

SOFT SKILLS PREPARATION AS PANACEA FOR SELF-EMPLOYMENT FOR TVET TECHNICIAN GRADUATES IN KENYA

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ABSTRACT: *The main aim of the paper was to assess how effect of soft skills on self-employment among Technical and Vocational Education and Training technician graduates in Kenya. The specific soft skills investigated in this study were practice time management, solve problems, work independently, interpersonal skills, communication skills, decision making skill, creativity/innovations and adaptability on self-employment among TVET graduates. This study was based on pragmatic research paradigm using embedded research design. The study targeted 527 technician graduate from TVET institutions in Uasin Gishu county Kenya. Simple random was used to select 320 sample size. Quantitative data analysis was done using descriptive statistics and inferential statistics. The interview transcripts were analysed using thematic analysis. Multiple Regression analysis was done to test hypothesis. Findings showed that TVET institutions did not inculcate soft skills content required for survival in self-employment. The generic skills tested were ranked from highly perceived as good to the least good: time management, ability to solve problems, ability to work autonomously, interpersonal skills, communication skills, decision making, creativity and innovative skills, and adaptability. However, despite time management being ranked the highest it had no effect on self-employment. Regression results revealed that ability to solve problems, ability to work independently, interpersonal skills, adaptability and creativity and innovations have a positive and significant effect on self-employment.*

KEYWORDS; Soft Skills, Self-Employment, Time Management, Communication Skills, TVET

INTRODUCTION

Indeed, globally young job-seekers from around the world endure high unemployment, extended unemployment periods and deteriorating job quality ((Mourshed et al, 2013). Even young people with TVET training face difficulties in securing employment, mainly due to mismatches of skills and a high number of candidates for every job. The job challenge is not only one of quantity but also of quality (Murgor, 2013). While the developing world has rapidly improved educational attainment, the gap between the skills acquired through formal education and the type of jobs available has widened considerably. Youth across the world are often accused of lacking employable and entrepreneurial skills. However, there are few programs aimed at increasing the “real work” element in training youth to overcome these obstacles (Badawi, 2013; Helyer & Lee, 2014).

The problem is not only a shortage of jobs but a rapidly changing world characterised by increasing longevity, hi-tech systems, larger and more integrated organisations, and global connectivity. Mastering all of these aspects requires new skill-sets which traditional education does not provide. Strong demand for high-skill workers has been growing while at the same time the surplus of low-skill workers continues to expand. These imbalances are

expected to continue to grow and add pressure to developing countries too (Gerds, 2006; Otobe, 2016; Wang, 2012). In such dynamic labour market, for one to get an edge over the rivals in job seeking one is left with no other choice but to add value to their acquired technical skills with soft skills that exploit its potential (Dobbs *et al.*, 2012; Oketch, 2007; Wood, 2008). The term soft skill is taking shape in the global arena and rivals technical or academic skills in the modern world of work.

A growing body of evidence (Gates *et al.*, 2016) suggests that soft skills are linked to a broad array of social and health behaviours and can result in a wider range of positive outcomes, including conflict and violence prevention, active and responsible citizenship, and improved sexual and reproductive health. These are important in themselves, and can positively affect employment outcomes. For example, programs fostering soft skills linked to both reproductive health decision-making and livelihoods, such as positive self-concept, self-efficacy and goal-orientation, have been shown to produce strong positive outcomes in young women. These skills help girls in particular navigate the complex decision-making involved in balancing work, education and family formation in adolescence and young adulthood (Bandiera *et al.*, 2015). When educational institutions “provide the opportunities for students to develop relationships, learn how to express their ideas and use their negotiation skills, it can transfer over into the household sphere leading to potentially positive influence on household gender relations (King, 2010).

Soft skills development requires exposing youth to new ideas and behaviours, and learning them requires appropriate levels of challenge, practice, feedback and reflection. Instructors who provide support, coaching and encouragement to youth are critical as youth learn and demonstrate the skills (Nagaoka, 2015).

Globalization continues to have a major influence on the need for flexible work skills and secondary education and skills training, of indifferent quality, will not do (Brown *et al.*, 2001; George, 2006). Arguably, the many benefits claimed for TVET, such as higher productivity, readiness for technological change, openness to new forms of work organization, the capacity to attract foreign direct investment and the achievement of Millennium Development Goals, all depend on the quality of the skills acquired, and a dynamic environment in which they can be applied (Jared & Margaret, 2015; King & Palmer, 2007).

In agreement, Afeti (2006) argues that TVETs are important for their orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. TVET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that Africa needs to create wealth and emerge out of poverty (Bhurtel, 2015; Mutamba, 2014; Oyebolu & Oshin, 2011; Pongo *et al.*, 2014). Nevertheless, the demand for skilled graduates in the labour market is not always to match acquired skills. In countries with either a general lack of jobs for technical vocational TVET graduates, TVET is likely to remain less popular than general schooling. In countries like South Korea, China and Mozambique, where formal job growth has been sustained in recent years through both national and foreign direct investment, and where there has been policy commitment to quality work skills, demand for TVET has been strong (Adams, 2007; Adams *et al.*, 2013; Mutamba, 2014).

TVET institutions should not only equip trainees with the knowledge and skills they need for work, but also ensure that they have adequate language, literacy and numeracy skills and foundation skills, green skills needed for a sustainable economy and society (Cooney, 2010;

Li et al., 2016; Wheelahan & Carter, 2001). Similarly they need technological skills, knowledge and skills they need for further learning as the basis for changes to their existing work and for occupational growth are paramount in today's global economy (Akanbi, 2017; Gamble, 2016).

Statement of the problem

Youth unemployment is primarily a problem of labour demand. The Kenyan economy is not creating sufficient jobs to cater for the increasing number of young labour market entrants. In 2011, a total of 520,000 new jobs were created in Kenya, of which 74,000 (14.3%) were formal sector jobs. Some 300,000 young people are left behind every year (World Bank, 2013). The youth unemployment challenge is therefore primarily a challenge of economic growth and job creation in Kenya. It requires bold and coordinated efforts to stimulate economic transformation and business sector development. Strengthening employment in the informal sector is key to address youth unemployment, as employment for youth is mainly provided in the informal sector.

Despite these efforts to engage young people in the labour market, the majority of the youth in Kenya are still unemployed, and being vulnerable (Hope Sr, 2012; Muthee & Scholar, 2010). While youth remain unemployed, industries complain they lack appropriate skills, knowledge and attitudes for available vacancies (Bank, 2010 ; Mureithi, 2008 ; Wachira *et al.*, 2009). On contrary, findings indicate that industries have shifted to casualization of labour or temporary employment on the same youth who remain optimistic of permanent employment (Amimo, 2012; Kaminchia, 2014; Omolo, 2013). Meaning that these studies dwelled on formal employment and not on how TVET institutions prepare youth for self-employment.

Studies (Simone and Nale, 2010; Massaro, Maurizio, Roland, and Andrea, 2016; Nilsson, 2010) have indicated that development of soft skills in tertiary institutions is likely to enhance venture creation among graduates. However, previous studies did not provide empirical evidence on how soft skills affect self-employment particularly among text students in Kenya. Thus this study hypothesized that

- H₀₁: There is no effect of ability to practice time management on self-employment among TVET graduates*
- H₀₂: There is no effect of ability to solve problems on self-employment among TVET graduates*
- H₀₃: There is no effect of ability to work independently on self-employment among TVET graduates*
- H₀₄: There is no effect of interpersonal skills on self-employment among TVET graduates*
- H₀₅: There is no effect of communication skills on self-employment among TVET graduates*
- H₀₆: There is no effect of decision making skills on self-employment among TVET graduates*
- H₀₇: There is no effect of creativity and innovations on self-employment among TVET graduates*

H₀₈: There is no effect of adaptability on self-employment among TVET graduates

LITERATURE REVIEW

According to Maniscalco (2010), soft skills refer to ‘[a] cluster of qualities, habits, personality traits, attitudes and social graces’ that everyone possesses in varying degrees and are needed for everyday life as much as they are needed for work. Lorenz (2006) refers to soft skills as qualities that make someone a good employee and a compatible co-worker’. Nevertheless, according to Gibbons et al. (2000), the term ‘soft skills’ is synonymous with core skills, key competencies and personal skills. Therefore, soft skills are the non-cognitive abilities that are innate in individuals and are necessary for good social relationships at the workplace. Soft skills are typically difficult to observe, quantify and measure. Others are extremely punctual or able to make rational decisions under pressure. A person may also have the ability to work with coworkers from other cultures or learn a new language quickly. According to Zedeck and Goldstein (2000), soft skills such as dealing with conflict and gathering and sharing information are highly sought after by organisations. Leigh et al. (1999) assert that workplace competencies include problem solving, communication skills, personal qualities and work ethics, which are soft skills categories.

Nilsson (2010) found that competence, interpersonal skills and personal characteristics significantly influence the employability of individuals. Sail and Alavi (2009) assert that interpersonal skills increase the knowledge of employees after they receive training. Olivier et al. (2009) mention that the structuring and awareness features of room-based collaborative platforms can enhance the learning experience of soft skills (communication and leadership skills) courses. Shyamala et al. (2009) second that the infusion acquisition of soft skills remains highly concentrated on specific items/skills for both coursework and training. Pilar et al. (2009) assert that the skills that assure the success of teamwork, such as communication, leadership, negotiation, or team management. Evidence shows that there are links between performance and skills and that relationship is the main impetus to increase skills, as well as one of the main forces legitimising them (Grugulis & Stoyanova 2011). Thus, it is clear from the abovementioned literature that communication skills, problem-solving skills, leadership, teamwork and interpersonal skills are some of the categories of soft skills that have been empirically tested and proven to improve self-employment.

Baum et al. (2001) constructed a multi-dimensional model to explain the direct and indirect effects on venture growth. In their model, five research domains were used to explain venture growth: personality traits and motives, personal competencies, situational specific motivations, competitive strategies, and business environment. Their findings revealed that specific competencies, situational specific motivations, and competitive strategies had direct effects on venture growth, while personality traits, general competencies, and the environment had significant indirect effects thereon. They further suggest that personality traits affect venture growth through competencies, motivations, and strategy. In a similar study, Shepherd and Krueger (2002) suggest that personality traits’ influence on entrepreneurial action and performance is mediated by multiple layers of factors, including attitude towards business and entrepreneurship, perceptions, and cognitive styles. This was further supported by Baum and Locke (2004) who found that entrepreneurial motivation mediates the relationship between personal characteristics and venture growth. Other than entrepreneurial motivation and attitudes, entrepreneurial alertness is found to influence entrepreneurial performance. Research

indicates that highly alert individuals tend to show greater commitment to their firm than less alert individuals (Tang, 2008; Hajizadeh and Zali, 2016). In addition, Adomako et al. (2016) found that entrepreneurs' personal attributes enhanced higher levels of cognitive planning and creating styles, in turn influencing performance.

METHODOLOGY

This study was based on pragmatic research paradigm using embedded research design which provides a means of integrating quantitative and qualitative methods into a single research study. Questionnaires and interview schedule were used to collect primary data from the respondents. The study targeted 527 technician graduate from TVET institutions in Uasin Gishu county Kenya. Simple random was used to select 320 sample size. Quantitative data analysis will be done using descriptive statistics and inferential statistics. The interview transcripts were analysed using thematic analysis. Multiple Regression analysis was done to establish relationships between selected independent and dependent variables.

Findings

Research question four sought to find out suitability of soft skills content received by graduates in preparation for self employment. The questionnaire sought answers to research question four on acquisition of soft skills content using eight (8) items on a five point scale. The engineering graduates were asked to rate acquisition of soft skills content on a 5 point scale. The scale range and weighting was as follows: "Very Good", "Good", "I Don't Know", "Poor" and "Very Poor". It may be noted that, apart from technical content, soft skills are values that enables graduates to transit from classroom or workshop to place to the world of work.

Descriptive Statistics

The eight (8) items sought by this study that represent soft skills content include: time management, ability to solve problems, ability to work autonomously, interpersonal skills, communication skills, decision making, creativity and innovative skills and adaptability skills.

Table 1: Graduates' Responses on Generic Content Received in TVET Institutions

	Rating of Generic Content Acquired				
	Very Good	Good	I don't Know	Poor	very poor
Time management	68(25.4%)	98(36.6%)	07(2.6%)	54(20.1%)	41(15.3%)
Ability to solve problems	59(22.0%)	97(36.2%)	09(3.4%)	60(22.4%)	43(16.0%)
Ability to work independently	51(19.0%)		92(34.3%)	09(03.4%)	63(23.5%)
53(19.8%)					
Interpersonal skills	47(17.5%)		89(33.2%)	08(03.0%)	68(25.4%)
56(20.9%)					

Communication skills	45(16.8%)	77(28.7%)	02(0.7%)	86(32.1%)
58(21.6%)				
Decision making	38(14.2%)	72(26.9%)	06(02.2%)	89(33.2%)
63(23.5%)				
Creativity and innovative skills	35(13.1%)	66(24.6%)	05(01.9%)	92(34.3%)
70(26.1%)				
Adaptability and flexibility	29(10.8%)	64(23.9%)	07(02.6%)	97(36.2%)
71(26.5%)				

Ability to Practice Time Management

As evident in Table 1, ability to practice time management was indicated by 98(36.6%) of respondents as good, 68(25.4%) as very good, 54(20.1%) as poor, 41(15.3%) as very poor and of the respondents. In overall time management was rated good by 166(62.0%) of the respondents. The finding is in agreement with study by Boahin *et al.* (2014) that time management can be developed through intensive study schedule and commitment in different extra-curricular activities and normal classes in TVET institution. Since all the programs TVET offered in institutions are time bound, graduates expected to complete tasks or assignment within a given time schedule. This implies that in the TVET institutions time management skill is acquired through following time table, study schedule and submissions of assignment within stipulated time. These are activities that prepare trainees for the world of work in TVET institutions. The finding is supported by qualitative finding through FGD that:

“We closely monitor study schedules adherence by our trainees through attendance list and submission list of assignments. Failure to attend classes leads to one being disqualified from sitting for both internal and external examinations” (Interview with trainer No. 1 OTTI)

Ability to Solve Problems

The second highly rated soft skill is ability to solve problems which was rated good by 97(36.2%) of the respondents, very good by 59(22.0%), do not know by 09(3.4%), very poor by 60(22.4%) and poor by 43(16.0%) of the respondents. In overall 156(58.2%) of the respondents indicated that the ability to solve problem was good. The finding is in agreement with studies that indicated that TVET graduates lack problem solving techniques since training is spoon-feeding students with fundamental theories and scientific facts for passing examinations only (Daud, 2013; Hadi *et al.*, 2015; Montague, 2013). This finding is supported by interview with trainers that:

“We train our learners to solve problems by giving challenging tasks and assignment to be solved in groups or individually. This is done through learners centred methods such guided discovery and problem solving methods. These skills we expect learners to go with as they engage in new environment of world of work” (Interview with trainer No. 1 OTTI)

Ability to Work independently

The third rated skill is the ability to work autonomously which was rated good by 92(34.3%) of the respondents very good by 51(19.0%), do not know by 09(03.4%), somewhat good by 63(23.5%) and not good by 53(19.8%) of the respondents. In overall 143(53.3%) believed that they acquired ability to work independently from their former independently. The finding is in agreement with studies that indicate that graduates lacks ability to work independently without supervision (Sira, 2016) This skill is developed when trainees work independent while doing assignment and tasks given where individual acquisition of skills is measured (Wass & Golding, 2014). This implies that TVET graduates cannot work independently without assistance from experts hence they lack confidence to engage in self employment. The finding is supported by FGD with trainees that:

“Working independently out here is totally different from what acquired from working independently in TVET institutions. The skill we acquired as working independently is when we were on industrial attachment although we were always under supervisors watch. Advantage is that we were operating in the real world of work” (FGD with trainees in Eldoret town)

Interpersonal Skills

The fourth rated is the interpersonal skills which was rated good by 89(33.2%) of the respondents, very good by 47(17.5%), do not by 08(03.0%), somewhat good by 68(25.4%) and not good 56(20.9%) of the respondents. In overall 136(50.7%) of the respondents showed that interpersonal skill was acquired by graduates in TVET institutions was good. This finding in agreement with studies that indicate that there is shortage of interpersonal skills amongst engineering TVET graduates due to traditional methods which do not use learners based approach (Leung & McGrath, 2010; Wheelahan & Carter, 2001). Interpersonal skill is acquired when trainees go through daily activities in group work, sports competitions among others and it is said that the workforce is well versed in technical skills but lack the interpersonal skills (Cheruvellil *et al.*, 2014; Kozlowski & Ilgen, 2006). This implies graduates transit to the world of work while they are not fully equipped with interpersonal skill which is important as graduates interact with new work environment.

“Training in TVET institutions are individualistic that encourage competitions and those who emerged with good certificates means they struggled on their own. We train to struggle as an individual but here sharing ideas is crucial since this where can stumble on business opportunities” (FGD with trainees in Eldoret town)

Communication skills

The fifth rated is communication skills which was rated good by 77(28.7%) of the respondents, very good by 45(16.8%), do not know by 2(0.7%), poor 86(32.1%) and very poor by 58(21.6%) of the respondents. In general 122(45.5%) of the respondents indicated that communication skills acquired by graduates was good which means it is inclined towards poor. This finding is in agreement with studies that indicates that communication skills is inadequately imparted to TVET trainees and negatively affects other fundamental skills such as teamwork, problem solving and leadership skills (Hui & Cheung, 2015; Ismail & Mohammed, 2015). This implies that communication skill is poorly developed in TVET

institutions, where concentration seemed to be majorly given to technical skills as required for passing examinations.

“We in the engineering field had no time to improve our communication skills by reading story books and English literature. Our field of study come with new concepts and wider coverage with require serious reading that is why we are poor in communication skills” (FGD with trainees in Eldoret town)

Decision Making Skills

Decision making was ranked sixth highest by respondents as follows: very good by 38(14.2%), good by 72(26.9%), do not know by 06(02.2%), somewhat good by 89(33.2%) and not good by 63(23.5%) of the respondents. In general 110(41.1%) of the respondents believed that decision making was good, indicating that it is inclined towards poor. The reason is that the trainees are only learning through demonstrations since the materials are limited and expensive to allow trainees practice on their own (Hampton, 2002; Ongaro, 2015). This implies that TVET institutions graduates may fear making decision of venturing into unknown or engaging in self employment. The finding is in supported by FGD with trainees that:

“...first of all taking decision to engage in self-employment is not easy for us. TVET training is hands on or practical but we never got enough practical skills since concentration was on passing examinations. Even with good certificate engaging in self-employment with limited practical skills is difficult” (FGD with trainees in Eldoret town)

Creativity and Innovations

When respondents were asked to rate creativity and innovative skills they acquired in TVET institutions their response were as follows: very good by 35(13.1%), good by 66(24.6%), do not know by 05(01.9%), somewhat good by 92(34.3%) and not good by 70(26.1%) of the respondents. In overall 101(37.7%) of the respondents indicated that creativity and innovations was good. This percentage is below average which means that graduates were not given adequate skills on creativity and innovations. This finding is in agreement with studies that indicated that current TVET training do not support generation, development and implementation of creative ideas and innovative approaches (Cachia *et al.*, 2010; Ismail & Mohammed, 2015; Mutua & Muriithi, 2015). This implies that TVET institutions concentrate on technical skills and ignore other skills like creativity and innovations that are acquired through learning environments that stimulate creativity and innovations. The finding is supported by qualitative finding through FGD with trainees that:

“We never caught enough practical training where challenging problems can be offered. We also rarely participated in exhibitions competitions were creativity and innovations can be nurtured” (FGD with trainees in Eldoret town)

Adaptability

Adaptability skills was ranked lowest at very good by 29(10.8%), good by 64(23.9%), 07(02.6%), poor by 97(36.2%) and very poor by 71(26.5%). In overall 93(34.7%) of the respondents indicated that adaptability training was good. This means a large number of the respondents believed that adaptability training was poorly imparted to trainees. The finding is

in agreement with studies that indicated that adaptability is a skill that has not been adequately exhibited TVET graduates at place of work (Di Fabio, 2014; Jayaram & Engmann, 2017; Mwangi, 2015). This implies that adaptability as a soft content was not adequately imparted into graduates.

“..From classroom to world of work is not easy for us. TVET institutions cannot provide environment equivalent to the world of work. We encounter a lot of challenges as we sought for jobs which are not found. Becoming self employed is equally a difficult task that why most of us are unemployed” (FGD with trainees in Eldoret town)

In summary, TVET institutions did not inculcate soft skills content required for survival in self employment. The time management was highly rated as a skill which was developed in TVET institutions more than the other skills. This could be attributed to the fact that in formal TVET institutions everything is done under time limits clearly pronounced. Time management and problem solving is well developed due to the fact that they are being practiced on daily activities in training institutions also transferable to other areas of operations.

“After graduation each one of us is out looking for employment individually and so survival skills are necessary. Working independently, time management, creativity and adaptability to new environment are survival tactics required in especially in self employment, these skills are never taught in our institutions” (FGD with trainer No. 1 Eldoret)

The study addressed five research questions in an attempt to find out how engineering diploma graduates are prepared in TVET institution for self employment in the face of diminishing formal employment opportunities in Kenya. Indeed, the labour market today faces challenges of globalisation and technological changes that TVET institutions need to catch up with in order to churn out graduates with relevant skills. The study sought views of diploma graduates in engineering who graduated in 2012 on how the training they received in TVET institutions assisted them to engaged self employed. The study intended to provide reliable and credible information that will serve as a basis of repackaging engineering TVET programs in response to challenges brought by labour market dynamics characterised by limited jobs in formal employment, globalisation and use modern technology. In a way of addressing the research questions human capital theory was adopted together with pull and push theory as basis of the theoretical framework.

Table 2: Self-employment

	Mean	Std.
Immediately after graduation I started my own business	4.37	0.735
All along I had intention to start my own business	4.40	0.868
I prefer being self-employed that being employed	2.96	1.455
I believe I have all the qualities need for starting a business	2.26	1.465

The findings in Table 2 are related to the response of the graduates concerning self-employment and it was showed that majority of the graduates started their own business immediately after graduation, mean = 4.370 and also majority had an intention to start their

own business, mean = 4.400. On the other hand, almost less than half of the graduates prefer self-employment than being employed, mean = 2.960 and believe that they have all the qualities needed for starting a business, mean = 2.260.

Testing hypothesis

The R- squared in Table 3 shows that a unit change in the explanatory variables will lead to 57.2% change in self-employment ($R = 0.756$, $R\text{-squared} = 0.572$) that is, 57.2% of the variation in self-employment is accounted for by the 8 explanatory variables. This is complimented by the Adjusted R Squared of 0.563. The significant value of the F- Statistic further justifies that the model is not biased.

The Goodness of fit of the model was also tested. The findings in Table 3 indicated that the model was a good fit and none of the estimated parameters was equal to zero, $F(6, 294) = 65.519$, $p\text{-value} = 0.000$. Thus, the model was fit to predict self-employment among TVET Technician Graduates in Kenya. In addition, holding every other explanatory variable constant, the findings show that self-employment would be negative and significant, $\beta_0 = -1.643$, $p = 0.000$.

Table 3: Testing hypothesis

	Unstandardized Coefficients		Standardized Coefficients			Correlations Zero-order
	B	Std. Error	Beta	t	Sig.	
(Constant)	-1.643	0.389		-4.219	0.000	
Time management	0.086	0.05	0.083	1.708	0.089	0.480
Solve problems	0.110	0.052	0.112	2.134	0.034	0.525
Work independently	0.172	0.048	0.157	3.56	0.000	0.405
Interpersonal skills	0.097	0.033	0.134	2.957	0.003	0.434
Communication skills	0.669	0.062	0.481	10.832	0.000	0.668
Decision making skills	0.093	0.064	0.070	1.466	0.144	0.446
Creativity and innovations	0.250	0.065	0.288	3.849	0.000	0.561
Adaptability	0.583	0.085	0.514	6.869	0.000	0.667
Model Summary statistics						
R		0.756a				
R Square		0.572				
Adjusted R Square		0.563				
Std. Error of the Estimate		0.612				
F		65.519				
df1		6				
df2		294				
Sig. F Change		0.000				

a Dependent Variable: Self-employment

The regression model estimated as showed in Table 3 was used in testing of the hypotheses. Findings in Table 3 showed that time management does not have a significant effect on self-employment among TVET Technician Graduates in Kenya $\beta_1 = 0.083$ ($p\text{-value} = 0.089$) at 5% level of significance but is significant at 10% level of significance. This shows that at

10% level of significance, time management has a positive and significant effect on self-employment among TVET Technician Graduates in Kenya which would increase by 0.083 units given each unit increase in the ability to practice time management. This can be explained by the fact that 35.4% of the respondents indicated that the level of the ability to practice time management was poor and very poor (see Table 1). From these findings, it is clear that the first hypothesis stating that there is no effect of ability to practice time management on self-employment among TVET graduates is not accepted.

The findings also showed that the ability to solve problems has a positive and significant effect on self-employment, $\beta_2 = 0.112$ and $p = 0.034$ at 5% level of significance. This means that each unit increase in the ability to solve problems results in an increase in self-employment. These findings indicate that the hypothesis stating that there is no effect of ability to solve problems on self-employment among TVET graduates is not accepted. Despite this, over 38% of the respondents highlighted a gap in terms of the ability of the graduates to solve problems by indicating that the level was poor or very poor (see Table 1).

The findings showed that the ability to work independently by the TVET graduates has a positive and significant effect on self-employment, $\beta_3 = 0.157$, $p = 0.000$. This indicates that with each unit increase in the ability of the TVET graduates to work independently, self-employment would increase by 0.157 units. The correlation between ability to work independently was 0.405 which showed that given a unit increase in the ability to work independently, there is a probability of 0.405 that self-employment would also increase. These findings indicate that the hypothesis stating that there is no effect of ability to work independently on self-employment among TVET graduates is not accepted. However, there are existing gaps in the ability of the TVET graduates in working independently as highlighted by 43.3% of the respondents who indicated that the level was poor or very poor (see Table 1).

Furthermore, the findings revealed that interpersonal skills have a positive and significant effect on self-employment, $\beta_4 = 0.134$, $p = 0.003$ and shows that each unit increase in interpersonal skills results in 0.134 unit increase in self-employment. The correlation value of 0.434 indicates that there is a probability of 0.434 that self-employment will increase with a unit increase in interpersonal skills. These findings show that the hypothesis stating that there is no effect of interpersonal skills on self-employment among TVET graduates is not accepted.

The findings also revealed that communication skills have a positive and significant effect on self-employment, $\beta_5 = 0.481$, $p = 0.000$ at 5% level of significance such that with each unit increase in communication skills, there is 0.481 unit increase in self-employment. In addition, there is positive relationship between communication skills and self-employment where there is a probability of 0.668 that self-employment will increase with each unit increase in communication skills. These findings show that the hypothesis stating that there is no effect of communication skills on self-employment among TVET graduates is not accepted.

On the other hand, the findings also showed that although decision making skills have a positive effect on self-employment, the effect is not significant, $\beta_6 = 0.070$, $p = 0.144$ at 5% level of significance. This is despite the findings showing a positive correlation between decision making skills and self-employment that showed that there is a probability of 0.446 that self-employment would increase with each unit increase in decision making skills. These findings mean that the hypothesis stating that there is no effect of decision making skills on

self-employment among TVET graduates is not rejected. This can be accounted for by the fact that there is greater focus on the passing of the examinations compared to the acquisition of aptitude skills such as decision making skills.

In addition, the findings showed that creativity and innovations have a positive and significant effect on self-employment, $\beta_7 = 0.288$, $p = 0.000$ in that with each unit increase in creativity and innovations, there is 0.288 unit increase in self-employment at 5% level of significance. There is also a positive correlation between creativity and innovations and self-employment where there is a probability of 0.561 that self-employment would increase given an increase in creativity and innovations. These findings show that the hypothesis stating that there is no effect of creativity and innovations on self-employment among TVET graduates is not accepted.

Finally, the findings showed that adaptability has a positive and significant effect on self-employment among TVET graduates, $\beta_8 = 0.514$, $p = 0.000$ and accounts for the largest effect among the explanatory variables on self-employment at 5% level of significance. The correlation between adaptability and self-employment showed that there is a probability of 0.667 that self-employment will increase given an increase in adaptability among the graduates. These findings show that with each unit increase in adaptability, there is 0.514 unit increase in self-employment. The findings also showed that the hypothesis stating that there is no effect of adaptability on self-employment among TVET graduates is not accepted.

CONCLUSION

The generic skills tested were ranked from highly perceived as good to the least good: time management, ability to solve problems, ability to work autonomously, interpersonal skills, communication skills, decision making, creativity and innovative skills, and adaptability. These skills are not taught in classroom but acquired in TVET institutions through extra curriculum programs which are basically voluntary. For example, one is not forced to participate in games or competition where generic skills are being exercised. On the other hand, during interaction or through time tabled activities where deadline is required for submission of tasks one would unconsciously learn how to manage time.

The study found time management as a generic skill which graduates acquired most, this is attributed to the fact that most activities in TVET are based on time lines or deadlines. During daily activities in TVET institution the graduates exercised time management which is also requirement for self employment. The study found adaptability ranked lowest due to the fact that informal environment or survival in self employment is totally different from the institution set up. Therefore the graduates felt that they were not well prepared on adaptability skills by TVET institutions where they encounter unkind reception in the informal sector and self-employment. Soft content is not included in the core curriculum and trainees are expected to acquire these skills from extra curriculum. These skills are important particularly to the self employed who must survive on their own being opportunity identifier by applying innovative skills and creativity. These skills are acquired through exposure over time on running of self-employment. As such, although majority of the explanatory variables that are related to soft skills have a positive effect on self-employment, time management skills as well as decision making skills are at a low level among the graduates mainly because

they are not adequately covered by the more practical-oriented curriculum and the focus on examinations by the institutions.

RECOMMENDATIONS

Soft skills need to be imparted more to trainees through core curriculum especially in the era of lack of formal employment. Technical skills alone handicap trainees, they require soft skills to unlock them so they can act creatively in a competitive labour market. For soft skills to be useful to both youth and employers, they need to be tailored to and practised within actual workforce conditions and market demands. Demand-driven youth training models require careful collaboration with employers to design training and placement opportunities for specific skills. To achieve strong employment outcomes for out-of-school youth, soft skills development needs to be linked to other kinds of program supports such as financial literacy, ICT training, job placement services, internships and career guidance. Successful programs for both in- and out-of-school youth typically use engaging modalities for fostering soft skills, such as sports, arts and theatre, entrepreneurship, competitive games and multi-medium. Educators (in both formal and informal institutions) need to have the opportunity to focus on soft skills development through the removal of barriers that prevent them from offering experiential learning. General, technical-vocational education, and other employability training programs should provide entrepreneurship skill-building for young people in and out of the formal school system

REFERENCE

- Adams, A. V. (2007). The role of youth skills development in the transition to work: A global review: Children & Youth, World Bank.
- Adams, A. V., Sara, J., & Razmara, S. (2013). Skills Development in the Informal Sector: Kenya.
- Adomako, S., Danso, A., Uddin, M. and Ofori-Damoah, J. (2016), "Entrepreneurs' optimism, cognitive style and persistence", International Journal of Entrepreneurial Behavior & Research, Vol. 22 No. 1, pp. 84-108.
- Afeti, G. (2006). Strategy to revitalize technical and vocational education and training (TVET) in Africa Background document for the African Union's TVET Experts' meeting, 13-14 December 2006, Addis Ababa.
- Akanbi, G. O. (2017). Prospects for technical and vocational education and training (TVET) in Nigeria: Bridging the gap between policy document and implementation. International Education Journal: Comparative Perspectives, 16(2), 1-15.
- Amimo, C. A. (2012). Tailoring higher education in Kenya to the demands of the postindustrial work place. Baraton Interdisciplinary Research Journal, 2(1), 52-58.
- Badawi, A. A. (2013). TVET and entrepreneurship skills. Revisiting global trends in TVET: Reflections on theory and practice, 275-308.
- Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S., Rasul, I., and Sulaiman, M., Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa (Washington, DC, the World Bank, 2015), <http://www.ucl.ac.uk/~uctpimr/research/ELA.pdf>

- Bank, W. (2010). International Bank for Reconstruction and Development : Stepping up skills for more jobs and higher productivity. [http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1281723119684/Stepping_up_skills.pdf. Assessed 25/01/2016].
- Baum, J.R. and Locke, E.A. (2004), "The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth", *Journal of Applied Psychology*, Vol. 89 No. 4, pp. 587-598.
- Baum, J.R., Locke, E.A. and Smith, K.G. (2001), "A multidimensional model of venture growth", *Academy of Management Journal*, Vol. 44 No. 2, pp. 292-303.
- Bhurtel, A. (2015). Technical and Vocational Education and Training in Workforce Development. *Journal of Training and Development*, 1, 77-84.
- Boahin, P., Eggink, J., & Hofman, A. (2014). Competency-based training in international perspective: comparing the implementation processes towards the achievement of employability. *Journal of Curriculum Studies*, 46(6), 839-858.
- Brown, P., Green, A., & Lauder, H. (2001). *High skills: Globalization, competitiveness, and skill formation: globalization, competitiveness, and skill formation*: OUP Oxford.
- Cachia, R., Ferrari, A., Ala-Mutka, K., & Punie, Y. (2010). *Creative learning and innovative teaching. Final report on the study on creativity and innovation in education in the EU member states*.
- Cheruvilil, K. S., Soranno, P. A., Weathers, K. C., Hanson, P. C., Goring, S. J., Filstrup, C. T., & Read, E. K. (2014). Creating and maintaining high-performing collaborative research teams: the importance of diversity and interpersonal skills. *Frontiers in Ecology and the Environment*, 12(1), 31-38.
- Cooney, R. (2010). Workplace training in a deregulated training system: Experiences from Australia's automotive industry. *Economic and Industrial Democracy*, 31(3), 389-403.
- Daud, M. (2013). How effective is the assessment of generic skills gained by Technical Vocational Education and Training (TVET) of engineering students engaged in Problem-Based Learning (PBL)?—A Literature Review. *PBL Across Cultures*, 88.
- Di Fabio, A. (2014). Intrapreneurial Self-Capital: A New Construct for the 21st Century. *Journal of employment counseling*, 51(3), 98-111.
- Dobbs, R., Madgavkar, A., Barton, D., Labaye, E., Manyika, J., Roxburgh, C., . . . Madhav, S. (2012). *The world at work: Jobs, pay, and skills for 3.5 billion people (Vol. 28)*: McKinsey Global Institute Greater Los Angeles.
- Gamble, J. (2016). From labour market to labour process: finding a basis for curriculum in TVET. *International Journal of Training Research*, 14(3), 215-229.
- Gates et al. (2016). *Key Soft Skills for Cross-Sectoral Youth Outcomes* (Washington, DC, USAID). 21 G20 Digital Economy Ministerial Declaration. Ministerial Conference, Düsseldorf, 6–7 April 2017, b
- George, E. S. (2006). Positioning higher education for the knowledge based economy. *Higher Education*, 52(4), 589-610.
- Gerds, P. (2006). Modular TVET-Teacher-Training-System, Based on Teacher-Qualification-Standards—a Propo-sal of UNIP. *TVET Teacher Education on the Threshold of Internationalisation*, 125.
- Gibbons, W.D. and Lange, T. (2000), "Developing core skills-lessons from Germany and Sweden", Vol. 42 No. 1, pp. 24-32.
- Grugulis, I. and Stoyanova, D. (2011), "Skill and performance", *British Journal of Industrial Relations*, Vol. 49, pp. 515-536.
- Hadi, M. Y. A., Hassan, R., Razaq, A. R. A., & Mustafa, M. Z. (2015). Application of thinking skills in career: A Survey on Technical and Vocational Education Training

- (TVET) qualification semi-professional job duties. *Procedia-Social and Behavioral Sciences*, 211, 1163-1170.
- Hajizadeh, M. and Zali, M. (2016), "Prior knowledge, cognitive characteristics and opportunity recognition", *International Journal of Entrepreneurial Behavior & Research*, Vol. 22 No. 1, pp. 63-83.
- Hampton, C. (2002). Teaching practical skills. *Perspectives on distance education: Skills development through distance education*, 83-91.
- Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly*, 68(3), 348-372.
- Hope Sr, K. R. (2012). Engaging the youth in Kenya: empowerment, education, and employment. *International Journal of Adolescence and Youth*, 17(4), 221-236.
- Hui, S. K. F., & Cheung, H. Y. (2015). Cultural literacy and student engagement: The case of technical and vocational education and training (TVET) in Hong Kong. *Journal of Further and Higher Education*, 39(4), 553-578.
- Ismail, S., & Mohammed, D. S. (2015). Employability Skills in TVET Curriculum in Nigeria Federal Universities of Technology. *Procedia-Social and Behavioral Sciences*, 204, 73-80.
- Jared, D., & Margaret, O. (2015). The Relationship between Dynamic Curriculum Capability and Competitive Advantage of TVET Institutions in Western Kenya Region. Held in Entebbe, Uganda from 7th To 12th December 2014 at Imperial Resort Beach Hotel-Entebbe, 144.
- Jayaram, S., & Engmann, M. (2017). *Diagnosing the Skill Gap Bridging the Skills Gap* (pp. 1-14): Springer.
- Kaminchia, S. (2014). Unemployment in Kenya: Some economic factors affecting wage. *African Review of Economics and Finance*, 6(1), 18-40.
- King, K., & Palmer, R. (2007). *Skills development and poverty reduction: A state of the art review*. Torino: European Training Foundation.
- Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological science in the public interest*, 7(3), 77-124.
- Leung, A. S. M., & McGrath, S. (2010). An Effective Learning Model to Support People Development: The Emerging Approach of The Hong Kong Institute for Vocational Education. *International Education Studies*, 3(4), 94.
- Li, W., Ahmed, M., Khan, Q., & Hongwei, M. (2016). *Education and Training for Rural Transformation: Skills, Jobs, Food and Green Future to Combat Poverty*: SAGE Publications India.
- Lorenz, K. (2009), "Top 10 soft skills for job hunters", available at <http://jobs.aol.com> (accessed 19 October 2012).
- Maniscalco, R.S. (2010), "La competenza interlinguistica e interculturale per la cittadinanza globale", *Label Lingue Europeo: Dialogare Premia, I quaderni LLP, Agenzia Nazionale Scuola*, Vol. 5, pp. 9-13.
- Massaro, M., Bardy, R. and Garlatti, A. (2016), "A soft skills training model for executive education", *Human Centered Management in Executive Education: Global Imperatives, Innovation and New Directions*
- Montague, A. (2013). Vocational and skill shortages in Vietnamese manufacturing and service sectors, and some plausible solutions. *Asia Pacific Journal of Human Resources*, 51(2), 208-227.
- Mourshed, M., Farrell, D. and Barton, D. (2013) *Education to Employment: Designing a System that Works* (Washington DC: McKinsey Centre for Government)

- Mureithi, G. W. (2008). Technical, Vocational Education and training in Africa: Has it lost its significance., Moi University Kenya Kenya
- Mutamba, C. (2014). World Bank Education Policy and Human Resource Development in Sub-Saharan Africa. Online Submission.
- Muthee, M. W., & Scholar, A. P. P. (2010). Hitting the target, missing the point: Youth policies and programmes in Kenya. African Public Policy Scholar. Woodrow Wilson International Centre for Scholars.
- Mutua, C., & Muriithi, M. N. (2015). Rationale of competency based education and training in building and construction industry in Kenya. Held in Entebbe, Uganda from 7th To 12th December 2014 at Imperial Resort Beach Hotel-Entebbe, 53.
- Mwangi, S. W. (2015). Perceptions on implementation of Automotive National Diploma Curriculum on its Trainees' Preparation for Job Performance of Technical Vocational Education Training (Tvet) in Nairobi Region. *Advances in Social Sciences Research Journal*, 2(3).
- Nilsson, S. (2010), "Enhancing individual employability: the perspective of engineering graduates", *Education and Training*, Vol. 52 Nos 6/7, pp. 540-551.
- Oketch, M. O. (2007). To vocationalise or not to vocationalise? Perspectives on current trends and issues in technical and vocational education and training (TVET) in Africa. *International Journal of Educational Development*, 27(2), 220-234.
- Olivier, T., Hausdorf, P., Lievens, F. and Conlon, P. (2009), "Interpersonal dynamics in assessment center exercises effects of role player portrayed disposition", *Journal of Management*. doi: 10.1177/0149206314525207.
- Omolo, J. (2013). Employment challenges in Kenya. *African Journal of Economic Review*, 1(1), 18-32.
- Ongaro, M. O. (2015). Rationale and Challenges of Competency Based Education and Training. Held in Entebbe, Uganda from 7th To 12th December 2014 at Imperial Resort Beach Hotel-Entebbe, 65.
- Otobe, N. (2016). Employment Policy Department Employment Working Paper No. 197 2016. ILO, 13, 3.
- Oyebolu, O., & Oshin, M. (2011). Roles of Technical and Vocational Education (TVE) in Alleviating Poverty in Nigeria. *African Journal for Contemporary Issues in Education*.
- Pilar, I., Calopa, M.K. and Brodar, K. (2009), "Impact of project management education and ICT usage on project success", (Unpublished academic exercise), University of Zagreb.
- Pongo, N. A., Effah, B., Osei-Owusu, B., Obinnim, E., & Sam, F. K. (2014). The Impact of TVET on Ghana's Socio-Economic Development: A Case Study of ICCES TVET Skills Training in Two Regions of Ghana. *American International Journal of Contemporary Research*, 4(1), 185-192.
- Sail, R.M. and Alavi, K. (2009), "Social skills and social values training for future k-workers", *Journal of European Industrial Training*, Vol. 34 No. 3, pp. 226-258.
- Shepherd, D. and Wiklund, J. (2009), "Are we comparing apples with apples or apples with oranges? Appropriateness of knowledge accumulation across growth studies", *Entrepreneurship Theory and Practice*, Vol. 33 No. 1, pp. 105-123
- Shyamala, E.D., Subramaniam, T. and Daniel, E.G.S. (2009), "Final year undergraduates' perceptions of the integration of soft skills in the formal curriculum: a survey of Malaysian public universities", *Asia Pacific Educ. Rev.*, Vol. 11, pp. 321-348.
- Simone, K. and Nale, L. (2010), "Sales training: effects of spaced practice on training transfer", *Journal of European Industrial Training*, Vol. 34 No. 1, pp. 23-37
- Sira, K. S. (2016). Development and Validation of Standard Competencies in Architectural Drafting Technology Program. *The Normal Lights*, 10(2).

- Tang, J. (2008), "Environmental munificence for entrepreneurs: entrepreneurial alertness and commitment", *International Journal of Entrepreneurial Behaviour and Research*, Vol. 14 No. 3, pp. 128-151
- Wachira, M., Root, D., Bowen, P. A., & Olima, W. (2009). An Investigation into informal craft skilling in the Kenyan and South African construction sectors. Cape Town.
- Wang, Y. (2012). *Education in a changing world: Flexibility, skills, and employability*. World Bank, Washington, DC.
- Wass, R., & Golding, C. (2014). Sharpening a tool for teaching: the zone of proximal development. *Teaching in Higher Education*, 19(6), 671-684.
- Wheelahan, L., & Carter, R. (2001). National training packages: a new curriculum framework for vocational education and training in Australia. *Education+ Training*, 43(6), 303-316.
- Wood, J. C. M. (2008). *The impact of globalization on education reform: A case study of Uganda*: University of Maryland, College Park.
- Zedeck, S., & Goldstein (2000). Sliding bands: An alternative to top-down selection. In R. Barrett (Ed.), *Handbook of fair employment strategies*. Westport, CT: Courum Books.