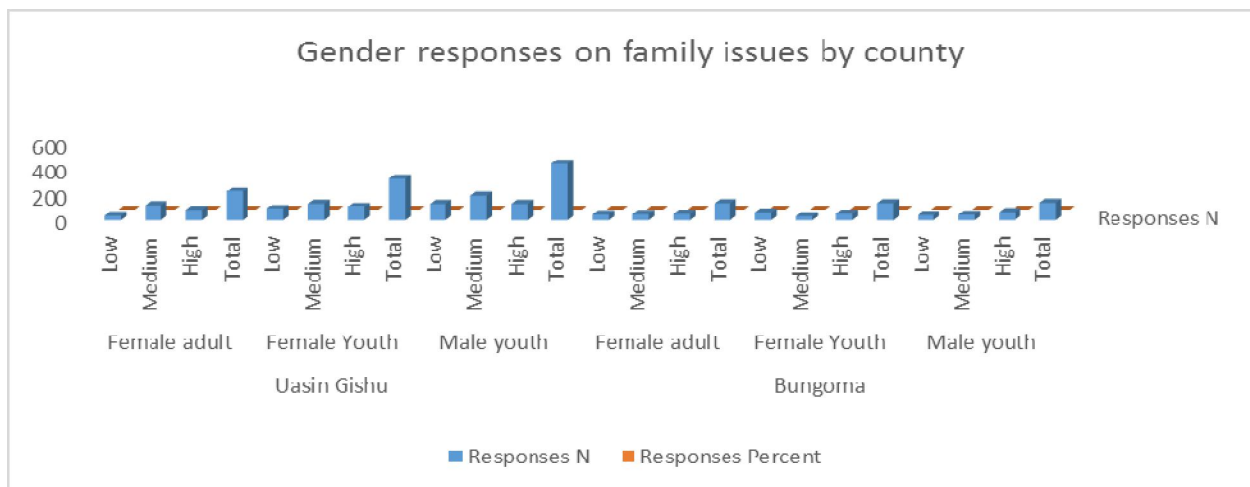
Figure 11: Start-Up challenges rating by frequency



Family issues

The components on family issues (Figure 12) included maintaining a healthy work/family balance and pressure to provide for other family members. In Uasin Gishu county female adult respondents rated family issues medium (52%), female youth rated medium (40%) and male youth also rated medium (42%). In Bungoma county female adult respondents rated family issues high (35%), female youth respondents low (42%) and male youth respondents high (43%).

Figure 12: Gender responses on family issues by percentage



Discussion

The findings from the study suggest that gender groups differential effects on entrepreneurship exists in western Kenya. The aspects include; marital status, work experience, educational levels and choice of start-up strategy in Uasin Gishu and Bungoma counties. Firm characteristics and gender differential effects were statistically significant. Gender groups' differential effects with entrepreneurial competencies were identified including; attitudinal, behavioural and managerial that showed statistical significant differences. Challenges facing female and youth entrepreneurs were also analysed including, corruption, legal and regulatory, entrepreneurial orientation and marketing issues. Respondents considered education to be of increasing importance in the entrepreneurial process.

This finding supports arguments of several authors on the role of education in entrepreneurship development (Bhardwaji, 2014; Katongole et al. (2014); Nassiuma (2011); Shah & Saurabh (2015).

However, the level of engagement in entrepreneurship by respondents holding higher education was minimal. This indeed may point to the value attached to entrepreneurship as a career. It may also be an indicator to attractive formal employment opportunities. On the aspect of marital status the majority of the respondents were married in the two counties. A finding which concurs with that of Katongole et al. (2014). The results on the gender suggests that entry of female in entrepreneurship career is at an increasing rate. Family support was found to be an important human capital input. The finding concurs with that of Imbaya (2012) on the need for family support. Adult Female respondents had a higher experience which may be attributed to the age factor. While youth respondents' in the two counties showed a progression, suggesting that they were starting up new enterprises at a much faster rate in comparison to adult Female. The changing value system, empowerment, culture, education and lack of employment opportunities may be some of the justification for this trend. Female adults had a higher entrepreneurial experience in Bungoma in comparison to Uasin Gishu while the youth have similar findings. As suggested by Sonja, Marija, & Vladislavljev, (2012). The youth (male and female) respondents generally ventured into entrepreneurship arising from either necessity or opportunity. While adult female respondents ventured into entrepreneurship owing to survival needs or opportunity.

H0₁: Gender of the respondent has no differential effect on the socio-economic profiles

An analysis of the gender differential effects on individual profiles across counties indicated a statistical significance. Implying that gender differentials existed. The null hypothesis was thus rejected and the alternate hypothesis was accepted. The post hoc results indicate that there were no female adult and youth differential effects on work experience in Uasin Gishu County as compared to Bungoma County where they were significant. Again of marital status Uasin Gishu County had no significant as compared to Bungoma which had a significant. On education both Uasin Gishu and Bungoma counties had statistical significance on female adult and youth differential effects. This finding implies that the individual profile was different and this may point to the entrepreneurial management strategies that could be adopted.

H0₂: Gender of the respondent has no differential effects on the nature of firm profile.

Choice of proprietorship mode by the majority of the respondents may be attributed to lack of entrepreneurial ideas, opportunity identification, support, resources and the low employment potential of formal enterprises. Sole proprietorship may not contribute effectively to sustainable livelihood improvements through employment value creation. Respondents chose the venture site in Uasin Gishu County by putting into consideration better conditions at the site. While in Bungoma considerations were based on family issues for all categories of respondents. Cultural aspects could have had a profound influence on the site selection in Bungoma County. It may also be construed to be a strategy of avoiding family conflicts in setting up the venture. It is worth noting that poor venture site selection may contribute to diminishing opportunities for the entrepreneurial venture. Most of the ventures were in the initial development stages and hence could have been founded on the need to enhance livelihoods. The findings compare favourably well with the increasing level of unemployment that could precipitate respondents to venture into enterprise creation as an alternative strategy for wealth creation and sustainable livelihoods. The findings suggest that most of the respondents lacked appropriate support and capital, notwithstanding the proliferation of micro financing institutions in Kenya.

H0₃: Gender of the respondent has no differential effect on the entrepreneurial profiles

The results show that gender groups' differential effects on attitudinal competences in Uasin Gishu and Bungoma counties were statistically significant. This implies that there were differences among groups owing to the gender groups. The post hoc tests and effect size were computed and the findings imply that the female adult and female youth differential effect on attitudinal competencies had statistical significant differences in Uasin Gishu and not Bungoma. While the results on female adult and male youth shows significant differences in Uasin Gishu and Bungoma. A comparison of female youth and male youth in the two study sites had no statistically significant differences. This suggests that female youth and male youth had the same attitudinal competence levels. On behavioural competence the study showed a statistically significant difference on almost all items. This implies here were differences on the basis of gender.

The gender groups' differential effects on behavioural competencies in Uasin Gishu were not statistically significant on female adult and female youth, female youth and male youth and female adult and male youth. While in Bungoma County the post hoc tests showed no significance except on female adult and male youth in Bungoma. On the managerial competence on overall the results show that there were gender groups' significant differential effects in Uasin Gishu and Bungoma counties. On the side of post hoc tests the gender groups' differential effects were noted on female adult and male youth in Bungoma County. Respondents faced challenges including resource based, entrepreneurial orientation, management related, corruption related, Legal & political and start-up and family related issues. Lack of adequate resources contributed to the formation of sole proprietorships. This might have been aggravated by lack of personal property rights, access to good market information, Infrastructure (Poor, Roads & Electricity), technological advancements and problem with bank's attitude towards female. A low level of entrepreneurial orientation was noted among the respondents, this is reflected in the sole proprietorship status of enterprises. Management challenges were high in all counties and to all respondents. The challenges comprised of the ability to delegate authority to staff, inadequate management experience, accurate record-keeping and hiring and keeping good and reliable staff. All respondents in the study counties perceived corruption to be high. This is a potential hindrance to venture operation. Legal and political challenges affected the operation of entrepreneurial ventures in the study sites. This finding concurs with that of Nassiuma (2011). Start-up challenges identified concurred with entrepreneurial orientation challenges, organisational modes, innovation levels, entrepreneurial competencies and managerial challenges and all this combined could reduce the potential for start-up. These results point to family issues taking a key role that can be attributed to female and youth being income poor, cultural issues, family responsibilities in terms of extended families and time poverty due to dual roles played. It thus implies that family issues may hinder venture operation. A collaboration of comparative results with the challenges faced by respondents suggests that the married respondents were most affected, yet at the same time were the majority. Challenges were more severe among Female adults and female youth in comparison to male youth.

Conclusion

In this study, we compared gender groups' differential effects on firm, individual profiles, entrepreneurial competencies and analysed challenges facing female and youth entrepreneurs in Uasin Gishu and Bungoma counties, Kenya. Based on the results from the survey of 698 female and youth entrepreneurs the study concludes that gender group differential effects on the various variable was statistically significant. The gender differential effect between female adult and youth category was statistically significant on most aspects while within the youth group was not. The gender differential effects on entrepreneurship indicators hold for sustainable livelihood improvement. Future studies can examine the relationship between firm, individual profiles and venture performance.

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References

- Alan, B. (2012), *Social research methods*. NY: Oxford University press.
- Arthur, S. J., Hisrich, R. D., & Cabrera, A. (2012), "The importance of education in the entrepreneurial process: A world view", *Journal of Small Business and Enterprise Development*, 19(3), 500-514.

- Bhardwaji, B. R. (2014), "Impact of education and training on performance of female entrepreneurs: A study in emerging market context", *Journal of entrepreneurship in emerging economies*, 6(1), 38-52. Doi: 10.1108/JEEE-05-2013-0014.
- Central Bureau of Statistics. International Centre for Economic Growth (ICEG) and K-Rep Holdings Ltd. (1999), *National Micro and Small Enterprise Baseline Survey*. Nairobi: Government Printer.
- Eijdenberg, E. L., Pass, J. L., & Masurel, E. (2015), "Entrepreneurial motivation and small business growth in Rwanda", *Journal of entrepreneurship in emerging economies*, 7(3), 212-240. Doi: 10.1108/JEEE-01-2015-004
- Equality for Growth. (2009), *Baseline survey of female entrepreneurs in Temeke, Kingdom and Liala Districts of Dar es Salaam*. Equality for Growth.
- Gakure, R. W. (1995), *Factors Affecting Job creating and low job creating firms owned by female*. University of Illinois, Urbana Champaign. Illinois:
- Gakure, W. R. (2003), *Factors affecting female growth prospects in Kenya*. Geneva: ILO.
- Haseena, V. A. (2014, April-June). Entrepreneurship in Kerala-A Preferential study on Kerala female. *International Journal of Business and Administration Research Review*, 2(5), 80.
- International Labour Organisation. (2008b), *Factors affecting Female Entrepreneurs in Micro and Small Enterprises in Kenya*. Switzerland: International Labour Organisation.
- International Labour Organization. (2008), *Female entrepreneurs in Kenya*. Switzerland: International Labour Organization.
- Kabir, M. S., Hou, X., Akther, J. W., & Wang, L. (2012, March 1). Impact of Small Entrepreneurship on sustainable Livelihood Assets of Rural Poor Female in Bangladesh. *College of Economics and Management*. Retrieved from <http://dx.doi.org/10.5539/ijef.V4n3p265>
- Kamaruddin, R., & Samsudin, S. (2014), "The sustainable livelihoods index: A tool to assess the ability and preparedness of the rural poor in receiving entrepreneurial project", *Journal of Social Economics Research*, 1((6)), 108-117.
- Katongole, C., Mulira, F., & Ahebwa, W. M. (2014), "Comparative Assessment of Rural Youth Entrepreneurs in Uganda and Kenya", *Global Journal of Management and Business Research*, 14(3).
- Kolk, A., & Van, T. R. (2010), "International business, corporate social responsibility and sustainable development", *International Business Review*, 19 No. (2), 119-125.
- Langowitz, N., & Minniti, M. (2007), "The entrepreneurial propensity of female", *Entrepreneurship: Theory & practice*, 31(3), 341-364.
- Lassithiotaki, A. (2011), "Rural female and entrepreneurship: A case study in Heraklion Creteprefecture", *Journal of Entrepreneurship Development*, 16(2), 269-284.
- Ministry of planning and national Development, Kenya National Economic and Social Council. (2007), *Kenya: Vision 2030*. Nairobi: Government of the republic of Kenya, Ministry of planning and National Development, and the National Economic and Social Council (NESC), Office of the President.
- Ministry of state for Planning, National and National Development and vision 2030. (2012), *Sessional paper No.....of 2012 on Kenya vision 2030*. Nairobi: Government press.
- Naituli, J. G. (2003), *Constraints on the growth of micro and small-scale female enterprises in*. PHD Thesis, Egerton University, Njoro.
- Nassiuma, B. (2011), *Street-based entrepreneurship: A comparative study of factors influencing street-based enterprise performance in Eldoret and Nakuru municipalities Kenya*. Germany: Lambert academia publishing.
- Njoroge, W. Z., Kariuki, W. J., & Ogollah, K. (2014), "Factors Leading to Disparity in Female Enterprise Loan Repayment in Selected Rural Constituencies in Kenya", *European Journal of Business Management*.
- OECD. (2012), *Empowering Female-led SMES: Economic Development and the new Arab world .Draft issue paper*. OECD.
- Ohutso, B. H. (2012), "The role of family support in performance of female-operated Micro enterprises in Eldoret, Kenya", *Journal of Emerging trends in economics and management sciences*, 3(5), 502-508.
- Omondi, P. (2013), *Youth Enterprise: Inhibiting Factors and Opportunities*. Nairobi.
- Sajilan, S., & Tehseen, S. (2015), "Cultural orientations, entrepreneurial competencies and SMEs Business Success: The contingent Roles of environmental Turbulence and Network competence", *Review of Integrative Business and Economics Research*, 4(2).
- Scoones, I. (1998.), *Sustainable Rural Livelihoods: A framework for analysis*. IDS, Working Paper 72, IDS, . Brighton: IDS.
- Shah, H., & Saurabh, P. (2015), "Female's Economic Empowerment", *Technology Innovation Management Review*, 5(8), 34-43.
- Shibanda, G., Jemymah, I., & Nassiuma, B. K. (2001), Training Needs Assessment among Smallholder Entrepreneurs. *Human Resource Development*, (pp. 38-1). Tulsa, Oklahoma.
- Sonja, A., Marija, B., & Vladislavljev, M. (2012), *the study on female's entrepreneurship in Serbia and gender analysis of government support measures for entrepreneurship*. Belgrade.
- Stevenson, L., & St-Onge, A. (2005), *Support for Growth-Oriented female respondents in Kenya*. Geneva: ILO.
- United Nations. (2014), *Entrepreneurship for development*. United Nations. (2015). *Female Entrepreneurs in Developing Nations: Growth and Replication Strategies and Their Impact on Poverty Alleviation*.
- World Bank website (2013), available at: <http://data.worldbank.org/country/kenya> (accessed 13 October 2014).