Culture and Entrepreneurial Self-Efficacy in Kenya

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Abstract

Entrepreneurial enterprises are suggested as a means of reducing poverty and increasing economic success for less developed countries. An Entrepreneurial Self-Efficacy (ESE) survey of 823 males between 18 and 35 years of age in Kenya found significant differences among ethnic communities in their perceived ability to successfully accomplish tasks previously associated with entrepreneurial success. The results indicated significant differences among various ethnic communities on total ESE, and on individual subscales of sourcing, planning, marshaling, implementation-people, and implementation-finance. The implications are that resources available to promote entrepreneurial training and education should be targeted to ethnic communities based on increasing entrepreneurial self-efficacy in areas of lower perceived abilities.

Keywords: entrepreneurial, self-efficacy, Kenya, entrepreneurship

1. Introduction

The role of entrepreneurship in promoting economic growth has been validated in numerous studies, with several of these studies showing a positive correlation between a country's increase in entrepreneurship rate and a concomitant increase in its economic growth rate (Bosma, Wennerkers, & Amoros, 2011; Van Praag & Versloot, 2007). Entrepreneurship leads to the establishment of small to medium size enterprises (SMEs) which leads to increased employment and reduced poverty rates. Governments continue with concerted efforts aimed at promoting entrepreneurship through various policy development initiatives. These policies have had mixed outcomes, with entrepreneurship rates increasing in some countries, while largely remaining unchanged in others (Nafukho & Muyia, 2010). In a desire to further develop the entrepreneurship theory, researchers have recently focused on exploring the factors that might hinder or motivate individuals to venture into entrepreneurship. One factor that has attracted much attention is the self-efficacy shown by an individual towards the establishment of an enterprise.

Self-efficacy is the level of confidence shown by an individual towards the undertaking of a task (Ajzen, 1991). This construct can either be generalized into a variety of tasks or can be tailored to specific tasks. Self-efficacy shown by an individual towards entrepreneurship is known as entrepreneurial self-efficacy (McGee, Peterson, Mueller, & Sequeira, 2009). Past studies have shown that individuals with high scores on this sub skill have higher intentions of establishing enterprises, exert more effort into the enterprise formation process and succeed at a higher rate than those that score low. Several measurement tools for this construct have been developed (Chen, Greene, & Crick, 1998; DeNoble, Ehrlich, & Singh, 2007; McGee et al., 2009).

Bandura (1986) conceptualized the self-efficacy construct in his social cognitive theory (SCT) and surmised that there is a reciprocal relationship between one's behavioral, cognitive, and environmental consequences so that perception of positive consequences reinforces similar behavior in the future while perceived negative consequences discourages similar behavior. Bandura's (1986) SCT theory on self-efficacy is similar to Ajzen's (1991) theory of planned behavior (TPB). The theory of planned behavior notes that the likelihood of an individual undertaking a certain task is contingent on his/her perception that he/she has control over the required resources to successfully undertake the task. Individuals with high perceived control over resources are more likely to undertake the task, exert more effort and succeed at a higher rate than are individuals with low perceived control (Ajzen, 1991). This construct can either be generalized into a variety of tasks or can be tailored to specific tasks. Self-efficacy shown by an individual towards entrepreneurship is known as entrepreneurial self-efficacy (ESE). Having validated the significant role that one's self-efficacy towards entrepreneurship plays in encouraging the

inception of an enterprise and persisting during the process, some researchers have begun to question whether ESE is contingent on culture (McGee et al., 2009).

Culture has been conceptualized variedly in past studies, with some studies viewing culture from a societal stance (Hofstede, 1981; House, Hanges, Javidan, Dorfman, & Gupta, 2004); and others have viewed it from an organizational stance (House, et al., 2004). Still, other researchers have alluded to the existence of subcultures within societies or organizations and conceptualized culture based on the racial (Gibson, 2008) or ethnic roots of participants (Mungai & Ogot, 2012). Consequently, various tools for measuring this construct have been developed with Hofstede's (1984) scale being one of the most widely used. This scale classifies societal cultures into four dimensions consisting of power distance, uncertainty avoidance, individualism versus collectivism, and masculinity versus femininity. Further research led to the addition of three more dimensions: long versus short-term orientation, indulgence versus restraint and monumentalism versus self-restraint (Hofstede, Hofstede, Minkov, & Vinken, 2008).

The purpose of this study is to explore if there are differences in entrepreneurial self-efficacy among young males in eleven ethnic communities in Kenya. McGee et al. (2009) called for examination of the relationship between these two constructs while Mungai & Ogot (2012) pointed to the scarcity of entrepreneurial studies from an African context in the extant literature, noting that studies that had been undertaken from a Western paradigm could not be generalized to Africa because of differences in the stages of cultural evolution. Ethnicity in African countries remains the cultural perspective by which members identify themselves; in contrast, Western sub-cultures have evolved to reflect the national cultures of the specific countries (Mungai & Ogot, 2012).

Understanding the link between culture and entrepreneurial self-efficacy will be of significant interest to schools, micro-credit institutions, and corporations. An individual's self-efficacy score can be improved through training, mentorship, or motivation. Schools tasked with training future entrepreneurs will benefit from this study by gaining insights into the role that culture plays in motivating individuals towards entrepreneurship. This insight can be used in establishing custom curriculums based on an ethnic community's scores. Outcomes of this study will also aid a micro-credit institution's determination of the level of training that various ethnic communities need before extending credit to entrepreneurs. Within a corporate setting, this study can inform corporations keen on expanding to ethnically diverse countries of the level of training employees may need in order to foster corporate entrepreneurship.

1.1 Research Questions

1) Are there differences in total ESE among the 11ethnic communities in Kenya?

2) Are there differences in ESE subscales among the 11ethnic communities in Kenya?

2. Literature Review

Wennberg, Pathak, and Autio (2013) explored whether culture moderates the positive relationship between entrepreneurial entry and self-efficacy. Using House et al.'s (2004) Performance Orientation and Institutional Collectivism scales to measure culture, Wennberg et al. (2013) concluded that the relationship between entrepreneurial entry and self-efficacy is moderated by these two constructs. Kumar and Uzkurt (2011) found that self-efficacy and consumer innovativeness are positively correlated and that this correlation is moderated by Hofstede's (1984) individualism dimension.

Urban (2006) examined differences in self-efficacy among three sub-cultures in South Africa: Indians, Blacks, and Caucasians. He argued that sub-cultures have different motivational factors and hypothesized that levels of intentions towards establishing enterprises may vary for various sub-cultures. Using a modified 15-item scale developed using items from the generalized efficacy scale and Chen et al.'s (1998) scale, Urban (2006) concluded that there were statistically significant differences between Indians and Blacks on ESE innovation. He also found differences in ESE finance between Indians and Caucasians as well as differences in general self-efficacy between Indians and Caucasians.

Jung, Ehrlich, Alex, and DeNoble (2001) investigated ESE differences between a U.S. sample and a Korean sample, two societies that score differently on Hofstede's (1997) individualism and uncertainty avoidance dimensions. The individualism dimension measures the strength of the social bonds among societal members and societies scoring high on this dimension are described as individualistic while societies scoring low are described as collectivist. The uncertainty avoidance dimension describes the extent to which societal members are able to tolerate situations that are novel, uncertain, unpredictable, or unstructured and societies scoring high on this dimension are considered to prefer predictable or stable situations. The U.S. scores higher on the individualism dimension and lower on the uncertainty avoidance dimension compared to Korea. Analysis of sample differences

between the two countries found differences on ESE between the two samples (Jung et al., 2001).

This study seeks to expand the literature on the relationship between culture and ESE by examining differences in ESE between 11 Kenyan ethnic communities. The next section presents the methodology to be used in exploring the differences.

3. Method

A survey will be used to explore differences in entrepreneurial intentions among males age 18 to 35 from 11 ethnic communities in Kenya.

3.1 Instrumentation

The Entrepreneurial Self-Efficacy (ESE) scale, a 19-item survey instrument, is used to survey participants from the 11communities (McGee et al., 2009). The independent variable is ethnicity while the dependent variables are total ESE score, as well as, the five subscale scores. The subscales are searching (brainstorming, need identification, and product/service design), planning (estimating demand, pricing, funding, and marketing), marshaling (visioning, networking, business planning), implementation-people (supervising, recruiting, delegating, problem-solving, motivating, and training), and implementation-finance (maintaining finances, managing assets, interpreting financials). Items are rated by participants in terms of their confidence in their ability to complete the activities described by the subscales. Ratings are scored from 1 = very little confidence to 5 = complete confidence. Higher scores indicate the participants' confidence in accomplishing the items shown to be related to entrepreneur success (McGee et al., 2009).

3.2 Sample

This study builds on Ketter (2014) by expanding the number of sub-cultures from six to 11 ethnicities in Kenya. Participants were randomly selected from Kenya's 11 largest ethnic communities: Kalenjin, Kamba, Kikuyu, Kisii, Luhya, Luo, Masai, Meru, Mijikenda, Somali, and Turkana. Participants were sampled from 11 ethnically homogeneous rural counties in Kenya. Participants were limited to males, aged 18-34 years old.

Cluster sampling was used to identify counties with the largest concentration of targeted ethnic communities and research assistants were instructed to visit and obtain participants from the largest town in that particular county. For example, Kakamega County is predominantly inhabited by members of the Luhya ethnic community. The largest town in this county is Kakamega and so participants from the Luhya community were sampled from this city. Table 1 presents the percentage of the Kenyan population by ethnicity, sample size, percentage of sample by ethnicity, and representative county for sampling each ethnicity. Sample sizes were based on population percentages for each ethnicity. G*Power 3 was used to estimate the sample size with .80 power and a medium effect (Faul, Erdfelder, Lang, & Buchner, 2007). The total sample was 823.

Table 1. Ethnic population distribution, sample size, and source

Ethnicity	Percent of Population	Sample	Percent of Sample	Sample Town, County
Kalenjin	14.2	117	14.2	Eldoret, Uasin Gishu County
Kamba	11.2	92	11.2	Machakos, Machakos county
Kikuyu	19.0	156	19.0	Nyeri, Nyeri County
Kisii	6.3	52	6.3	Kisii, Kisii County
Luhya	15.3	126	15.3	Kakamega, Kakamega County
Luo	11.6	96	11.7	Siaya, Siaya County
Masai	2.4	21	2.6	Narok, Narok County
Meru	4.8	38	4.6	Meru, Meru County
Mijikenda	5.6	46	5.6	Kilifi, Kilifi County
Somali	6.8	56	6.8	Garissa, Garissa County
Turkana	2.8	23	2.8	Lodwar, Turkana County

3.3 Procedures

Research assistants in the largest city in each of the 11countries randomly selected participants from the public who were asked to participate in the research study. If they agreed, the participants were given a consent form and

the ESE survey form to complete.

3.4 Alpha Level

The alpha level for rejection of the null hypothesis was set at .001. A Bonferroni adjustment was used to control for multiple post-hoc analyses in order to keep the post-hoc alpha level at .001 (Shaffer, 1995).

4. Results

4.1 General Results

A Shapiro-Wilk's test (p > .05) (Razali & Wah, 2011; Shapiro & Wilk, 1965) and a visual inspection of the histograms, normal Q-Q plots, and box plots showed that the exam scores were approximately normally distributed for each ethnic group. The studentized range was used to assess for significant differences in kurtosis on each independent variable among the ethnicities (p > .001) indicating that there was not a violation of normality due to kurtosis (Tracy & Doane, 2005). A Levene's test indicated a lack of equality of variances in the samples (homogeneity of variance) (p = .000) (Tabachnick & Fidell, 2007) as did a Brown-Forsythe test for equal group variances (p=.000) (Brown & Forsythe, 1974). While Analysis of Variance (ANOVA) is generally considered to be robust to violations of normality, it is not robust in terms of violations of the assumption of homogeneity of variance (Box, 1954; Ramsey & Ramsey, 2009). Wilcox, Charlin, and Thompson (1986) demonstrated that the Brown-Forsythe and Welch adjustments to ANOVA are not applicable to control for violations of the assumption of homogeneity of variance when sample sizes are not equal, which is the case in this study. Therefore, a nonparametric test of hypothesis would be used for the analyses. Table 2 presents the nonparametric Levene test of homogeneity of variances. It indicates that the variances differ significantly among ethnicities on the total ESE score, and on all ESE subscales (Nordstokke & Zumbo, 2010). Mood's median test was selected for the analyses of the hypotheses as it is more robust in terms of heterogeneity of variance than the Kruskal-Wallis test.

Table 2. Nonparametric Levene's test of equality of error variance for ESE scores [a]

Dependent Variable	F	df1	df2	Sig.
Total ESE	6.922	10	812	.000
ESE Searching	7.172	10	812	.000
ESE Planning	4.177	10	812	.000
ESE Marshaling	4.872	10	812	.000
ESE Implementation-People	6.963	10	812	.000
ESE Implementation-Financial	7.689	10	812	.000

[a] Tests the null hypothesis that error variance for the median of the dependent variable is equal across all groups.

4.2 Test of Hypotheses

An initial consideration was whether age and years of post-secondary education could act as covariates to influence the effect of ethnicity on ESE scores. An analysis of covariance was conducted with ethnicity as the independent variable, age and years of post-secondary education as covariates and the total ESE score as the dependent variable. The analysis indicated that age, years of post-secondary education, and all interaction terms were not significant at p=.01. Thus age and years of post-secondary education were not considered in any further analyses.

4.2.1 Hypothesis 1

Hypothesis 1 is whether there are significant differences in Total ESE scores among the 11 ethnic communities in Kenya. Table 3 presents the descriptive statistics for total ESE score for each ethnicity. Table 4 presents a count of the number of subjects scoring above and at, or below, the Total ESE group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and total ESE scores. The relation between these variables was significant, X^2 (10, N = 823) = 143.336, p = .000, Cramer's V = .417. Cramer's V, a measure of effect size, indicates that ethnicity has a large effect on total ESE scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction to maintain the pair-wise error rate. Table 5 presents the pairs of ethnic groups that showed significant differences (p = .000) on the total ESE score. Cramer's V ranged from .361 to .634, indicating that the difference in ethnicity between the pairs had a

medium to large effect on total ESE scores.

Table 3. Descriptive statistics for total ESE score by ethnicity

| Ethnicity | N | Min | Q1 | Median | Q3 | Max | IRQ | Median 99.9% CI | |
								Lower	Upper
Kalenjin	117	1.37	2.92	3.32	3.58	4.89	0.66	3.14	3.47
Kamba	92	1.89	2.80	3.21	3.63	4.63	0.83	3.00	3.47
Kikuyu	156	2.37	3.54	3.89	4.32	4.84	0.78	3.74	4.16
Kisii	52	2.47	3.42	3.74	4.12	5.00	0.70	3.47	3.95
Luhya	126	2.47	2.89	3.05	3.33	4.63	0.44	3.00	3.16
Luo	96	1.58	2.85	3.21	3.68	4.68	0.83	3.03	3.53
Masaai	21	1.74	2.16	2.68	3.48	3.84	1.32	2.08	3.68
Meru	38	2.58	3.08	3.45	3.82	5.00	0.73	3.11	3.79
Mijikenda	46	1.42	2.84	3.21	3.74	4.58	0.90	2.84	3.74
Somali	56	2.37	2.63	3.22	4.23	5.00	1.60	2.63	3.84
Turkana	23	1.84	2.21	2.58	2.89	3.58	0.68	2.11	3.00
Total	823	1.37	2.95	3.32	3.84	5.00	0.89	3.21	3.47

Table 4. Total ESE by ethnicity crosstabulation

| Count | Ethnicity | | | | | | | | | | | Total |
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	57	36	129	40	31	42	5	22	22	25	2	411
== Median	60	56	27	12	95	54	16	16	24	31	21	412
Total	117	92	156	52	126	96	21	38	46	56	23	823

Table 5. Total ESE pair-wise post hoc tests

Ethnicity		Median	$\chi^{2\ a}$	df	Asymptotic Significance [b]	Cramer's V
Kikuyu	-	3.89				
	Kalenjin	3.32	33.995	1	0.000	0.361
	Somali	3.22	28.135	1	0.000	0.376
	Kamba	3.21	47.382	1	0.000	0.446
	Luo	3.21	39.554	1	0.000	0.405
	Luhya	3.05	93.468	1	0.000	0.583
	Masaai	2.68	31.763	1	0.000	0.444
	Turkana	2.58	52.219	1	0.000	0.559
Kisii	-	3.74				
	Luhya	3.05	39.869	1	0.000	0.486
	Turkana	2.58	27.421	1	0.000	0.634

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

4.2.2 Hypothesis 2

Hypothesis 2 is whether there are significant differences on the ESE subscale scores (searching, planning, marshaling, implementation-people, and implementation-finance) among the 11 ethnic communities in Kenya.

4.2.2.1 ESE Searching

Table 6 presents the descriptive statistics for the ESE searching score for each ethnicity. Table 7 presents a count of the number of subjects scoring above and at, or below, the ESE searching group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and ESE searching scores. The relation between these variables was significant, X^2 (10, $N = 823$) = 97.592, $p = .000$, Cramer's V = .344, indicating that ethnicity has a fairly large effect on ESE searching scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction. Table 8 presents the pairs of ethnic groups that showed significant differences ($p = .000$) on the ESE searching score. Cramer's V ranged from .353 to .544, indicating that the difference in ethnicity between the pairs had a medium to large effect on ESE searching scores.

Table 6. Descriptive statistics for ESE searching score by ethnicity

Ethnicity	N	Min	Q1	Median	Q3	Max	*IRQ*	Median 99.9% CI	
								Lower	Upper
Kalenjin	117	1.00	2.33	2.67	3.33	5.00	1.00	2.67	3.33
Kamba	92	1.00	2.00	2.33	2.67	4.33	0.67	2.00	2.67
Kikuyu	156	1.33	2.67	3.33	3.67	5.00	1.00	3.00	3.67
Kisii	52	1.67	2.42	3.33	3.92	5.00	1.50	2.67	3.67
Luhya	126	2.00	2.67	3.00	3.67	5.00	1.00	3.00	3.33
Luo	96	1.33	2.67	3.00	3.67	5.00	1.00	3.00	3.33
Masaai	21	1.67	2.00	2.33	3.00	4.00	1.00	2.00	3.33
Meru	38	1.33	2.67	3.33	3.67	5.00	1.00	2.67	3.67
Mijikenda	46	1.50	2.75	3.25	4.00	4.75	1.25	2.75	3.75
Somali	56	1.00	2.67	3.33	4.00	5.00	1.33	2.67	3.67
Turkana	23	1.00	1.67	2.00	2.33	3.00	0.66	1.67	2.33
Total	823	1.00	2.67	3.00	3.67	5.00	1.00	3.00	3.00

Table 7. ESE searching by ethnicity crosstabulation

Count	Ethnicity											Total
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	45	9	93	29	53	47	4	20	28	31	0	359
== Median	72	83	63	23	73	49	17	18	18	25	23	464
Total	117	92	156	52	126	96	21	38	46	56	23	823

Table 8. ESE searching post hoc pair-wise tests

Ethnicity		Median	χ^2 [a]	*df*	Asymptotic Significance [b]	Cramer's *V*
Kamba	-	2.33				
	Kikuyu	3.33	57.313	1	0.000	0.489
	Kisii	3.33	33.840	1	0.000	0.501
	Meru	3.33	26.070	1	0.000	0.468
	Somali	3.33	34.386	1	0.000	0.498
	Mijikenda	3.25	38.225	1	0.000	0.544
	Luhya	3.00	25.663	1	0.000	0.353
	Luo	3.00	32.626	1	0.000	0.428
Kikuyu	-	2.67				
	Turkana	1.67	26.201	1	0.000	0.399

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

4.2.2.2 ESE Planning

Table 9 presents the descriptive statistics for the ESE planning score for each ethnicity. Table 10 presents a count of the number of subjects scoring above and at, or below, the ESE planning group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and ESE planning scores. The relation between these variables was significant, X^2 (10, N = 823) = 89.102, p = .000, Cramer's V = .331, indicating that ethnicity has a fairly large effect on ESE searching scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction. Table 11 presents the pairs of ethnic groups that showed significant differences (p = .000) on the ESE planning score. Cramer's V ranged from .461 to .490, indicating that the difference in ethnicity between the pairs had a fairly large effect on ESE planning scores.

Table 9. Descriptive statistics for ESE planning score by ethnicity

Ethnicity	N	Min	Q1	Median	Q3	Max	IRQ	Median 99.9% CI	
								Lower	Upper
Kalenjin	117	1.50	2.75	3.25	3.75	5.00	1.00	3.00	3.50
Kamba	92	1.25	2.75	3.25	3.75	4.50	1.00	3.00	3.50
Kikuyu	156	1.75	3.25	3.75	4.25	5.00	1.00	3.50	4.00
Kisii	52	1.75	3.25	3.75	4.00	5.00	0.75	3.25	4.00
Luhya	126	2.00	2.75	3.00	3.25	4.50	0.50	2.75	3.25
Luo	96	1.75	2.75	3.25	3.75	4.75	1.00	3.00	3.50
Masaai	21	2.00	2.13	2.75	3.38	3.75	1.25	2.00	3.50
Meru	38	2.50	3.00	3.50	3.75	5.00	0.75	3.00	3.75
Mijikenda	46	1.67	2.67	3.33	4.00	5.00	1.33	2.67	4.00
Somali	56	2.25	2.75	3.00	4.00	5.00	1.25	2.75	4.00
Turkana	23	1.50	2.25	2.50	3.25	4.00	1.00	2.00	3.25
Total	823	1.25	2.75	3.25	3.75	5.00	1.00	3.25	3.50

Table 10. ESE planning by ethnicity crosstabulation

Count	Ethnicity											Total
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	50	36	103	37	25	47	5	20	19	24	4	370
== Median	67	56	53	15	101	49	16	18	17	32	19	443
Total	117	92	156	52	126	96	21	38	36	56	23	813

Table 11. ESE planning post hoc pair-wise tests

Ethnicity		Median	$\chi^{2\,a}$	df	Asymptotic Significance [b]	Cramer's V
Luhya	-	3.00				
	Kikuyu	3.75	58.131	1	0.000	0.461
	Kisii	3.75	40.466	1	0.000	0.490

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

4.2.2.3 ESE Marshaling

Table 12 presents the descriptive statistics for the ESE marshaling score for each ethnicity. Table 13 presents a

count of the number of subjects scoring above and at, or below, the ESE marshaling group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and ESE marshaling scores. The relation between these variables was significant, X^2 (10, N = 823) = 97.549, p = .000, Cramer's V = .344, indicating that ethnicity has a fairly large effect on ESE marshaling scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction. Table 14 presents the pairs of ethnic groups that showed significant differences (p = .000) on the ESE marshaling score. Cramer's V ranged from .322 to .458, indicating that the difference in ethnicity between the pairs had a fairly large effect on ESE marshaling scores.

Table 12. Descriptive statistics for ESE marshaling score by ethnicity

Ethnicity	N	Min	Q1	Median	Q3	Max	IRQ	Median 99.9% CI	
								Lower	Upper
Kalenjin	117	1.00	3.00	3.33	3.67	5.00	0.67	3.17	3.67
Kamba	92	1.00	2.67	3.33	3.67	5.00	1.00	3.00	3.67
Kikuyu	156	1.67	3.33	4.00	4.33	5.00	1.00	3.67	4.17
Kisii	52	2.00	3.00	3.85	4.33	5.00	1.33	3.33	4.33
Luhya	126	2.00	3.00	3.33	3.33	5.00	0.33	3.00	3.33
Luo	96	1.33	3.00	3.33	3.67	4.67	0.67	3.00	3.67
Masaai	21	1.67	2.33	2.67	3.33	4.67	1.00	2.00	3.50
Meru	38	2.33	3.00	3.33	3.67	5.00	0.67	3.00	3.67
Mijikenda	46	1.33	2.67	3.33	3.67	5.00	1.00	2.84	3.67
Somali	56	1.00	2.67	3.00	4.00	5.00	1.33	2.67	3.67
Turkana	23	1.33	2.33	2.67	3.33	3.67	1.00	2.00	3.33
Total	823	1.00	3.00	3.33	4.00	5.00	1.00	3.33	3.33

Table 13. ESE Marshaling by ethnicity crosstabulation

Count					Ethnicity							Total
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	44	38	109	34	30	33	3	13	17	24	3	348
== Median	73	54	47	18	96	63	18	25	29	32	20	475
Total	117	92	156	52	126	96	21	38	46	56	23	823

Table 14. ESE marshaling post hoc pair-wise tests

Ethnicity		Median	χ^2 [a]	df	Asymptotic Significance [b]	Cramer's V
Kikuyu	-	4.00				
	Kalenjin	3.33	26.958	1	0.000	0.322
	Luhya	3.33	57.339	1	0.000	0.458
	Luo	3.33	29.017	1	0.000	0.348
	Masaai	2.67	22.276	1	0.000	0.373
	Turkana	2.67	26.267	1	0.000	0.393
Kisii	-	3.85				
	Luhya	3.33	25.854	1	0.000	0.394

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

4.2.2.4 ESE Implementation-People

Table 15 presents the descriptive statistics for ESE implementation-people score for each ethnicity. Table 16 presents a count of the number of subjects scoring above and at, or below, the ESE implementation-people group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and ESE implementation-people scores. The relation between these variables was significant, X^2 (10, $N = 823$) = 171.027, $p = .000$, Cramer's $V = .456$, indicating that ethnicity has a very large effect on ESE implementation-people scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction. Table 17 presents the pairs of ethnic groups that showed significant differences ($p = .000$) on the ESE implementation-people score. Cramer's V ranged from .390 to .648, indicating that the difference in ethnicity between the pairs had a very large effect on ESE implementation-people scores.

Table 15. Descriptive statistics for ESE implementation-people score by ethnicity

Ethnicity	N	Min	Q1	Median	Q3	Max	IRQ	Median 99.9% CI	
								Lower	Upper
Kalenjin	117	1.50	3.00	3.33	3.83	5.00	0.83	3.17	3.50
Kamba	92	1.83	2.71	3.33	3.79	5.00	1.08	3.00	3.50
Kikuyu	156	2.17	3.67	4.17	4.50	5.00	0.83	4.00	4.33
Kisii	52	2.33	3.50	3.92	4.33	5.00	0.83	3.50	4.33
Luhya	126	2.33	2.83	3.17	3.33	4.83	0.50	3.00	3.17
Luo	96	1.67	2.83	3.17	3.83	5.00	1.00	3.00	3.50
Masaai	21	1.67	2.17	3.00	3.34	4.33	1.17	2.00	3.83
Meru	38	2.50	3.17	3.42	3.87	5.00	0.70	3.17	3.83
Mijikenda	46	1.50	2.83	3.33	3.71	4.50	0.88	2.83	3.67
Somali	56	2.17	2.54	3.25	4.46	5.00	1.92	2.67	4.33
Turkana	23	1.33	2.00	2.50	2.83	4.33	0.83	2.00	3.00
Total	823	1.33	3.00	3.33	4.00	5.00	1.00	3.17	3.50

Table 16. ESE implementation-people by ethnicity crosstabulation

Count	Ethnicity											Total
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	53	37	133	41	26	36	5	19	21	24	2	397
== Median	64	55	23	11	100	60	16	19	25	32	21	426
Total	117	92	156	52	126	96	21	38	46	56	23	823

Table 17. ESE implementation-people post hoc pair-wise tests

	Ethnicity	Median	χ^2 [a]	df	Asymptotic Significance [b]	Cramer's V
Kikuyu	-	4.17				
	Kalenjin	3.33	47.339	1	0.000	0.424
	Kamba	3.33	52.381	1	0.000	0.469
	Mijikenda	3.33	28.610	1	0.000	0.390
	Somali	3.25	36.382	1	0.000	0.426
	Luhya	3.17	115.744	1	0.000	0.648
	Luo	3.17	59.218	1	0.000	0.493
	Masaai	3.00	37.181	1	0.000	0.479
	Turkana	2.50	59.314	1	0.000	0.595
Kisii	-	3.92				
	Luhya	3.17	50.688	1	0.000	0.546

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

4.2.2.5 ESE Implementation-Financial

Table 18 presents the descriptive statistics for the ESE implementation-financial score for each ethnicity. Table 19 presents a count of the number of subjects scoring above and at, or below, the ESE implementation-financial group median for each ethnicity. A Mood's median test, with a continuity correction, was performed to examine the relationship between ethnicity and ESE implementation-people scores. The relation between these variables was significant, X^2 (10, $N = 823$) = 144.829, $p = .000$, Cramer's $V = .419$, indicating that ethnicity has a large effect on ESE implementation-financial scores. Post hoc analyses were performed using Mood's median test, with the Bonferroni correction. Table 20 presents the pairs of ethnic groups that showed significant differences ($p = .000$) on the ESE implementation-financial score. Cramer's V ranged from .404 to .589, indicating that the difference in ethnicity between the pairs had a very large effect on ESE implementation-financial scores.

Table 18. Descriptive statistics for ESE implementation-financial score by ethnicity

Ethnicity	N	Min	Q1	Median	Q3	Max	*IRQ*	Median 99.9% CI	
								Lower	Upper
Kalenjin	117	1.00	3.00	3.67	4.00	5.00	1.00	3.33	4.00
Kamba	92	2.00	3.67	4.00	5.00	5.00	1.33	3.67	4.33
Kikuyu	156	2.33	4.00	4.67	5.00	5.00	1.00	4.33	4.67
Kisii	52	1.00	3.33	4.00	4.67	5.00	1.34	3.33	4.67
Luhya	126	2.00	3.00	3.00	3.67	5.00	0.67	3.00	3.33
Luo	96	1.00	3.00	3.00	4.00	5.00	1.00	3.00	3.67
Masaai	21	1.33	2.00	2.67	3.50	4.67	1.50	1.67	3.67
Meru	38	2.67	3.00	3.67	4.33	5.00	1.33	3.00	4.33
Mijikenda	46	1.00	3.00	3.84	4.33	5.00	1.33	3.00	4.33
Somali	56	1.00	2.33	3.00	4.50	5.00	2.17	2.67	4.00
Turkana	23	1.67	2.67	3.33	4.00	5.00	1.33	2.67	4.00
Total	823	1.00	3.00	3.67	4.33	5.00	1.33	3.67	4.00

Table 19. ESE implementation-financial by ethnicity crosstabulation

Count	Ethnicity											Total
	Kalenjin	Kamba	Kikuyu	Kisii	Luhya	Luo	Masaai	Meru	Mijikenda	Somali	Turkana	
> Median	45	56	122	33	24	28	3	16	23	18	8	376
== Median	72	36	34	19	102	68	18	22	23	38	15	447
Total	117	92	156	52	126	96	21	38	46	56	23	823

Table 20. ESE implementation-finance post hoc pair-wise tests

Ethnicity		Median	χ^2 [a]	*df*	Asymptotic Significance [b]	Cramer's *V*
Kikuyu	-	4.67				
	Kalenjin	3.67	42.804	1	0.000	0.404
	Luhya	3.00	95.340	1	0.000	0.589
	Luo	3.00	57.299	1	0.000	0.485
	Masaai	2.67	33.432	1	0.000	0.454
	Somali	3.00	36.957	1	0.000	0.429
Luhya	-	3.00				
	Kamba	4.00	38.256	1	0.000	0.429
	Kisii	4.00	31.347	1	0.000	0.433

[a] Pearson chi-square with continuity correction.

[b] Significant at the 0.001 level with Bonferroni correction.

5. Discussion

Studies continue to validate the positive relationship between entrepreneurship rates and economic growth rates and promotion of entrepreneurship remains one of the tools considered to be effective in alleviating poverty (Jooste, 2014). Governments, researchers, and non-governmental organizations continue to devise policies and strategies that potentially stimulate entrepreneurship rate with these strategies and polices having had mixed results in various societies. This has led researchers to question whether intentions towards entrepreneurship are contingent on culture (McGee et al., 2009). This study aims to contribute to this debate by examining differences in entrepreneurial intentions among various ethnic communities. Differences in ESE were examined both at the total ESE score level as well as at the subscale score level.

The first research question explored whether there were differences in total ESE among male youths in the 11 Kenyan ethnic communities. Descriptive analysis of the data revealed there were differences among the ethnic communities in total ESE with the Kikuyu participants having the highest median score of 3.89, followed by the Kisii with a median score of 3.74, while the Turkana participants had the lowest score of 2.58 on a 5-point Likert-like scale. Maasai participants had a low median score of 2.89 as well.

Mood's median test analysis revealed statistically significant differences in total ESE among the communities. Post hoc analysis portrayed that there were statistically significant differences between the Kikuyu participants and the participants from seven other communities: Kalenjin, Somali, Kamba, Luo, Luhya, Masaai, and Turkana. Differences were also observed between the Kisii and participants from two other communities: the Luhya and the Turkana.

The second research question enquired if there were differences in ESE subscale scores for participants from the 11 ethnic communities. A review of descriptive statistics revealed that four communities, Kikuyu, Kisii, Somali and Meru had the highest similar median score of 3.33 on ESE searching with the Turkana having the lowest score of 2.00 while the Maasai and the Kamba had similar low median scores of 2.33. On ESE planning, the Kikuyu and Kisii had the highest median scores of 3.75 while the Turkana and the Maasai had lowest median scores of 2.50 and 2.75 respectively. The Kikuyu similarly had the highest median score on ESE marshaling of 4.00 followed by the Kisii with a score of 3.85. Two communities, the Maasai and the Turkana, had similar lowest scores of 2.67. The same consistency was observed on ESE implementation-people with the Kikiyu having the highest score of 4.17, followed by the Kisii with a score of 3.92. Only the Turkana had a median score less than 3 with its 2.50 score. On ESE implementation-finance, the Kikuyu had the highest score at 4.67, while the Kamba and the Kisii had similar scores of 4.00. Three communities, the Luhya, Luo, and Somali, had the lowest score of 3.00.

Mood's median test analyses were also used to examine whether observed differences among the communities were significant in the five ESE subscales and outcomes revealed statistically significant differences among the groups in each of the five subscales. Post hoc analysis on the ESE searching sub-scale showed that differences exist between the Kamba and seven other communities: the Kikuyu, Kisii, Meru, Somali, Mijikenda, Luhya, and Luo, and also between the Kikuyu and the Turkana. On ESE planning, statistically significant differences were observed between the Luhya and two communities, the Kikuyu and Kisii, while differences were observed between the Kikuyu and five communities: the Kalenjin, Luhya, Luo, Maasai and Turkana on ESE marshaling as well as between the Kisii and the Luhya. Post hoc analysis on ESE implementation-people revealed differences between the Kikuyu and eight communities: the Kalenjin, Kamba, Mijikenda, Somali, Luhya, Luo, Masaai, and Turkana, and also between the Kisii and the Luhya. Finally, post hoc analysis on ESE implementation-finance exposed differences between the Kikuyu and five communities: the Kalenjin, Luhya, Luo, Maasai, and Somali, and also between the Luhya and two communities: the Kamba and Kisii.

Some of the outcomes of the current study are consistent with Ketter's (2014) findings while others are contradictory. The current study found statistically significant differences in total ESE among some communities. This is consistent with Ketter's (2014) findings that differences exist in total ESE among various ethnic communities. Ketter (2014) found statistically significant differences in ESE planning, ESE searching, and in ESE implementation-people, indicating consistency with the current study. Although differences were observed in ESE marshaling and in ESE implementation-finance in Ketter (2014), observed differences were not considered meaningful as the effects sizes were less than 0.1. Urban (2006) found statistically significant differences in ESE implementation-finance between Blacks and Indians in South Africa, indicating concurrence with the current study's findings.

5.1 Implications

Outcomes of this study may have implications in terms of policy strategies needed to promote entrepreneurship in the various Kenyan counties as observed differences call for culture-centric strategies geared towards increasing

the level of confidence in terms of total ESE for some communities while focusing on specific sub-scales in others. For example, the consistently low scores among the Maasai and Turkana participants call for more investment in training members of these ethnic communities in entrepreneurship before providing funding for enterprise establishment. Conversely, the high scores among the Kikuyu and Kisii participants indicates that other supportive mechanisms such as provision of capital may readily promote entrepreneurship in the counties mostly inhabited by these communities. Other measures may include establishment of business incubation centers in communities scoring low on the total ESE as a way of assisting participants from these communities in the venture creation process.

5.2 Conclusion

Entrepreneurial enterprises are suggested as a means of reducing poverty and increasing economic success for less developed countries. An entrepreneurial self-efficacy (ESE) survey of 823 males between 18 and 35 years of age in Kenya found significant differences among ethnic communities in their perceived ability to successfully accomplish tasks previously associated with entrepreneurial success. The results indicated significant differences among various ethnic communities on total ESE, and on individual subscales of ESE sourcing, ESE planning, ESE marshaling, ESE implementation-people, and ESE implementation-finance. The implications are that resources available to promote entrepreneurial training and education should be targeted to ethnic communities based on increasing entrepreneurial self-efficacy in areas of lower perceived abilities.

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