

Integration Of Soft Skills Into The TVET Curriculum In Kenya

Charles M.M. Ondieki

Associate Professor; Mechanical Engineering,
Multimedia University of Kenya,
Nairobi, Kenya
charlesondieki@gmail.com

Ndungu Kahihu

Chief Executive Officer,
CAP YEI;
Nairobi, Kenya
ndungu@capyei.org,

Sharleen Muthoni

Consultant,
CAP YEI;
Nairobi, Kenya
sharleen@capyei.org,

Abstract—Life skills is a term used to describe a set of basic skills acquired through learning and/or direct life experience that enable individuals and groups to effectively handle issues and problems commonly encountered in daily life. They include creativity, critical thinking, problem-solving, decision-making, the ability to communicate and collaborate, along with personal and social responsibility that contribute to good citizenship – all essential skills for success in the 21st century, both for healthy societies and for successful and employable individuals. Life skills will help keep school-leavers off the streets and reduce the threat of social unrest; they will generate more employment opportunities than would otherwise be the case.

The failure of TVET institutions to provide life skills results in graduates who, even when they have the requisite technical skills, are not able to succeed at work or in developing their own business and lack the resilience to recover from inevitable setbacks. This has in turn led to employers who are usually deeply dissatisfied with the public TVET system and often must invest their own resources in training their staff. The objective of this research was to test the potential for integrating CAP YEI's proven life skills curriculum in the public TVET system by introducing the module to a selected number of Vocational Training Centers (VTC's) in Kenya and assessing the impact on beneficiaries' learning and course completion outcomes against a chosen control group. Generally, there was a positive trend with the Treatment Group (TG), which can be attributed to the Life Skills that had been offered to the students. The difference in proportion of change between the Treatment and Control Groups was significant and the direction towards the predicted change indicated that the life skills training had a positive impact on the youth. The findings of this study will be helpful to TVET institutions and other institutions of higher learning to integrate life skills into their curriculum in order to lead to improved learning and livelihood outcomes.

Key words: *Life Skills, TVET Institutions, VTCs, CAP YEI BEST Model*

I. INTRODUCTION

A. Background Information

In 2016 the German Federal Ministry for Economic Cooperation and Development (BMZ) commissioned a YouMatch Project implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). "YouMatch" stands for the *Global Initiative on Innovative Employment Services for Youth*, and its overall objective of the global initiative is to offer young people long-term employment perspectives. It is a global initiative that is used to bring youth into employment with a particular focus on Sub-Saharan Africa and the Middle East and North Africa region (MENA) where youth unemployment and underemployment are among the highest in the world. The initiative is centred on the link between labour demand and supply with the key idea to improve employment services for youth. To achieve the project's objectives six working groups were formed.

In January 2017, YouMatch established a research fund called YouMatch Open Innovation Fund for Employment Services (YouMatch OIFES) and invited the six working groups to apply for the funds to carry out research in their areas. Group four (4), which had been asked to look at the challenges concerning the "*Mainstreaming career guidance and life skills in TVET and school curricula*" applied for funds to research on the *integration of Soft Skills into the TVET Curriculum in the TVET system in Kenya*; the group was successful and they were asked to carry out the research.

B. Life Skills Definition

Life skills is a term used to describe a set of basic skills acquired through learning and/or direct life experience that enable individuals and groups to effectively handle issues and problems commonly encountered in daily life. They include creativity, critical thinking, problem-solving, decision-making, the ability to communicate and collaborate, along with

personal and social responsibility that contribute to good citizenship – all essential skills for success in the 21st century, both for healthy societies and for successful and employable individuals.

Life skills education is a structured program of needs- and outcomes-based participatory learning that aims to increase positive and adaptive behaviour by assisting individuals to develop and practice psycho-social skills that minimize risk factors and maximize protective factors. Life skills education programs are theory- and evidenced-based, learner-focused, delivered by competent facilitators, and appropriately evaluated to ensure continuous improvement of documented results.

(https://www.unicef.org/lifeskills/index_7308.html)

There are three categories of Life Skills:

- **Category 1: Skills of knowing and living with oneself** that comprise Self-awareness, Self-esteem, coping with emotions, and Coping with stress.
- **Category 2: Skills of knowing and living with others** that comprise Empathy, Effective communication, Conflict resolution and negotiation, Friendship formation, Assertiveness, and Peer pressure resistance
- **Category 3: Skills of effective decision making** that comprise Critical thinking, Creative thinking, Problem solving, and Decision making.

C.The Reasons for Training in Life Skills

Life skills will help keep school-leavers off the streets and reduce the threat of social unrest; they will generate more employment opportunities than would otherwise be the case. The training in Life Skills will benefit young people by:

- i) Helping them to develop self-confidence and successfully deal with significant life changes and challenges, such as bullying and discrimination.
- ii) Giving them a voice at school, in their community and in society.
- iii) Enabling them to make a positive contribution by developing the expertise and experience, they need to assert their rights and understand their responsibilities, while preparing them for the challenges and opportunities of adult and working life.

D.Mainstreaming career guidance and life skills in TVET and school curricula

The guidance and career education program plays a central role in secondary school by providing students with the tools they need for success in school, in the workplace, and in their daily lives. In particular, the curriculum focuses on skill development that will help students better manage their time, resources, and dealings with other people to improve their opportunities for success both in school and in their future lives. Courses in guidance and career education actively involve students in research,

inquiry, problem-solving, and decision-making processes related to planning for postsecondary education, training, or work. The guidance and career education program is designed to recognize the diverse abilities, strengths, and aspirations of all students, providing them with knowledge and skills that will benefit them throughout their lives.

The goals of the guidance and career education curriculum are to enable students to:

- understand concepts related to lifelong learning, interpersonal relationships, and career planning;
- develop learning skills, social skills, a sense of social responsibility, and the ability to formulate and pursue educational and career goals;
- Apply this learning to their lives and work in the school and the community.

These goals are organized into three areas of knowledge and skills: student development, interpersonal development, and career development, as outlined in *Choices into Action: Guidance and Career Education Program Policy for Ontario Elementary and Secondary Schools, 1999*.

The guidance and career education program aims to help students become more confident, more motivated, and more effective learners. Students learn how to identify and assess their own competencies, characteristics, and aspirations. They explore a broad range of options related to learning, work, and community involvement through a variety of school and experiential learning opportunities. Students develop learning and employability skills and strategies that they can apply in their secondary and postsecondary studies and in the workplace. They identify and develop essential skills and work habits that are required for success in the workplace, as well as skills needed for effective communication, teamwork, and leadership. In their guidance and career education courses, students learn about the changing nature of work and trends affecting the workplace, and gain insights into the challenges and opportunities they will encounter in the modern economy. The curriculum allows for opportunities for students to practice the skills they are developing in both school and community contexts and to become aware of the importance of contributing to their communities.

E.Understanding of Life Skills

There is a general agreement that Life skills play an important role in the workplace and that this development should be reflected in TVET. While the extent to which life skills are integrated in TVET varies, reference to life skills can be found in policy frameworks across the African region. In some countries, they are included in laws and/or regulations, as target goals in policies or as action plans for implementation. A few countries have yet to develop life skills in their policies and/or action plans. In some countries, life skills in TVET are referred to as

'employability skills'. However, in general terms it should be understood that:

- **Life Skills** comprising (1) Self-Management, (2) Planning and Organizing, (3) Communication, (4) Working with Others, (5) Problem Solving, (6) Initiative and Enterprise, (7) Applying Numeracy, Design and Technology Skills, and (8) Learning are very crucial skills that every student should have. These skills are applicable and transferable in different vocational and social environment. However, these skills are not easy to teach and assess.

- Life Skills are the very important skills sought after by employers from their job applicants. These skills are perceived as more crucial than the technical skills.

- The importance of Life Skills, especially in the 21st century is not only for working but also for personal growth and quality of life.

a) A framework of integrating Life Skills into TVET curriculum

Input and demand from industry are perceived as the most important for improving the integration of LS in TVET. The process to integrate transferable skills brings together the related government bodies, such as Ministry of Labour and National certification bodies. Some institutions have their autonomy to customize their approaches to integrating Life Skills in their curriculum, teaching learning, and assessment.

The best approach is to promote **student-centered** (i.e., CBET) method to teach **Life Skills**. This also requires teachers/trainers with industry background in TVET institutions. Assessing Life Skills is influenced by the regulation in the respective institution and the nature of the subject. Some countries engage industry and other related institution to assess these **Life Skills**. Observation is the most common assessment approach in assessing **Life Skills**, where it will report the descriptive analysis.

b) Methods of Integrating of Life Skills (LS) in TVET Institutions

Methods of Integrating of Life Skills (LS) in TVET curriculum, teaching-learning and assessment are divided into three (3) categories:

- the integration of **Life Skills** in TVET curriculum,
- The teaching and learning process, and
- The assessment method.

c) The integration of Life Skills in TVET curriculum

- LS is to be emphasized in all the new (CBET) curricula and grouped under basic competencies.

- One body, say CDACC in Kenya, is to be tasked to develop the basic competencies. Industry and other stakeholders have to be fully involved in developing the competencies so that the industrial

needs and market demands are the influencing factors in developing LS in the curriculum.

- The Government should provide standard books related to life skills

- LS should also be incorporated and embedded in the learning guide

- LS should be integrated both in the off-the-job and on-the-job training

d) Integration of Life Skills in Teaching and Learning Process

- The transfer process of LS employs the real phenomenon as learning orientation. Some teaching methodologies are: project-based learning, problem-based learning and group discussion

- Two types in implementing LS in teaching and learning process: 1. Embedding teaching and learning of communication skills, teamwork, critical thinking, and other skills in the classroom. 2. Offering subjects such as entrepreneurship, leadership and other skills as optional courses.

- The principles of life skills (LS) teaching activities: 1. The content of LS teaching and learning is suitable to the learners' psychology. 2. CDACC will be responsible for the content and quality of life skills (LS) education in TVET. 3. The learners should participate in the volunteer spirit.

- There are different approaches to teach or inculcate LS, ranging from a student centered to teacher centered. LS employment in the teaching and learning process requires the trainers to have industry experience for effective delivery.

- Employing some approaches as follows: 1. Hands on activities / experience based learning approach. 2. Highlighting values/ skills in all learning areas. 3. Utilizing innovative technology. 4. Applying skills to real-life situation. 5. Engaging learners via varied instructional approaches. 6. Using the 4 teaching learning episodes (what to know, process, reflect and transfer). 7. Allowing students to discover and develop skills by themselves.

- LS are employed in a dual program, (which ties apprenticeship in the industry), classroom activities, research based learning, group studies, project based learning, and extracurricular activities (i.e., sport and leisure activities, community services, leadership camp, and skill competition)

Life Skills are very valuable for everybody, not just for students but also adults, for not only work but also everyday life. They are also important for the economic development of a country. If we want to have dynamic and sustainable economic development, we need a labour force that is adaptable to changes, at personal and organizational levels. We are, basically, trying to impart life skills through giving students' an understating of the life skills concept and by opening their minds to be able to adapt to different work environments.

To promote life skills, TVET must be conducted in an environment conducive to nurturing these skills. Such an environment can only be created through a holistic approach at both national and school/institution levels. *“The whole TVET system must convey the same message: ‘Life Skills are very important’”*. Students should be encouraged to explore and expand these skills inside and outside of school so as to broaden the scope of the **Life Skills** i.e., Integration of **Life Skills** in the course content should not be restricted to the classroom. Any activity inside and outside the classroom should reflect **Life Skills** and the teacher/trainer should be a role model in their application.

F. Problem Statement

The research title was informed by the many challenges facing the Technical and Vocational Education and Training (TVET) systems in Sub Saharan Africa, one of the critical ones is the failure to provide transferable life skills that youth need in order to be successful in the world of work, business and life. Many employers prefer to hire youth who, in addition to possessing required technical skills, also possess such ‘skills’ like: positive attitudes, honesty, initiative, ambition, communication, respect, ability to follow instructions and work in teams, etc. However, the training of these skills is not part of the curriculum of most TVET institutions and therefore not taught in the government run TVET system. Even in cases where life skills topics are integrated in the curriculum, these are usually optional and therefore instructors tend to omit them. The failure to provide life skills results in graduates who, even when they have the requisite technical skills, are not able to succeed at work or in developing their own business and lack the resilience to recover from inevitable setbacks. This has in turn led to employers who are usually deeply dissatisfied with the public TVET system and often must invest their own resources in training their staff. In addition, employers experience a high employee turnover rate and increased staff retention costs. Vocational and technical education and training, therefore, suffers a bad reputation among employers as well as potential students and their parents leading to youth preferring to pursue career paths through higher education and academic careers/occupations. This in turn leads to a lack of technical skills and skilled employees available for the economy. Moreover, the female learners tend to avoid TVET programs that are traditionally male dominated because they lack the confidence and ambition to pursue these courses, attitudes that a good life skills curriculum should help build.

G. Research Objectives

The objective of this research was to test the potential for integrating CAP YEI’s proven life skills curriculum in the public TVET system by introducing the module to a selected number of Vocational Training Centers (VTC’s) in Kenya and assessing the impact on beneficiaries’ learning and course

completion outcomes against a chosen control group. The following were the specific objectives of this study:

- Test the potential for integrating a proven life skills curriculum in the public TVET system by introducing CAP YEI’s module to a selected number of Vocational Training Centers (VTC’s) in Kenya
- Assess the impact of integrating the life skills in the TVET curriculum
- Derive lessons learnt and give recommendations
- Engage stakeholders for adoption and validation of the tested model

CAP-Youth Empowerment Institute Kenya (CAP YEI) is a non-government organization started in Kenya in 2011 committed, to train youth out of school in job entry level skills. This training is operationalized using the Basic Employability Skills Training (BEST) model. The first five years’ project was under the Learn, Earn, and Save Initiative in Sub Sahara Africa-Kenya, supported by the MasterCard Foundation and CAP Workforce Development Institute (WDI). The new five-year phase started in September 2016 under the project title Expanding and Sustaining the CAP-BEST Program and Model in Kenya in partnership with MasterCard Foundation. This project is guided by three core objectives:

- *To ensure disadvantaged youth acquire life skills, relevant labor market skills, savings education, and small business development.*
- *To facilitate disadvantaged youth access internship and job opportunities during through institutionalized public-private partnership.*
- *To ensure youth receive vital pre and post job placement counseling, support, and services including financial as they transition to work.*

H. Rationale

It is expected that the provision of life skills and support, in conjunction with technical skills, leads to better learning outcomes for youth as indicated through lasting measurable behavior, attitudes and perception change along such domains as, improved relationships, self-confidence, optimism, negotiation, life planning, resilience among others. Over the long term, leads to greater livelihood access and more success for youth in the world of work or small business and results in productivity gains by industry employers who hire well-trained and motivated workers. There is, therefore, a general agreement that Life skills play an important role in the workplace and that this development should be reflected in TVET.

Input and demand from industry are perceived as the most important for improving the integration of Life Skills in TVET. The process to integrate transferable skills brings together the related government bodies, such as Ministry of Labour and National certification bodies. The best approach is to promote **student-**

centered (i.e., CBET) method to teach **Life Skills**. This also requires trainers with industry background in TVET institutions. Methods of Integrating of Life Skills in TVET curriculum, teaching- learning and assessment are divided into three categories: the integration of **Life Skills** in TVET curriculum, The teaching and learning process, and The assessment method.

I. Justification for the Research

Life Skills are very valuable for everybody, not just for students but also adults, for not only work but also everyday life. They are also important for the economic development of a country. If we want to have dynamic and sustainable economic development, we need a labour force that is adaptable to changes, at personal and organizational levels.

The life skills and work readiness curriculum of CAP YEI has emerged from many years of engaging closely with employer needs and the aspiration of young people. For instance, every technical skills course offered by the organization is only selected after a thorough market assessment to identify the potential for livelihood opportunities that the trained youth can engage in. Part of this scan includes a process of querying employers on the ideal skills and attitudes they desire their employers to have. While many employers will start by identifying technical skills related to the jobs they offer, almost all of them, upon further probing will cite attitudes and behaviors that are not often offered by many skills providers. These include honesty, time keeping, and communication, ability to follow instructions, work in teams and be proactive. From these conversations, CAP YEI has created a curriculum that aims to offer youth trainees an opportunity to building the kind of attitudes and behaviors that will make them stand out in the work place.

It has been shown in other research that these life skills are highly valued by employers and CAP YEI's experience clearly confirms this. The organization conducts annual program reviews with selected employment sector representative where employers are invited to critique the program from the perspective of their interaction with youth either during training, internship or at the work place. One of the most exciting findings is the indication that these behaviour changes may actually last for life. One of the surveys carried out to assess the CAP YEI model indicated that 61% of youth trained by CAP YEI were doing well after 4 years since they left the program while another 64% were saving money in order to start their own business or go back to school for further learning. Many CAP YEI graduates when asked, report that life skills were the most important lessons they learned from CAP YEI.

The model that CAP YEI uses in order to achieve these results is known as Basic Employability Skills Training (BEST). BEST is a nine step dynamic demand driven model that works by creating linkages between skills providers on the one hand and industry

employers and markets on the other. It places strong emphasis on the employability needs of employers and the life aspiration of the young people. It offers an integrated trainee support system that extends beyond course delivery and a program that lays as much emphasis on 'hard' technical skills as on 'soft' life skills.

J. Research Hypothesis

The provision of life skills and support, in conjunction with technical skills, leads to better learning outcomes for youth as indicated through lasting measurable behavior, attitudes and perception change along such domains as, improved relationships, self-confidence, optimism, negotiation, life planning, resilience among others. Over the long term, leads to greater livelihood access and more success for youth in the world of work or small business and results in productivity gains by industry employers who hire well-trained and motivated workers.

a) Justification for the Research Hypothesis

The basis of proposing this research hypothesis was the experience of CAP YEI in providing life skills through an integrated Basic Employability Skills Training (BEST) model. Over a period between 2011 and 2017, CAP YEI was able to directly reach and train over 12,000 youth through a market based skills program lasting 3 to 4 months. The transition from learning to earning for these youth had averaged over 82% (75% linked to jobs and 7% who opted to start micro businesses). Different assessments of the program had all concluded that the provision of life skills, in conjunction with technical skills, was a critical factor in the BEST models success. For instance, a longitudinal survey carried out by the University of Minnesota had questioned youth on what it was they valued most in the CAP YEI program. According to the 2014 report an overwhelming number valued life skills and the inter personal relationship this created between them and the staff. In 2015 a summative evaluation of the program pointed to a combination of factors as being behind the success of the model which included the life skills component. Two independent analysis papers that were based largely on the data collected by CAP YEI came to the same conclusion. In a peer reviewed paper written by Prof Chris Johnstone, Acacia Nikoi and Ndungu Kahihu, titled *Uhusiano Design for Learning*, the authors noted that ".the self-confidence developed through life skills was a key success factor, helping youth to see themselves as positive members and contributors to society."

All this gave the confidence that the same module could work with youth in the public TVET system, hence the hypothesis. But the context in which training happens in a large government system is different from that of a small flexible private sector skills provider like CAP YEI and it was necessary to test this assumption. The selection of Kenya as a test country was justified due to the fact that the country is

deeply involved in carrying out reforms in the TVET sector as outlined elsewhere and the partnership with CAP YEI has been well established¹. Nevertheless, the challenges Kenya faces, in the skills and youth employability sector, are fairly similar to those in other Sub Saharan Africa countries and the conclusions can be fairly generalized across the region. The findings will be useful in shedding light on how such application of life skills in government institutions can be best effected, not just in Kenya but also in most of the other African countries.

II.METHODOLOGY

A.Study Area

The Students who participated in this study were identified and selected from ten (10) VTCs across the country and who had not been taught any life skills. The ten were then randomly divided into two equal 'Treatment' and 'Control' groups. The treatment group (TG) of VTCs were: *Kilgoris, Kangemi, Kiplabai, Magemo, and Migwani* with a total sample of 286 students. The control group (CG) of VTCs were: *Nduluku, Mkongani, Sero, Wakiaga and Eiden* with a total sample of 302 students. However, *Wakiaga* VTC did not participate during the second round of data gathering and it was therefore, not considered in the final analysis.

TABLE 1: PARTICIPATING VTCs

Treatment Group			Control Group		
VTC	Baseline Sample	Impact Sample	VTC	Baseline Sample	Impact Sample
Kilgoris	47	40	Nduluku	70	42
Kangemi	34	14	Mkongani	78	28
Kiplabai	72	19	Sero	40	72
Magemo	51	34	Eiden	61	35
Migwani	33	54	Wakiaga	53	0
TOTAL	237	161	Total	249	338

A Training of Trainers course on Life Skills was designed, organized and conducted for the trainers of the five-treatment group VTC's; each trainer was provided with a package of curriculum and support materials.

The selection of the participating VTCs was conducted by the research team based on the following criteria:

- Must be a public TVET institution
- Have at least 150 students' population
- Willingness to be part of the research
- Have at least 30% female students
- VTC management able to allocate at least two hours every week on the timetable for life skills,
 - Have at least two trainers willing to trained in life skills,
 - Train the selected group of youth in life skills

- Assist in the administration of questionnaires and any other data gathering activities

B.Study Population and Sample

The target population of the study consisted of a mix of students who were primary school drop outs, who had completed class eight of primary education but did not manage to join secondary school, secondary school dropouts and students who had completed form four of secondary education. The final selection was done using a stratified random sampling so as to include students who were studying for different technical courses. The 30% gender composition that had been required in the selection criteria was not met by every individual VTC. However, the overall sample met the gender composition requirement as shown below, with an overall ratio of 38% of participants being female. This the researchers felt satisfied the conditions of the research.

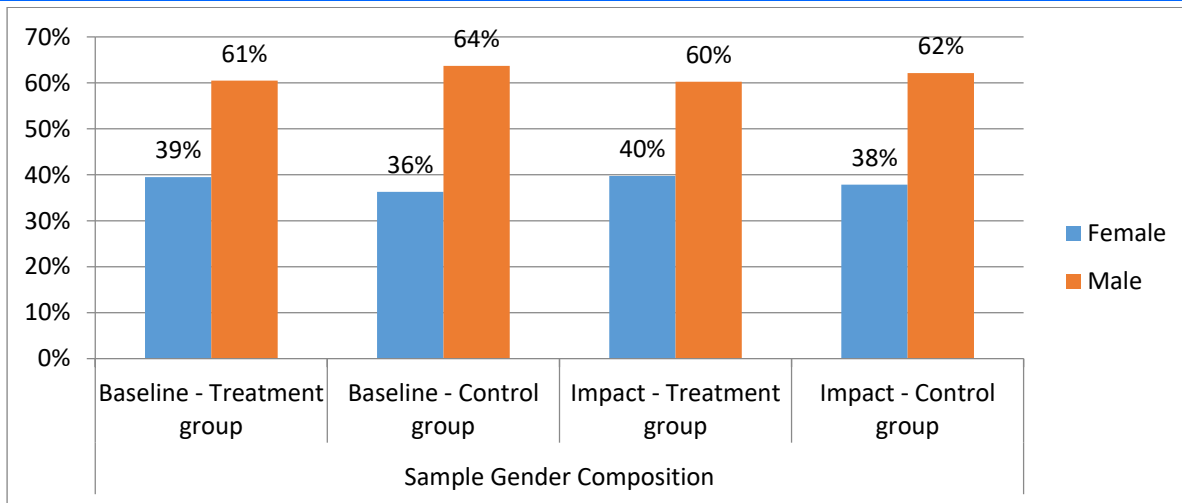


Figure 1: Sample Gender Composition

C. The Evaluation of the Variables of the Study

The independent variables of the study were the students' response to the questions, while the dependent variable was the mean percentage scores obtained to indicate the trend of the impact of integrating life skills in the curriculum.

D. Data Generation Tools

The following instruments were used to collect data:

- Structured questionnaires covering various topics of Life Skills,
- Assessment of the responses from the students,

a) Structured Questionnaires

Questionnaires were the main tool used to get information regarding the students' responses to the various questions on the various topics of the life skills. The questionnaires were hand delivered to the participants and filled in the presence of the researchers. The researchers assisted the students to understand the questions so that they could give the appropriate responses. The same questionnaire was administered twice to all participants, first at the **baseline before** the life skills training was given to the treatment group and second at the **impact level** after the training. The questions were organized into nine (9) clusters each meant to assess behavior, attitude and perceptions change under a particular variable. These variables were: Self-esteem, Mindset, Self-efficacy, Optimism, Relationship with other students and teachers, Teamwork, Negotiation, Perception on TVET and Work ethics. A tenth cluster of questions assessed students plans post training.

b) Assessment of the responses from the students

The questionnaires were administered directly to the students who were put together in every VTC by the researchers. After the students finished filling in the questionnaires the researchers collected them for

assessment. A second questionnaire was administered once to trainers from the treatment group to assess their experience of the life skills curriculum delivery and their suggestions for policy makers and other stakeholders.

E. Data Analysis and Presentation

Data was collected using a structured questionnaire that was administered to the students by the researchers. The data was analyzed through regression analysis with the use of SPSS software and presented in tables and charts. Two approaches were used: a regression analysis to indicate the proportion of change against each question and cluster and a trend analysis to indicate the broad direction of change as indicated by response clusters of related questions. This result was obtained by doing a trend count of the number of question responses in each cluster that indicated change in a positive direction.

Since the primary objective was to assess broad trends in response change, only answers provided at the 'extremes' of each response continuum, for instance 'strongly disagree' versus 'strongly agree' were considered. Each question's response was then rated by the direction of change against each answer, either positive or negative. The broad trend towards a certain direction was then established by simply counting the number of questions where the rating was positive against those where the rating was negative. This trend count provided a pattern for both treatment and control groups that enabled the researchers to identify the direction of change exhibited by each of the two groups. The analysis used percentages so as to control for the fact that the treatment and control samples were not equal and some students dropped out before the research was completed.

III. FINDINGS

Generally, there was a positive trend with the Treatment Group (TG), which can be attributed to the Life Skills that had been offered to the students. The

difference in proportion of change between the Treatment and Control Groups as given by the various tables and bar charts is significant and the direction towards the predicted change indicates that the life skills training had a positive impact on the youth. This change, however, could have been more pronounced had it not been due to language barrier that might have reduced the students' understanding of the questions, and the inexperience of the trainers.

At least 90% of the trainers felt that students received the life skills curriculum well and they were very responsive to the curriculum in terms of preparation, teamwork and participation. 90% of the trainers noted positive changes in self-awareness, problem management, awareness of strengths, potentials and weaknesses, self-esteem and class participation. They all agreed that CAPYEI life skills curriculum has a significant and positive impact on trainees in terms of self-awareness, confidence and relationship management. They felt the life skills training is good and trainers are able to know how to handle students and their everyday lives; CAPYEI life skills training is a good initiative since it helps youth counter the problems affecting them today e.g. drug abuse, *miraa* chewing, early marriages and school drop-outs. They advised Life skills need to be done also in churches so as to reach more youths.

The provision of life skills training results into positive behavior, attitude and perception changes in students. The delivery of life skills by trainers has an added benefit of improving relations between trainers and students, and enhanced classroom participation. The best way to deliver life skills is by using the same trainers who deliver other technical subjects as this creates a good platform for building positive student trainer relations and reinforcing critical life skills concepts and behavior changes. These changes will last over time and lead to increased retention and completion as well as better employability outcomes. For best results, it is necessary to train trainers in both

life skills content as well as the experiential methodologies of delivery.

There is a need to replicate this research in other countries of the Sub Saharan Africa region to validate the findings and conclusions made. The results of assessment of behavior change, while very persuasive, are limited by time and the fact that the research could only assesses immediate changes after training. It is important to follow up some of the respondents to confirm if indeed these changes were sustained and whether they led to positive livelihood and life outcomes as well. The roll out of life skills in the government TVET system requires additional investments that policy makers should plan for, in terms of training of trainers, recognition and facilitation, materials and equipment and curriculum design.

A. Summary of behavior, attitude and perceptions change responses

The nine question clusters that assessed different behavior, attitudes and perception changes showed a pronounced pattern that could not be attributed to chance. For one, the proportion of changes suggested by the treatment group data was much higher than that of the control group, implying that life skills generated a much higher and more active application of concepts learned under life skills into real life behaviors, attitudes and perceptions. The only exception was for the cluster assessing 'relationships with other students and teachers' where the proportion of positive change was a fairly low 17% for both the treatment and control groups. Secondly the pattern of results was broadly in the direction of positive change, especially when you consider total change for each cluster (see diagram below). These results would clearly support the argument that providing life skills not only leads to a much higher level of behavior, attitudes and perception change in young people, but that this change is largely positive.

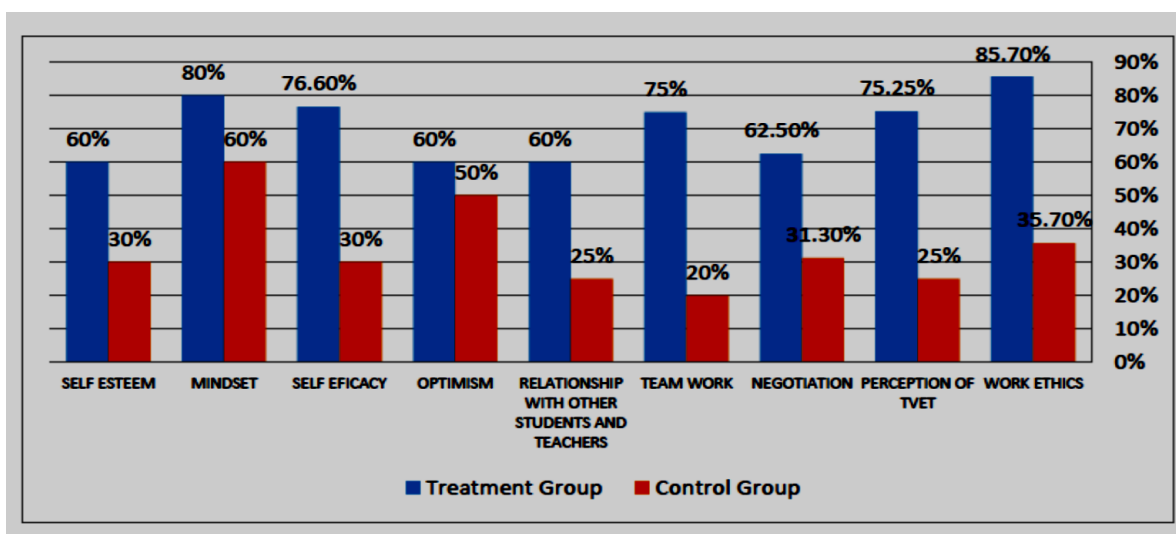


Figure 2: Tendency to change of Treatment Group vs Control Group by question cluster

Secondly, responses given for eight out of nine question clusters showed that the direction of change for the Treatment Group was overwhelmingly positive, while that of the Control Group was much more likely

to be negative, or where positive, only minimally so. An example from the cluster of questions measuring 'Mindset' and 'Teamwork' is shown below.

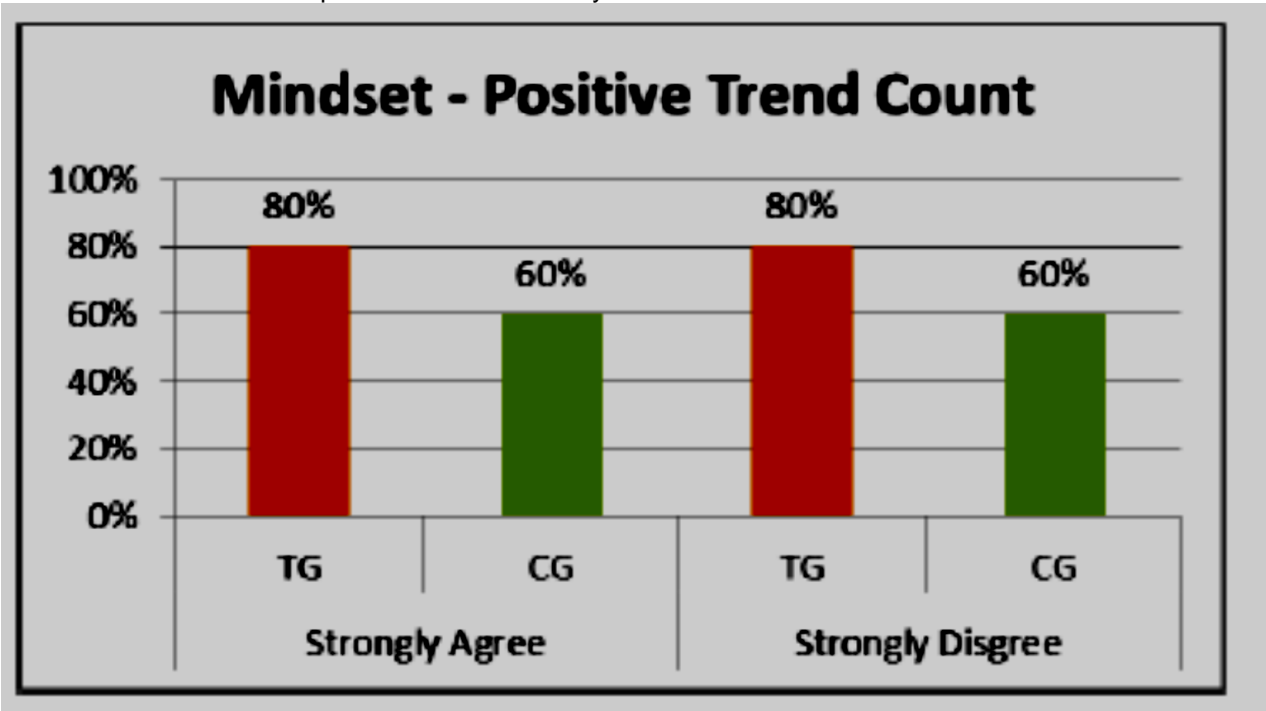


Figure 3: Mindset positive trend count comparison

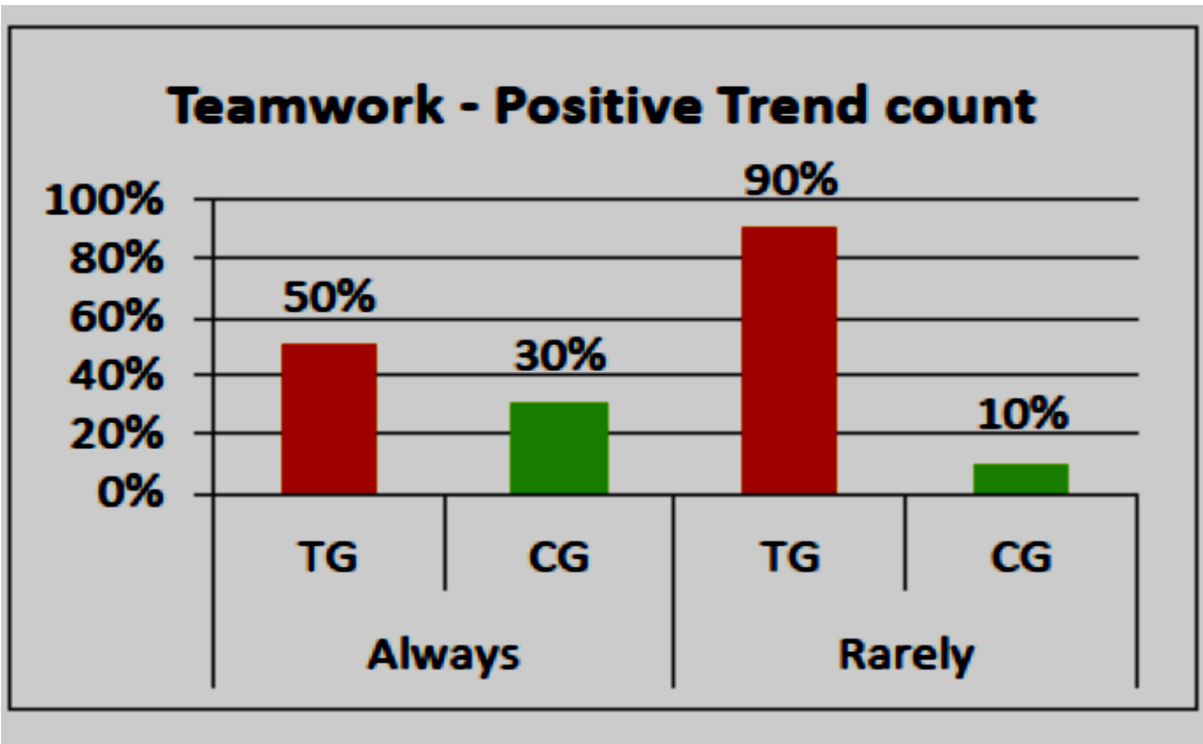


Figure 4: Teamwork positive trend count comparison

The only departure from this trend was the cluster assessing 'Relationship with other students and teachers' where the percentages at one response extreme, 'Never,' were equal for both the Control Group and the Treatment Group (see below) indicating that the life skills training did not have a

positive impact on the latter. However, the pattern of change at the opposite response extreme, 'Almost always,' followed the same patterns as seen with all other clusters. The researchers explain this outlier as indicative of increased agency leading to dissatisfaction. A similar experience has been

observed among CAP YEI alumni, where the increase in students' self-confidence tends to go along with an

increasing dissatisfaction with 'things as they are,' whether at work or in school.

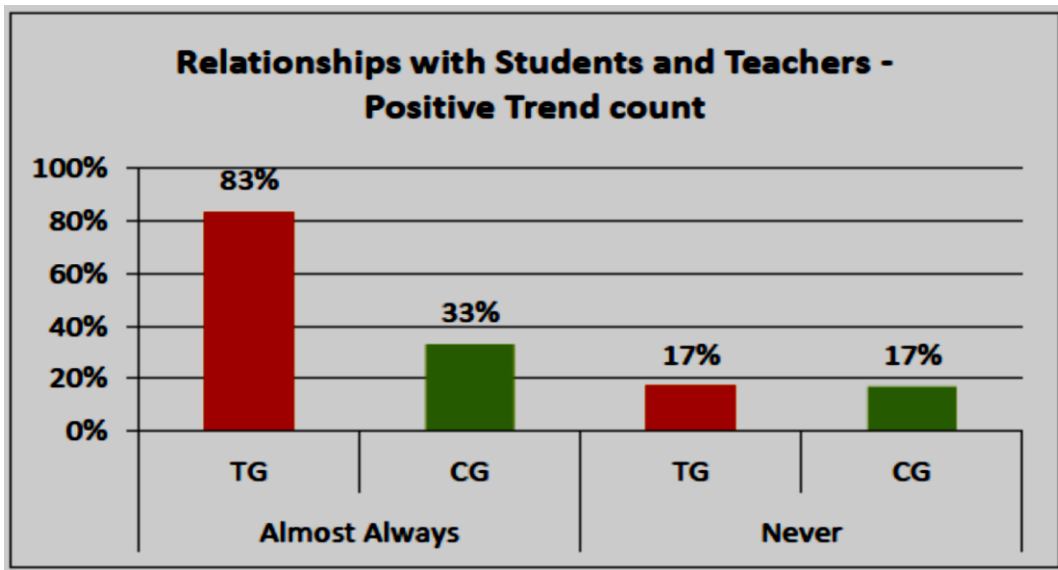


Figure 5: Relationship with students and teachers positive trend count comparison

From this analysis, it was concluded that the provision of life skills leads to a higher rate of behaviour, attitude and perception change in youth, and that these changes are highly positive. From this validation, the research also concludes that it is possible to replicate some of the successes of CAP YEI's life skills curriculum, at least at learning outcome level. However, one limitation of this study is that, owing to the limited time available for the research, it was only possible to measure learning outcome changes. While we can infer the possibility that these changes will later translate into positive livelihood and life outcomes based on CAP YEI's experience, where this has indeed been the case, it would be helpful to carry out a follow up assessment of this survey sample to establish if this is indeed the case.

B. Analysis of Responses by Treatment Group Trainers

The research carried out an assessment of the perceptions and experiences of the trainers who delivered the CAP YEI life skills curriculum to establish what they felt would be the best ways of scaling up the program in the TVET system where they work. To do this, a post evaluation workshop was organized for all trainers from the Treatment Group. During the workshop, trainers were invited to share their experiences and thoughts, both through an unstructured discussion format and through a structured questionnaire. Trainers were asked to give their views on the responsiveness of the students to the life skills curriculum; their experience of the research project; their views of the actual curriculum and support materials; changes they noticed in the students during and after the training; and the benefits of life skills on the trainers themselves. Trainers were also asked which approach they would prefer for scaling up life skills in the TVET system—a specialist approach (with dedicated life skills trainers) or an

integrated approach (where trainers of other subject also deliver life skills). Some of the results are summarized in the table below:

	Question	Overall/Mean response	
		Positive	Negative
1	Responsiveness of the students to the life skills curriculum	84%	16%
2	Experience of the research project	77%	23%
3	Rating of the curriculum and support materials	85%	15%
4	Changes noticed in students' behaviour	71%	29%
5	Benefits of the life skills curriculum to trainers	86%	14%

Finally, 80% of the trainers indicated they would prefer a non-specialist approach to scaling up life skills. They felt that such an approach would encourage greater interaction between trainers and students. They also felt that the life skills training would enhance their technical class lessons. On the other hand, the 20% who disagreed felt that a specialized trainer would be more effective since the technical course trainers are already overworked.

One conclusion from the above responses is that trainers were generally well disposed towards the life skills curriculum and felt that students respond to the same too. It would also seem the CAP YEI methodology and tools of delivering life skills were rated very highly by the trainers who used them, implying that this could be a good starting point for other stakeholders wishing to implement life skills as part of their skills provision efforts.

IV. CONCLUSION AND RECOMMENDATIONS

A. Conclusion

The provision of life skills training results into positive behavior, attitude and perception changes in students. The delivery of life skills by trainers has an added benefit of improving relations between trainers and students, and enhanced classroom participation. The best way to deliver life skills is by using the same trainers who deliver other technical subjects as this creates a good platform for building positive student trainer relations and reinforcing critical life skills concepts and behavior changes. These changes will last over time and lead to increased retention and completion as well as better employability outcomes. For best results, it is necessary to train trainers in both life skills content as well as the experiential methodologies of delivery.

B. Recommendations

a) Policy Recommendations

- The roll out of life skills in the government TVET system requires additional investments that policy makers should plan for, in terms of training of trainers, recognition and facilitation, materials and equipment and curriculum design.
- For life skills to be taken seriously, it should be made examinable and monitoring tools similar to the IYLDP introduced to enable in classroom measurement and reinforcement of the resulting behavior attitude change
- CAP YEI delivers life skills through a dedicated time block (induction) set aside for the purpose and thereafter, continuous reinforcement during classroom training. A similar approach should be considered for TVET intuitions since many students could benefit from such an induction before selecting the courses to take.
- There is a need for Governments to create national policies that will guide the development, delivery, resourcing and assessment of life skills in the education system. The researchers are convinced that such an investment would be worthwhile, considering that life skills seems to have such a key influence in achieving positive education, livelihood and life outcomes.

To evaluate and monitor the impact of life skills on the attitudes, perceptions and behaviour of the youth trained, several tools are used. The key one is the Individual Youth Life Development Plan (IYLDP). This is a monthly evaluation conducted by the facilitators on the students. It rates the students' performance by assessing changes in observed behavior and attitudes and assigning a score against each. The IYLDP is used as individualized assessment tool for behaviour modification. The students are given feedback by the facilitators after each assessment as a way to encourage positive behaviors and discourage negative ones. By constantly reinforcing the critical concepts taught

under life skills, the students are given an opportunity to change and modify their attitudes and behaviors during the course of the 3 to 4 months training.

b) Recommendations for Further Research

- There is a need to replicate this research in other countries of the Sub Saharan Africa region to validate the findings and conclusions made
- The results of assessment of behavior change,

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