BUILDING JUA-KALI OPERATORS' CAPACITY IN SOFT SKILLS FOR FASTER ECONOMIC DEVELOPMENT

John Gowland-Mwangi, Agnes Oywaya Nkurumwa

Egerton University, Egerton, Kenya E-mail: mwangijg5@yahoo.com, aonkurumwa@yahoo.com

Stephen Wambugu Maina

Ministry of Agriculture, Nakuru, Kenya E-mail: Stephen67maina@yahoo.com

Abstract

Kenya's Jua-Kali sector offers an alternative to formal employment. Though one needs technical and soft skills to work effectively, the latter are critical for successful entrepreneurship and unless Jua-Kali operators are trained in soft skills, they cannot function effectively. A trainer requires knowledge of what they need, lack and extent of deficiency. A cross-sectional survey design involving 230 randomly selected operators was used to provide this information. Extension experts ascertained the questionnaire's content validity whose reliability was 0.93\alpha at 0.05 confidence level. The operators were 15-71years old with 69% married, 65% male, and 99% formally trained. Soft skills' mean acquisition was 55% at primary, 61% at secondary and 71% at tertiary level and was independent of gender; >90% of the operators lacked but required all 18 soft skills. Males dominated jobs requiring higher capital and more physical strength while females dominated jobs requiring lower capital and less physical strength and also the food sector; The sector accommodated people of all ages, majority being self-employed; on-the-job training was inadequate; and teaching soft skills within curricula was the best training modality. The researchers recommended mainstreaming formal provision of soft skills; training using the best modality and encouraging more people to join the sector.

Key words: Jua-Kali, youth, soft skills, training, women, economic development, Kenya.

Introduction

Kenya's Vision 2030 targets a 10% annual economic growth aimed at improving infrastructure and reducing unequal distribution of resources, poverty and unemployment (Daily Nation, 2009). Kenya's Jua-Kali sector (also known as informal or Micro and Small Enterprises - MSEs) offers jobs in value adding, self-reliant initiatives and entrepreneurship to 9.1 million youth (15-32 years) who drop out of school or graduate without skills for formal employment (Nyanga & Ayodo, 2009). The sector has been growing rapidly because it is easy to enter and leave as little capital and no registration or other legal formalities are required to do so. Operators work in open yards, market stalls, undeveloped plots, residential houses and street pavements (Awori, 2007; Chadzynska, 2009; Dondo, 2007; Kariuki & Omolo, 2009).

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Soft skills enhance entrepreneurship and help improve staff motivation, morale and job satisfaction (Gill, 2009, Outten, 2009 & Williams, 2008). A person with soft skills can use technical skills effectively to improve workplace relationships, to function efficiently and to increase profit by building commitment of talented employees; and can create an atmosphere of caring, trust and inclusion (Allard, 2008, & Elekes, 2009). Organizations whose employees lack soft skills may experience increased employee turnover, absenteeism and dissatisfied customers due to poor relations, higher product defect rates and unfocused business objectives, stifled innovation, disgruntled colleagues and a frustrated management team (Allard, 2008; Cox, 2009; Nussbaum, 2009; Outten, 2009; Rivera, 2009). Technically qualified graduates with insufficient soft skills cannot manage staff and clients or contribute to economic development effectively.

Problem of Research

Though individuals require technical and soft skills to function effectively (Gill, 2009; Outten, 2009 & Williams, 2008), most training institutions still focus on provision of technical rather than soft skills, which are critical for successful entrepreneurship. Consequently, many technically qualified graduates find themselves ill prepared to handle work challenges of managing staff, clients and markets. In this study, the researchers hypothesized that Jua-Kali operators' job performance can be improved by giving them appropriate soft skills through well organized tailor-made, training that focuses on their felt needs. For such training to be effective, the trainer must first identify the soft skills that the operators need, what they lack and extent of deficiency and the best training method. This information though needed to close the knowledge gap and to help in determining how to build the operators' capacity in soft skills to enable them increase their job performance, income and living standards was insufficiently available.

The study sought to determine types of soft skills the operators needed, what they lacked and extent of deficiency; whether institutions that trained them at their highest education level included provision of soft skills in the curricula; and best modalities for improving operators' competence in soft skills. Specifically, the study sought to determine the operators' biographical data; types of soft skills imparted on them by institutions (primary, secondary and tertiary) that trained them at the highest level; types of soft skills they needed; what they lacked and extent of the deficiency; gender differences in possession of soft skills and best training modality.

Research Focus

Kenya's Jua-Kali sector has been growing rapidly largely due to the successful implementation of the Economic Recovery Strategy (ERS) upon which Kenya Government embarked on its Vision 2030, which enabled the economy to recover from 0.5% in 2002 to 7% in 2007 (Ministry of Industrialization, 2008), Vision 2030 targets a 10% annual economic growth to the Gross Domestic Product (GDP), which is expected to raise enough funds to improve infrastructure and reduce unequal distribution of resources, poverty and unemployment (Daily Nation, 2009, April 15). The sector attracts youth who drop out of school or graduate without the skills necessary for formal employment. Of the 9.1 million youth aged 15-32 years, 62% are unemployed and economically marginalized (Nyanga & Ayodo, 2009). Jua-Kali means hot sun in Kiswahili language and depicts informal, semi-organized and unregulated, smallscale businesses with 1-10 employees working in open yards, market stalls, undeveloped plots, residential houses and street pavements (Chadzynska, 2009, Dondo, 2007, Kariuki & Omolo, 2009). Jua-Kali enterprises, 70% of which are individually owned, deal with ceramics, curios, textiles, furniture, leather, tree planting, environmental clean-up campaigns, bio-diversity and metal-based, agro-processing or service industries (Dondo, 2007, Ministry of Youth Affairs and Sports, 2009, World Bank, 2009). The operators recycle materials such as old tires and scrap

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metal to produce affordable goods and services, which are either imported or unaffordable to low income earners (Ministry of Youth Affairs and Sports, 2009, World Bank, 2009).

Women operators are 48% in this sector, which accounts for 72% of total wage employment and 81% of private sector employment (Dondo, 2007, Ministry of Youth Affairs and Sports, 2009, & World Bank, 2009). The sector has reduced unemployment in Kenya by engaging youth in value-adding initiatives that absorb 500,000 youth who graduate from tertiary institutions annually (Ministry of Youth Affairs and Sports, 2009, Odinga, 2009). It hosts the Kazi Kwa Vijana (Jobs for the Youth) program – launched by President Mwai Kibaki in March, 2009 to create 300,000 jobs for the youth in all counties (Daily Nation, 2009, March 13). The program offers jobs in water, irrigation, roads, garbage collection, waste management and forestry to 2.5 million youth. Jua Kali traders in the milk industry, for instance, handle a third of Kenya's marketed raw milk (Chadzynska, 2009). The sector has employed 2.3 million people, contributed 18% to GDP, and made youth self-reliant through participation in medium and small enterprises (Awori, 2007). However, the operators lack suitable working premises, face constant harassment by local authorities, have difficulties accessing credit due to lack of tangible security, high inflation which was 27% in 2008, poor infrastructure, power failures, high telephone charges, lack of appropriate technical and business skills an inaccessibility of information (Chadzynska, 2009; Dondo, 2007; Ministry of Youth Affairs and Sports, 2009).

In order to function effectively during transition and tough economic times when entrepreneurs are under increasing pressure to produce better results, one requires both technical and soft skills (Gill, 2009, Outten, 2009, & Williams, 2008). Soft skills are important in business and include one's ability to manage staff and clients, ability to work well with others, and to sell firm services (Gill, 2009, Nussbaum, 2009). They also include one's ability to listen actively; having a positive body language; ability to write well; asking the right questions in order to understand business requirements and customer issues; thinking critically and being creative; good time management; ability to negotiate and solve conflicts and work-related problems; ability to work well under pressure and to manage time and stress effectively; flexibility; ability to adapt to new situations; having and observing work ethics; good interpersonal communication skills; ability to work well in a team; punctuality and ability to take initiative at work (Cox, 2009, Nussbaum, 2009, Outten, 2009, Rivera, 2009 & Williams, 2008). Cox (2009) pointed out that employers give soft skills higher priority than job specific technical skills during job interviews while according to Allard (2008) and Elekes (2009), soft skills are essential for effective leadership. They enable leaders to motivate employees through caring, trust and inclusion.

An organization whose employees lack soft skills may be characterized by increased employee turnover, absenteeism, dissatisfied customers from poor customer service, higher product defects and unfocused business objectives, stifled innovation, disgruntled colleagues and a frustrated management team (Allard, 2008; Outten, 2009; Williams, 2008). People want to be appreciated and to work with genuinely approachable and caring bosses who can respond objectively to criticism and conflict, who have a positive attitude toward others, who maintain work composure when under stress and pressure and who can recover from troubled situations without blaming others for mistakes (Allard, 2008, Nussbaum, 2009). These authors add that people want to work with people they can speak to freely without fear of repercussion and will resent those who overlook, coerce or manipulate them, whose only interest is to make profit. Additionally, people are likely to befriend people who listen to them.

Methodology of Research

General Background of Research

A cross-sectional research design, also called cross-sectional analysis, was used to col-

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lect and analyze data from 230 operators selected from various Jua-Kali enterprises. This design is faster and inexpensive compared to case and cohort studies and allows for hypotheses testing while providing self-reported facts about respondents, their feelings, attitudes, opinions and habits (Kombo & Tromp, 2007; Kothari, 2008). Cross-sectional studies - used in all branches of science - take a 'slice' of their target group and base their overall findings on views or behaviors of those targeted, assuming them to be typical of the whole group. A self-administered questionnaire was used to collect data from well educated operators and face-to-face interviews from those with inadequate writing skills. Data collection involved use of a questionnaire, face-to-face interviews and focus group discussions (FGDs) for purposes of triangulation.

Sample of Research

In most research studies, sample sizes of 60 to 300 or an average of 200 respondents are common (Balian, 1988). Although the nature of the study dictates the sample size, statistical tests in quantitative research require a minimum of 20 to 30 subjects per strata group for meaningful scientific comparisons. Based on Balian's recommended final sample size of 200 respondents, the sample was increased by 15% to 230 operators to compensate for attrition and respondents' refusal or inability to participate. The sample comprised service providers, non-agro-based traders, agro-based traders, and transporters. To ensure diversity in gender, age, education and occupation, purposeful sampling was used to pick the four categories; followed by proportional random sampling within the categories to ensure adequate representation of the target population. For triangulation purposes, FGDs with 48 participants were held and included 24 participants in two FGDs selected randomly from the 230 operators in the sample and 24 participants in the other two FGDs selected randomly from Jua-Kali operators who were not in the sample. Seven questions used to guide the FGDs sought to determine the operators' reasons for working in the Jua-kali sector; their feelings about working in the sector; general and soft skills related challenges they faced; the training and usefulness of the training they had attended; and their views on what should be done to improve their contribution to the economy.

Instrument and Procedures

A soft skills' questionnaire, developed by the researchers, measured operators' responses on their biographical data; extent to which institutions that trained them included provision of soft skills in the curricula; types of soft skills they needed; types of soft skills they lacked and extent of the deficiency; gender differences, among them, in possession of soft skills; and the best modality for imparting soft skills. A panel of 5 agricultural extension experts ascertained the questionnaire's content validity. A pilot test involving 32 operators in the neighboring Naivasha district indicated that the questionnaire had a reliability of 0.93α , which was above the 0.70 minimum acceptable for educational research at a confidence level of 0.05 set *a priori*.

Prior to data collection the researchers conducted a preliminary survey of Jua-Kali enterprises and their operators, which helped them, plan effective strategies for data collection. The objectives guiding data collection and analysis focused on male and female operators engaged in tree planting; repair of motor vehicles; metal-based industries; public transportation; water, milk and mali-mali (mobile retail) vending; crop produce marketing; construction; food kiosks; environmental clean-up campaigns; agro-processing or service industries; ceramics; curios; textiles; furniture and bio-diversity. To make the excise easier, faster and more efficient, the researchers contacted potential respondents by phone, email, or through their leaders, friends or colleagues to work out logistics for group meetings. A self-administered questionnaire was used for well-educated operators and face-to-face interviews for those with limited writing skills. A follow-up was used to reach selected operators who had missed initial group meetings.

Data Analysis

Data were analyzed using qualitative and quantitative methods. Qualitative methods were used to answer interpretive and explanatory questions of why, how and in which way while quantitative methods were used to answer objective questions of when, where, how many, at what time and to what extent. Qualitative data were categorized into appropriate themes and checked for frequencies or percentages of responses to determine emerging trends. Quantitative data were coded and analyzed using the Statistical Package for Social Sciences (SPSS). A t-test was done to determine gender differences between males' and females' possession of soft skills.

Results of Research

In terms of gender (Figure 1), 65% of the operators were male but sub-sectors had more operators of either gender than others. The service sub-sector and the transport sub-sector, for instance, had >90% males while the agro-based sub-sector had >80% females. The ratio of males to females in the non-agro-based sector was 50:50.

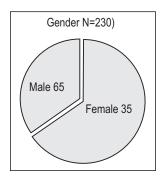


Figure 1: Percentage of Jua-Kali operators by gender.

Young and old males and females (15-71 years) worked in the sector (Figure 2). Their mean age was 35 years and 57% of them were 15-35 years old but when grouped with young adults (36-45 years), their number rose to 84%. Mature and elderly adults (>46 years), were 16% while 16% of the operators of school-going age (15-25) years, had left school to work in the sector.

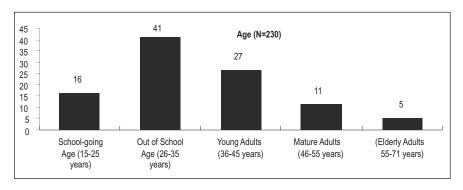


Figure 2: Percentage of Jua-Kali operators by age.

Except 1%, all operators had formal education (primary: 46%, secondary: 46%, and post-secondary: 7% (Figure 3).

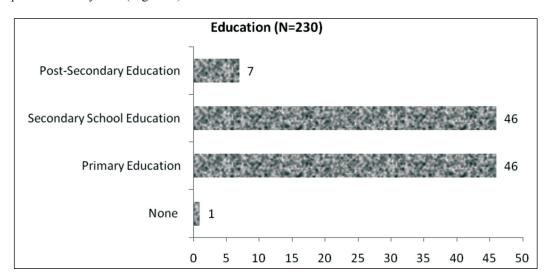


Figure 3: Percentage of Jua-Kali operators by education level.

Marital status of the 230 operators was 69% married, 21% single, 43% widowed, 3.5% separated and 1.7% divorced (Figure 4).

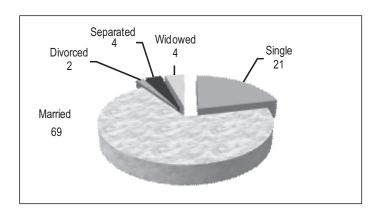


Figure 4: Percentage of Jua-Kali operators by marital status.

Reasons for joining the sector included (1) inability to afford fees; (2) insecurity caused by politically instigated post-election violence of 1992, 1997 and 2008 that displaced some operators from their homes after destroying their livelihood sources and rendering them jobless; (3) perception that jobs in the sector offered regular income; (4) lack of stringent conditions for entry to the sector; (5) opportunity for earning an income; (6) flexibility; (8) opportunity to work at one's pace; (9) self-reliance; (10) preference self-employment; (11) inability to meet educational requirements and skills required for formal employment; (12) retrenchment and retirement from formal employment; (13) ability to operate in the sector with little capital; (14) love for the job; and (15) opportunity to interact with other people freely.

Many operators felt good, joyful and satisfied by the flexibility of being their own bosses, getting a regular income; interacting and sharing information; and having jobs outside the

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formal sector but some operators felt frustrated by inadequate income and restrictions imposed by local authorities on how and where they operate. Operators in this category said they would leave the sector if they got better jobs. Operators were involved in economic activities, which the researchers grouped into five categories (Figure 5): (1) *Service providers* (tailors, shoe makers, shoe shiners, hair dressers, mechanics, and bicycle repairers). (2) *Non-agro-based traders* (hawkers, vendors in second-hand clothes, air time, newspapers, stationery and electronics). (3) *Agro-based traders* (traders in cereals, vegetables, fruits, spices, milk and cooked food). (4) *Transporters* of public goods and services (who used bicycles, motor cycles, tricycles, Nissan matatus, buses and trucks). Service providers were 39%, non-agro-based traders 31%, agro-based traders 18%, and transporters 12%.

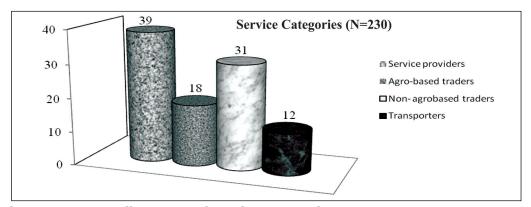


Figure 5: Jua-Kali operators' service categories.

About 58% of the operators were self-employed, 21% employees, 18% self-employed with employees of their own, 2% employees who had employed workers such as house helps, and less than 1% was purely employers (Figure 6).

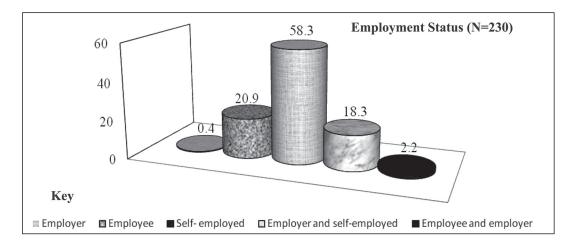


Figure 6: Percentage of Jua-Kali operators by employment status.

On-the-job training was lacking for 61.7% of the operators but 33.5% of them served as trainers and 4.8% as trainees. Training focused on technical skills only and was informal and free for >75% of the trainees but participants provided free labor during training. The training covered (1) selling agro- and non-agro-based goods and services; (2) motor vehicle mechanics; (3) shoe making/repair/shining; (4) hair dressing; (5) tailoring; (6) bicycle/motor cycle riding;

(7) driving; and (8) cooking. The cost of training for 1 day to 3 years' course ranged from Kenya shillings 500/= to 23,000/= and was largely conducted by universities and non-government organizations. The 18 soft skills investigated included (1) how to listen actively; (2) how to work well under pressure; (3) how to take coherent / comprehensive notes; (4) how to be flexible; (5) how to think critically; (6) how to work in a team; (7) good time management; (8) how to negotiate; (9) how to solve conflicts / work related problems; (10) how to have a positive body language; (11) how to manage stress effectively; (12) how to ask the right questions; (13) how to adapt to new situations; (14) how to observe work ethics; (15) interpersonal skills; (16) how to be creative; (17) importance of punctuality; and (18) how to take initiative at work.

At their highest educational level (primary, secondary or tertiary/post-secondary), the operators had received soft skills' training (Figure 7) in good time management (78%); active listening and importance of punctuality (77%); how to ask the right questions (73%); how to work in a team (71%); how to be creative, how to write well, how to negotiate, how to take initiative at work, how to be flexible, how to observe work ethics, and how to negotiate (>50%); critical thinking (49%); interpersonal skills (43%); use of body language and stress management (39%). The mean percent score for soft skills' acquisition (Figure 8) was 55% at primary, 61% at secondary and 71% at tertiary (post-secondary) level.

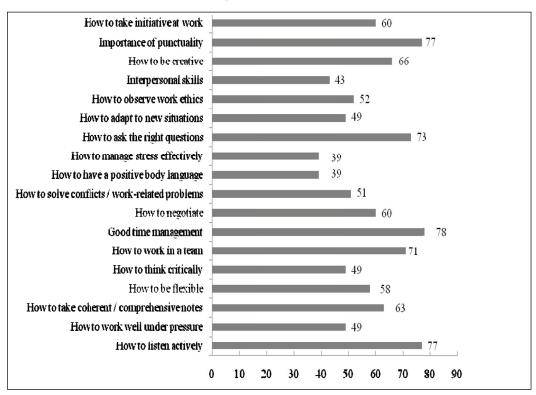


Figure 7: Percentages of Jua-Kali operators trained in soft skills.

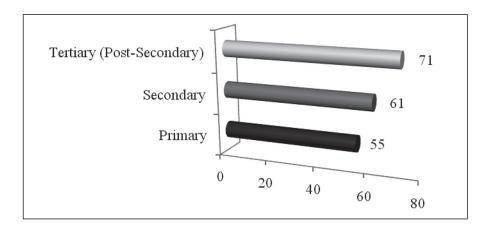


Figure 8: Operators' mean percentage acquisition of soft skills by educational level.

Table 1 shows types of soft skills the operators needed. Ranked first were skills on how to solve conflicts/work-related problems and how to take initiative at work (needed by 97.4%). Second were skills on how to manage stress effectively (by 96.5%). Third was how to work in a team (by 96.1%). Ranked lowest were skills on how to write well (by 90.9%). How to have a positive body language was ranked second from the bottom (by 93%).

Table 1. Skills Required by Jua-Kali Operators (N=230).

	Skills Required	Frequency	Percent	Rank	
1	How to solve conflicts / work-related problems	224	97.4	1	
2	How take initiative at work	224	97.4		
3	How to manage stress effectively	222	96.5	2	
4	How to work in a team	221	96.1	3	
5	How to adapt to new situations	220	95.7	4	
6	How to listen actively	219	95.2	-	
7	How to think critically	219	95.2	5	
8	How to negotiate	218	94.8	6	
9	How to be creative	218	94.8		
10	How to work well under pressure	217	94.3		
11	Good time management	217	94.3	7	
12	Importance of punctuality	217	94.3	,	
13	How to ask the right questions	216	93.9		
14	How to observe work ethics	216	93.9	8	
15	Interpersonal skills	216	93.9	0	
16	How to be flexible	215	93.5	9	
17	How to have a positive body language	214	93.0	10	
18	How to take coherent/comprehensive notes	209	90.9	11	

To get a clearer understanding of types of soft skills the operators lacked and extent of the deficiency, the researchers placed the 18 soft skills in five related categories:

- 1. Effective communication comprised skills on how to listen actively, how to take coherent / comprehensive notes, how to negotiate, how to have a positive body language, how to ask the right questions and interpersonal skills.
- 2. Flexibility comprised skills on how to be flexible and to adapt to new situations.
- 3. Management of self and time comprised skills on how to work well under pressure, good time management, how to manage stress effectively, how to observe work ethics, and importance of punctuality.
- 4. *Critical thinking, initiative and creativity* comprised skills on how to think critically, how to be creative, and how to take initiative at work.
- 5. *Teamwork and conflict resolution* comprised skills on how to work in a team, and how to solve conflicts / work-related problems.

Table 2 shows ranking of the five soft skills' categories in which the operators had over 50% deficiency based on their self assessment. Ranked were skills in critical thinking, taking initiative at work and being creative (missed by >42%); followed by skills in teamwork and conflict resolution (missed by 39%); skills on effective communication (missed by 38%); skills on management of self and time (missed by 34%) and skills on flexibility (23%) respectively.

Table 2. Category ranking of soft skills' deficiency (N=230).

Type of soft Skills' category	Percentage of operators with >50% soft skills' deficiency	Rank of soft skills' category	
Critical thinking, initiative and creativity	42	1	
Teamwork and conflict resolution	39	2	
Effective communication skills	38	3	
Management of self and time	34	4	
Flexibility	23	5	

All the operators lacked all the 18 soft skills but the level of deficiency depended on their education and experience. Over 94% required all the skills (Figure 9). This indicated the importance of soft skills in one's life as found by other researchers (Allard, 2008, Elekes, 2009, Gill, 2009, Outten, 2009 & Williams, 2008).

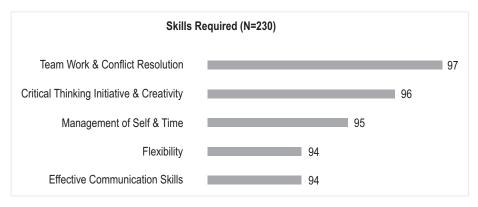


Figure 9: Percentages of soft skills required by Jua-Kali operators.

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Over 96% of the operators indicated no gender difference between males' and females' ability to acquire soft skills and a t-test (Table 3) indicated no statistically significant difference between the means of the two groups at 0.05 confidence level.

Table 3. Gender Differences in Soft Skills among Jua-Kali Operators (N=230).

Soft Skills Imparted by Educa- tional Institutions to Jua-Kali	Levene's Test for Equal- ity of Variances		t-test for Equality of Means			
Operators	F	Sig.	t	df	Sig. (2- tailed)	Std. Error Difference
How to listen actively	0.00	0.95	0.03	228	0.98	0.06
How to work well under pressure	0.37	0.54	-0.36	228	0.72	0.07
How to take coherent/comprehensive notes	18.35	0.00	1.97	228	0.05	0.07
How to be flexible	1.98	0.16	0.67	228	0.50	0.07
How to think Critically	0.37	0.54	-0.36	228	0.72	0.07
How to work in a team	15.70	0.00	1.83	228	0.07	0.06
Good time management	6.79	0.01	1.25	228	0.21	0.06
How to negotiate	1.48	0.23	-0.66	228	0.51	0.07
How to solve conflicts/work related problems	0.44	0.51	0.99	228	0.32	0.07
How to have a positive body language	0.24	0.63	-0.73	228	0.47	0.07
How to manage stress effectively	0.00	0.96	-0.45	228	0.65	0.07
How to ask the right questions	6.52	0.01	1.21	228	0.23	0.06
How to adapt to new situations	0.13	0.72	0.29	228	0.77	0.07
How to observe work ethics	1.40	0.24	0.62	228	0.53	0.07
Interpersonal skills	1.47	0.23	0.72	228	0.48	0.07
How to be creative	3.67	0.06	0.91	228	0.36	0.07
Importance of punctuality	8.10	0.01	1.35	228	0.18	0.06
How to take initiative at work	0.76	0.38	-0.46	228	0.64	0.07

Irrespective of gender, operators considered women equally capable of learning soft skills as their male counterparts. The ability to learn and acquire soft skills, they explained, depended on one's interest, commitment, effort and learner's interaction with the educator.

Discussion

The large proportion of married Jua-Kali operators implied that the sector was an important livelihood source for many people and a major facilitator of economic development at household level. The operators faced challenges on how to manage time and meet deadlines; how to deal with unpredictable/unreliable and difficult people; how to communicate effectively with unreasonable, irritable, drunk, unreliable, arrogant, rude or abusive clients; how to manage stress; how to solve work-related conflicts; how to negotiate; and how to be flexible. Most operators recognized the importance of soft skills in successful interpersonal relations and entrepreneurship, were aware of their deficiency and understood how soft skills' deficiency limited

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their job productivity and ability to help Kenya achieve the 10% annual economic growth spelt out in Vision 2030. Government role in soft skills' training, though extremely important, was clearly absent, yet it was responsible for making provision of soft skills a national priority. Over 90% of the operators needed all the skills under investigation implying that they recognized their importance. Cox (2009), Gill (2009), Nussbaum (2009), Outten (2009), Rivera (2009) and Williams (2008) had also indicated the importance of soft skills for job applicants.

Soft skills' acquisition increased with education and employees should be provided with them based on felt needs on a regular basis through formal, tailor-made refresher courses. Trainers should remember that some sub-sectors are male and others female dominated and should make training affordable and flexible in terms of duration, scheduling of contact time and venue to enable many operators participate while carrying out their businesses. Listed in decreasing order of importance, operators needed training in communication skills, how to be creative, entrepreneurship, interpersonal skills, teamwork, managing stress, flexibility, how to negotiate, critical thinking and conflict resolution. They ranked training methods in decreasing order of effectiveness as: teaching soft skills within the curricula; giving induction courses to new employees; giving annual refresher courses to employees; and teaching final year students.

The operators faced general challenges of handling customers who took goods and services on credit and became reluctant to pay, inability to offer competitive prices, insufficient funds to run or expand businesses, insufficient business/financial management skills, fluctuating supply and demand, being despised and disrespected by people in formal employment, risk of buying stolen goods and pressure from customers who wanted faster services or wished to be given undeserved priority attention. Other challenges were equipment breakdowns, inadequate work due to low demand for goods and services, insecurity, unreasonable complaints from clients, products' oversupply and perishability, high employee turnover, and high rents for business premises, weather extremes for those working outdoors, poor markets; and uneven playing field.

To help them succeed in their jobs, the operators suggested that the Government and its development partners should give them affordable, subsidized in-service training on technical and soft skills while ensuring that the cost of a six month's course does not exceed Ksh 10,000/= or Ksh 2,000/= for a one-month's course on soft skills. The training should be part-time to allow many of them participate while running their businesses. License fees/levies should be waived or lowered and timely, easily accessible and affordable credit provided. They should be assisted to create chains that guarantee reliable markets for their products and their working environment should be improved by providing physical facilities to ensure proper hygiene and protection from weather extremes. The Government should improve image of the sector by publishing success stories to attract more youth and should avoid double taxation in form of licenses and service charge. Leaders should encourage more people to work in the sector and education institutions to mainstream formal provision of soft skills at all levels of education. Due to the operators' deficiency in soft skills, the Government through public-private-partnerships should jointly conduct affordable soft skills training regularly using the best training modality. Further research is needed to determine soft skills' content in primary, secondary and tertiary institutions' curricula for purpose of recommending improvement. There is need to establish whether teachers at various schools and levels of education are themselves competent to impart soft skills to students effectively; whether existing curricula cover appropriate types of soft skills at primary, secondary and tertiary education; and whether employees in formal employment at lower, non-managerial levels possess the soft skills necessary to make them more effective in their work. There is also a need to replicate the study in other areas to establish whether Jua-Kali operators in rural and urban settings differ significantly in their possession of soft skills.

Conclusions

Males dominate sub-sectors requiring high initial capital and more physical strength to operate while females dominated those requiring low initial capital and less physical strength to operate and also the food sub-sector. Age was not a barrier for one to operate and most operators in the sector had formal education. Many people depended on the sector for their livelihoods. People joined the sector for varied reasons with the aim of getting employment opportunities in agriculture, trade/business, service provision and transport; self employment dominated the sector in which there was inadequate on-the-job training focusing on provision of technical rather than soft skills and the training was conducted informally. Soft skills' acquisition was independent of gender, depended on one's interest, commitment, effort and interaction with the educator; and increased with education. All 18 soft skills under investigation were important to the operators, who lacked more than half of them. The best training modalities for imparting soft skills to Jua-Kali operators, listed in decreasing order of effectiveness, were teaching soft skills within curriculum, giving induction courses to new employees, giving annual refresher courses, and teaching final year students respectively.

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Adviced by Laima Railienė, University of Šiauliai, Lithuania

John Gowland-Mwangi	PhD in Agricultural Education and Extension, Professor of Agricultural Education and Extension, Egerton University, P. O. Box 536-20115 Egerton, Kenya. E-mail: mwangijg@yahoo.com Website: http://www.egerton.ac.ke/
Agnes Oywaya Nkurumwa	PhD in Agricultural Extension, Lecturer, Egerton University, P. O. Box 536-20115 Egerton, Kenya. E-mail: aonkurumwa@yahoo.com Website: http://www.egerton.ac.ke/
Stephen Wambugu Maina	MSc in Agricultural Extension, Principal Agricultural Officer, Ministry of Agriculture – Sotik, P. O. Box 15428-20100, Nakuru, Kenya. E-mail: Stephen67maina@yahoo.com Website: http://www.kilimo.go.ke/