

## AN INVESTIGATION INTO THE UTILIZATION OF TECHNOLOGY BY SCHOOL COUNSELLORS IN PUBLIC SECONDARY SCHOOLS IN KAKAMEGA, COUNTY KENYA.

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### ABSTRACT

Technology has become an integral part of every-day life. According to the American School Counsellor Association (2016) technology can be used to promote student development, support academic growth, social and emotional wellbeing and college and career development. The teacher counsellor who lacks training may have difficulties in fulfilling their roles hence the learners will have little confidence in the information they give during counselling. This study focused on investigating the utilization of technology by school counsellors in public secondary schools. The research adopted a descriptive survey design. Stratified sampling, proportionate sampling, purposive sampling and random sampling techniques were employed in this investigation. The study population comprised of all public secondary schools within Kakamega County. This investigation specifically targeted school counsellors, school principals and students of those schools. The study used questionnaires, interviews and document analysis. The Statistical Package for Social Science version 23 was used to analyse the data. Presentation of the data was done using graphs, pie charts frequency tables, and measures of central tendency. The results of the investigation were expected to have implications both practically and theoretically on the educational teacher programs in Kenya. The study was expected to contribute to the improvement of knowledge about use of technology by secondary school counsellors. Practically, the findings gave insight into the inadequacies in the digitalization of school counsellors while making recommendations of the need for best practices for school counsellors.

**Key words:** Technology, counsellor, utilization, roles, inadequacies.

### INTRODUCTION

Technology has become an important part of day-to-day life. Technology also presents different challenges among adolescences and also has a positive impact (Beidoglu & Dincyurek and Akintug, 2015). Since ICT has grown this means the school counsellor can use it for keying information from the students,

visual, aural and printed technological tools which provide information and thoughts (Karatas, 2011). The computer based psychological counselling application increased with the development of ICT (Beidoglu et. al., 2015). The teacher counsellor who lacks training may have difficulties in fulfilling their roles hence the learners will have little confidence in the information they

give during counselling (Mbogo, Mowes, & Chata (2016).

This growth of ICT may also include pre-service training of counsellors. This would ensure more counsellors are comfortable to use ICT in their counselling processes. The role technology plays in the school counselling was predicted in the 1980s (Grosshandler, 2012). School counsellors were made aware and asked to consider the use of computers and related technologies as teammates. This means computer use would enhance the quality of services to the students (Beidoglu et. al., 2015). Student's information when keyed in the computer can be protected. The privacy regulation ensures protection to the client information by the counsellor. The regulations protect all the records and other individual identifiable information (Adelm & Taylor, 2015). The school counsellor is guided by ethical consideration that does not allow them to share student's information. The parents of the students should also be made aware that students have a right to privacy and confidentiality as the basis for an effective counselling relationship (Adelma & Taylar, 2015).

Shea, Cinotti & Stone (2016) in their study on an examination of school counsellor use of electronic case notes found out that for anyone to access student's information they had limited access since one had to have a written permission to access any information. Stone (2013b) noted that education records were routinely shared within the institution, between colleagues without consent and without breaching the legal and ethical consideration. This is because the teachers had an educational legitimate interest in

the students hence allowing them to see the documents.

It is worthy-noting that the American School Counsellor Association [ASCA] (2016) noted that the school counsellor case notes were considered as student's records and therefore parents could access them although the school counsellor was seen to be the only one to have sole custody of the notes. This is because the counsellor hand writes the student cases notes when everyone else had left the counselling room. Technology on other hand has introduced a new way of keeping notes under the regulation and lessened the counsellor's ability to keep what is considered as sole possession notes (Sea, Cinotti & Stone, 2016).

The school counsellors must also recognise the vulnerability of confidentiality in electronic communications and transmit student information electronically in a way that follows current security standards (ASCA, 2016). This would hence mean that the student's management systems would include spaces for schools' counsellors to write notes about students electronically. Steele, Jacokes and Stone (2015) also noted there is need for dialogue between the students' information confidentiality. This is critical especially the practice of professionalism among the school counsellors on use of computers as storage of cases notes.

## **RESEARCH METHODOLOGY**

### **Research Design**

The purpose of this study was to assess the utilization of technology by school counsellors in secondary schools in Kakamega County, Kenya. The study adopted a descriptive survey design.

According to Kerlinger (2004), a descriptive survey makes conclusions about aspects whose exhibition has already taken place and hence the investigator has no straight authority over the independent variables. The study focused on data of variables that have already occurred such as training of teacher counsellors and their competencies, supervision and support, and post-college training options available to them in public secondary schools in Kakamega County. This was critical to the investigation since it enabled the investigator to establish the existing state of counsellors' use of technology and how they impacted on the delivery of guidance and counselling services to the students in public secondary schools in Kakamega County. The study used interview schedules, questionnaires, and document analysis.

In order to accomplish the objectives, the researcher used both qualitative and quantitative research methods. The use of qualitative methods, enables study respondents to give responses that show their particular stand points, language and furnish richer description that supplement the facts obtained by quantitative techniques. The use of qualitative and quantitative is one of the triangulation methods noted by Denzin (2013) and Lock, P. (2011). The data that accrued from the research was analysed using the statistical package for social sciences (SPSS) version 23. This package is a powerful data management tool that gives an in-depth statistical analysis in graphical form, it enabled data editing, gleaning, coding, tabulation and making of statistical inferences. Tabulation and graphical presentations were based on computed percentages and averages. Coefficients of

correlation and other descriptive statistics (Yadutta & Ngan, 2006) were used to summarize the data. Correlation and regression analysis were employed to analyse the hypothesis. Correlation coefficient was used as a descriptive statistic to describe the relationship between the two variables. It was also used for prediction and estimation of a variable from a known variable. This led to the calculation of the correlation coefficient. Pearson's product moment coefficient of correlation was used.

### **Study Area**

This research was conducted in Kakamega County. Kakamega County is one of the most populous counties in Kenya with the highest number of secondary schools in the country. There are 383 secondary schools well spread across the county (Ministry of Education/UNICEF Report, 2014). The county was best suited for the investigation because the schools were in a wide variety of categories and were found in a variety of settings; urban, peri urban and rural. Out of the 383 secondary schools 276 were boarding, 67 both day and boarding, 40 day, and 60 of the schools were for girls, 23 for boys and 300 mixed.

### **Study Population**

The study population comprised of all public secondary schools within Kakamega County, school guidance counsellors, school principals of those schools and the County Quality Assurance and Standards Officer (CQASO). There were 383 public secondary schools consisting of 23 for boys, 60 for girls and 300 co-educational secondary schools (See Table 3.1). The students, Heads of Departments (H.o.Ds), G & C who served

as guidance counsellors together with the respective school principals were also part of the study population.

**Table 3.1: Number of public secondary schools in Kakamega County**

Type of school	Boys' schools	Girls' schools	Co-educational
National schools	1	1	-
Extra County schools	3	2	-
County schools	5	21	17
Sub-County schools	14	36	283
<b>Total</b>	<b>23</b>	<b>60</b>	<b>300</b>

*Source:* (CDE'S Kakamega Annual Report, 2014)

### Sampling Techniques

Stratified random sampling, proportionate sampling, purposive sampling and random sampling techniques were used in this study. First, schools were stratified on the basis of whether they were boys' schools, girls' schools or co-educational schools, or whether they were National, Extra County, County, and Sub-County. Thereafter, proportionate sampling was used select students in respect to their numerical superiority. This ensured that the sample was representative enough of the entire population. Once this was accomplished, random sampling technique was employed to select the student participants. Purposive sampling was used by the researcher to purposely target the group of respondents assumed to be resourceful for the study (Kombo & Tromp, 2006). This involved the selection of 'information-rich persons; students who were the recipients of G&C services, HODs G&C who were charged with the delivery of G&C services, Principals of schools under whom HODs G&C worked, all known to encounter the phenomenon being investigated (McMillan & Schumacher, 2006). On this

account, only Form 3 and 4 students were sampled because they had been in school long enough and could give their informed opinion on the effectiveness of the guidance counsellor on matters related to emotional and social issues, subject and career selection, and college/university choices. In addition, only HODs, G&Cs and school principals were purposely selected.

Finally, once this step was completed, simple random sampling was employed to choose 10% of the students for the study. To obtain the required number of students, pieces of paper written on 'YES' or 'NO' were given to form 3 and 4 students from the sampled schools to pick. Only those who picked 'YES' were allowed to participate in the study. This method ensured that all possible population characteristics were captured and that all the students targeted had equivalent opportunities of being chosen.

### Sample Size

Patton (1980) argues that the sample size selected is contingent upon what one desires to find out, the motive of the investigation, what is at stake, what was helpful, what was reliable and how the time and resources at hand could be used. According to Kerlinger (2004) and

Kombo and Tromp (2006), a sample size of between 10 percent and 30 percent was representative enough for a study population. Kakamega County has a total of 383 public secondary schools. Using the 10 parameters, a sample size of 42 public secondary schools was selected

with representation from each school type and category.

**Table 3.2: Sampling Matrix**

Category	Type of school					
	Boys	%	Girls	%	Co-educ.	%
National	1	100	1	100	0	0
Extra County	1	33	1	50	0	0
County	1	20	2	10	2	12
Sub-County	2	14	4	11	27	
<b>Total</b>	5		8		29	42

*Source:* (CDE'S Kakamega Annual Report, 2014)

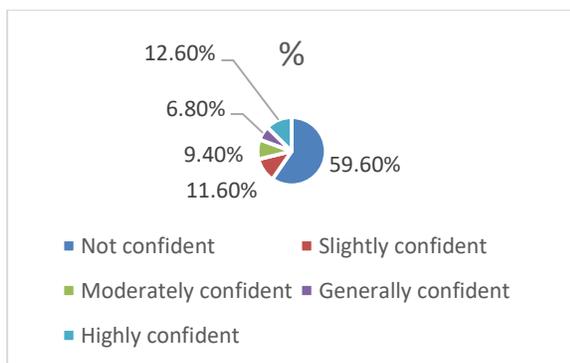
This study sought from the students, school counsellors and the principals whether the school counsellor had sufficient skills during counselling sessions. The results of the students are as shown in Table 4.16.

**Table 4.16: Students' responses on school counsellor counselling skills**

	Not Confident	Slightly Confident	Moderately Confident	Generally Confident	Highly Confident
Uses the computer and modern technology when counselling	272 (59.6%)	53 (11.6%)	43 (9.4%)	31 (6.8%)	57 (12.6%)
Has well kept confidential files for students and counselees	253 (55.4%)	55 (12.0%)	40 (8.8%)	49 (10.7%)	60 (13.1%)
Keeps student's information confidential	226 (49.2%)	48 (10.5%)	49 (10.7%)	48 (10.5%)	88 (19.2%)

Identifies learning opportunities and suggest activities that could help team members to develop new technical skills.	207 (45.7%)	51 (11.3%)	55 (12.0%)	58 (13.0%)	82 (18.0%)
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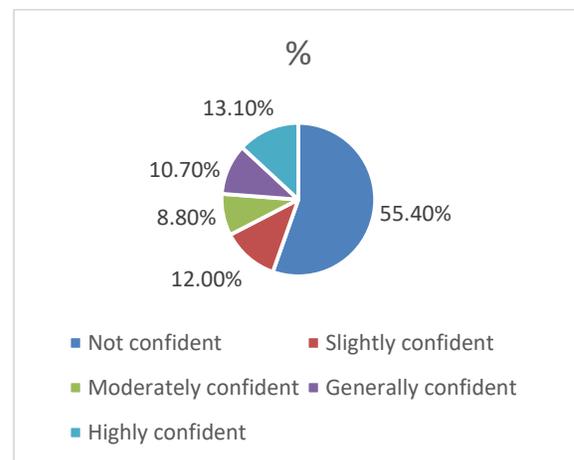
A majority of the students (59.6%) had no confidence, 11.6 percent of them had slight confidence, 9.4 percent of them had moderate confidence, 6.8 percent had a general confidence and 12.6 percent of them had high confidence in the school counsellors counselling skills using the computer and modern technology. This is illustrated in figure 4.37 below.



**Figure 4.37: Uses the computer and modern technology when counselling.**

This implies that most of students (71.2%) indicated that they either had no confidence or very little confidence in the counsellor's ability to use the computer and modern technology when counselling. The results agree with those of Beidoglu et al. (2015) who noted that computer use in school would enhance the quality of counselling services for the students. Computer use would also mean the student information is kept safe.

About 55.4 percent of the students had no confidence, 13.1 percent of them had slight confidence, 10.7percent had moderate confidence, 8.8 percent had general confidence and 12.0 percent of them had high confidence in the school counsellor's ability to keep confidential files for students and counsees. This is illustrated in figure 4.38 below.



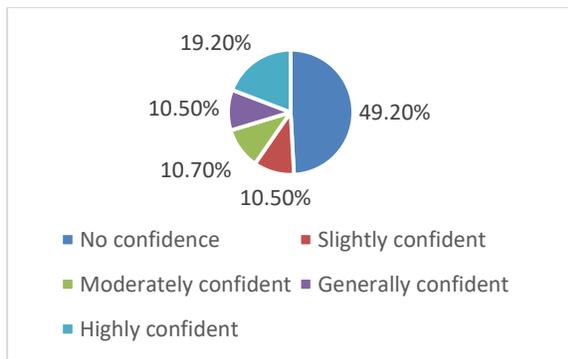
**Figure 4.38: Has well kept confidential files for students and counsees.**

This implies that most of the students (79.2%) had below average confidence in the counsellor's ability to keep confidential files for students and counsees. The results agree with those of Adelma and Taylor (2015) who noted that regulations protect all the records and other individual identifiable information. They also noted that students have a right to privacy and

confidentiality for counselling to be effective.

Slightly above half of the students; 53.4 percent had no confidence, while 7.4 had slight confidence, 9.4 percent had moderate confidence, 14.7 percent were generally confident and 15.1 percent were highly confident in how the school counsellor worked with external organizations to help students. This is illustrated in figure 4.39 below.

About 49.2 percent of the students had no confidence, 10.5 percent had slight confidence, 10.7 percent had moderate confidence and 10.5 percent had general confidence and 19.2 percent had high confidence in the school counsellor ability in keeping students' information confidential. This is illustrated in figure 4.41 below.

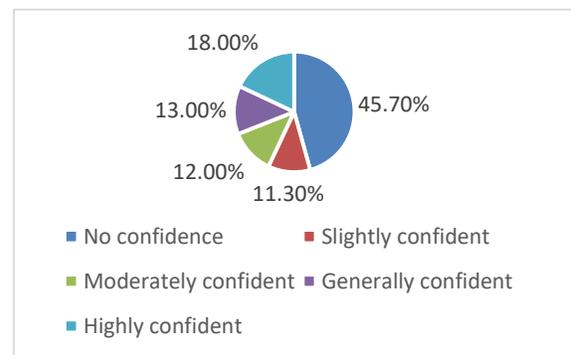


**Figure 4.41: Keeps student's information confidential.**

This implies that most of the students (59.70%) had confidence ranging from slight confidence to completely no confidence in the school counsellor's ability to keep the student's information confidential. The results agree with those of Shea, Cinotti and Stone (2016) who noted that confidentiality was partial when the information had limited access when stored electronically. This was also

supported by Adelma and Taylor (2015) the counsellor had regulations to protect all the records and other individual identifiable information.

Most of the students, 45.7 percent had no confidence, while 11.3 percent of them had slight confidence, 12.0 percent had moderate confidence, 13.0 percent had general confidence and 18.0 percent were highly confident in the school counsellors' way of identifying learning opportunities and suggesting activities that could help



team members to develop new technical skills especially for peer counsellors. This is illustrated in figure 4.44 below.

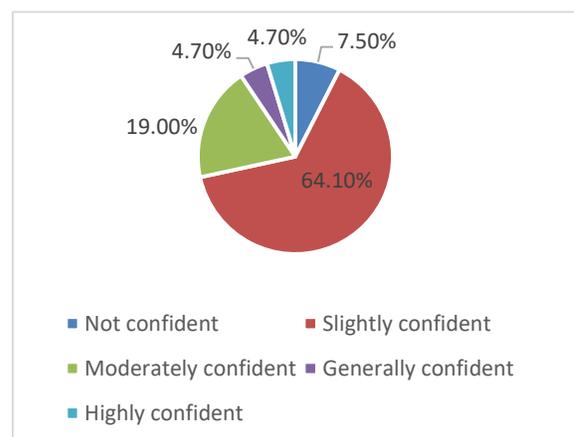
**Figure 4.44: Identifies learning opportunities and suggest activities that could help team members to develop new technical skills.**

This implies that most of the (60%) had very little or no confidence in the counsellors' ability to identify learning opportunities and suggest activities that could help team members to develop new technical skills. The results agree with those of Campbell and Dahir (2018) who noted that the purpose of the school counselling program should be to impart skills, knowledge and learning opportunities that help students broaden their knowledge about the changing world and social development.

The counsellors also gave their response to the questions under the counselling skills; the results were as presented in table 4.17.

**Table 4.17: Counsellors’ response on counselling skills**

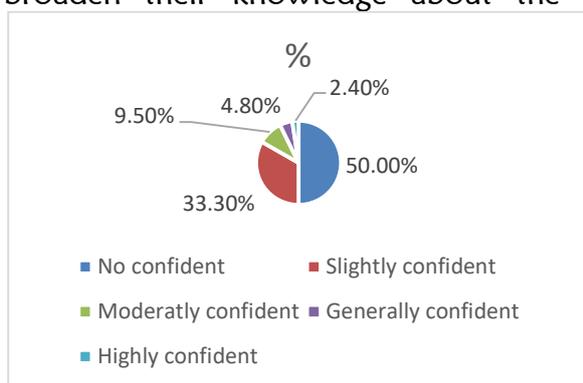
	Not Confident	Slightly Confident	Moderately Confident	Generally Confident	Highly Confident
Identifies learning opportunities and suggest activities that could help team members to develop new technical skills.	3 (7.5%)	27 (64.1%)	8 (19.0%)	2 (4.7%)	2 (4.7%)
Support students’ achievement and advancement through the academic program by use of modern technology	21 (50.0%)	14 (33.3%)	4 (9.5%)	2 (4.8%)	1 (2.4%)
Ensure the confidentiality of student records and releases personal data only according to professional ethics.	1 (2.4%)	4 (9.5%)	10 (23.8%)	15 (35.7%)	12 (28.6%)
Keeps information confidential as contained in professional ethics for counsellors.	1 (2.4%)	3 (7.1%)	11 (26.2%)	14 (33.3%)	13 (31.0%)



Majority of the school counsellors (64.1%) had slight confidence, 7.5% were not confident, while 19.0 percent of them had moderate confidence, 4.7 percent had general confidence, and 4.7 were highly confident about their own ability to identify the learning opportunities and suggest activities that could help team members to develop new technical skills. This is shown in figure 4.53.

**Figure 4.53: Identifies learning opportunities and suggest activities that could help team members to develop new technical skills.**

This implies that most of the school counsellors (72%) had either no confidence or some slight confidence in how they were able to identify learning opportunities and suggest activities that could help the team members to develop new technical skills. The results concur with Kourkoutas (2012) who noted that guidance and counselling program should help increase self-knowledge and how the students relate effectively with others and should also broaden their knowledge about the



**Figure 4.60: Support students' achievement and advancement through the academic programs by use of modern technology.**

changing environment and help the students reach their academic potential. Kapur (2018) also found that counselling and guidance should help the students to identify their own potentialities and limitations, and make appropriate career choices in educational vocational and other fields. Counselling and guidance are necessary in schools to change social patterns, change conditions in labour and industry through the school curriculum where appropriate skills and abilities are evaluated. Counsellors also give opportunities to the students to understand themselves, realise their strength and weaknesses and help them live a fulfilled life.

Half of the school counsellors ,50 percent, had no confidence, while 33.3 percent of them had slight confidence, 9.5 percent had moderate confidence, while 4.8 percent had general confidence and 2.4 percent of them were highly confident with their ability to support student's achievement and advancement through the academic program by use of modern technology. This is illustrated in figure 4.60.

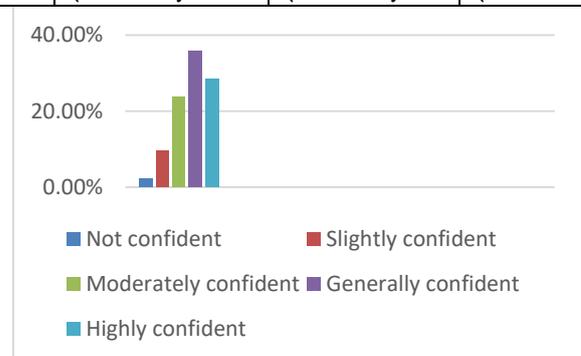
This implies that the issue of use of technology to support student's achievement and advancement through the academic programs by use of modern technology was an area most of

the school counsellors (83.30%) either had no confidence or had very

little confidence in themselves. The results also agree with those of Karatas (2011) who noted that it is important for the school counsellors to encourage students to adopt modern technology.

	Slightly Confident	Moderately Confident	Generally Confident	Highly Confident
Employs modern technology to support students' successes and progress through the educational process.	8 (17.8%)	6 (13.3%)	7 (15.6%)	24 (53.3%)
Identifies learning opportunities and suggest activities that could help team members to develop new technical skills.	13 (28.9%)	10 (22.2%)	7 (15.6%)	15 (33.3%)
Has well kept confidential files for students and counselees	11 (24.4%)	12 (26.7%)	9 (20.0%)	13 (28.9%)
Has respect for colleagues and handles them professionally	2 (4.4%)	9 (20.0%)	22 (48.9%)	12 (26.7%)
Keeps student's information confidential	6 (13.3%)	16 (35.6%)	11 (24.4%)	12 (26.7%)

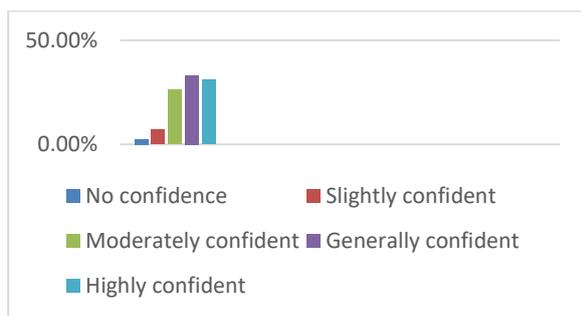
The school counsellors were asked to state their level of confidence in their own ability to maintain confidentiality of student's records and release personal data only according to professional ethics. 2.4percent said they had no confidence in their own ability to do so, 9.5percent said they had slight confidence, 23.8 percent had moderate confidence 35.7 percent had general confidence and 28.6 percent had high confidence. This is illustrated in figure 4.66.



**Figure 4.66: Ensure the confidentiality of student records and releases personal data only according to professional ethics.**

The results indicate that majority of the counsellors (64.3%) had confidence ranging from general to high confidence in their own ability to keep the confidentiality of the student's records. This is in agreement with the ethical

standards set by the Kenya Counselling and Psychological Association (KCPA). Though confidentiality can be more challenging for school counsellor, the The school counsellors were asked to state the level of confidence they had in their own ability to Keeps information confidential as contained in professional ethics for counsellors. 2.4 percent of the counsellors said they had no confidence in their own ability to Keeps information confidential as contained in professional ethics for counsellors. 7.1 percent of them said they were slightly confident, 26.2 percent said they had moderate confidence 33.3 percent said they had general confidence and 31.0 percent said they had high confidence. This is illustrated in figure 4.68.



**Figure 4.68:** *Keeps information confidential as contained in professional ethics for counsellors.*

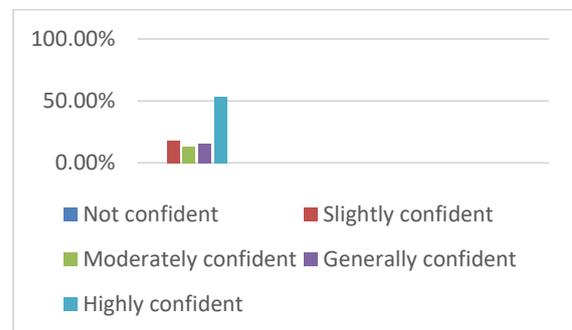
Majority of the counsellors (64.3%) had confidence in their ability to keep their mandate of keeping information confidential as contained in professional ethics for counsellors. The results agree with those of Wambu and Fisher (2015) who noted that schools are expected to adhere to these ethical guidelines of KCPA. Hence maintain confidentiality of the students' information not unless the students have plans to harm self or others, then the confidentiality can be broken.

counsellors are bound by the ethical standards (Kerch & Kimemia, 2012; Wambu & Fisher, 2015).

**Table 4.18:** *Principal's responses on schools' counsellors counselling skills*

**Note:** In the table above none of the principals reported having "No confidence" in any of the 17 variables in question. They all started at "slightly confident", that is why the first column which should have been labelled "Not confident" was omitted.

About 17.8 percent of the principals were slightly confident about the school counsellor's ability to employ modern technology to support students' successes and progress through the education process. 13.3 percent had moderate confidence; 15.6 percent had general confidence while 53.3 percent of the principals had high confidence. This is illustrated in figure 4.70 below.

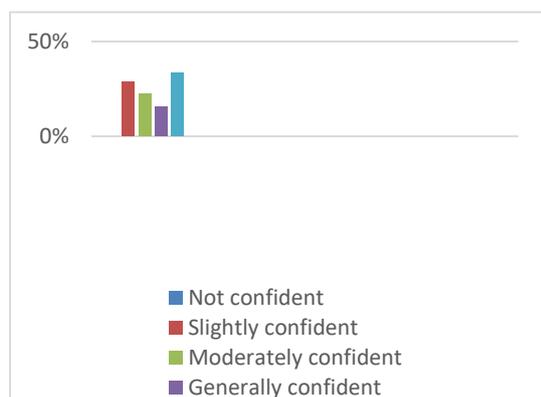


**Figure 4.70:** *Employ modern technology to support students' successes and progress through the education process.*

According to majority of the principals (68.9%), who posted confidence levels response of generally confident and highly confident, the school counsellors were able to employ modern technology to support students' successes and progress through the education process. The results agree with Beidoglu et al. (2015) who noted that technology has a positive impact on

the students especially when the teachers is able to use it during a counselling session to encourage the students.

28.9 percent of the principals were slightly confident, 22.2 percent were moderately confident, 15.6 percent were generally confident and another 33.3% of the principals were highly confident in the school counsellors' skills that enabled them to identify learning opportunities that enabled them to suggest activities that could help the team members to develop new technical skills. This is illustrated in figure 4.75.

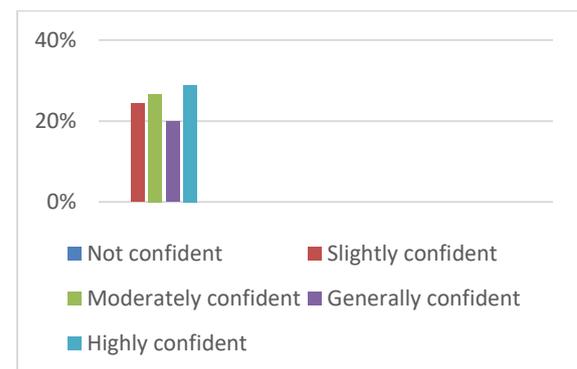


**Figure 4.75:** *Had skills that enabled them to identify learning opportunities that enabled them to suggest activities that could help the team members to develop new technical skills.*

This indicates that a good number of the principals (51 %) opined that their confidence in the school counsellor's ability to identify learning opportunities that enabled them to suggest activities that could help the team members to develop new technical skills was below average. The results agreed with those of the American School Counsellors Association (2019) who noted that the

school counsellor should believe that every student can have access to and have an opportunity for high quality education; they could also be successful and grow provided the relevant opportunities are provided.

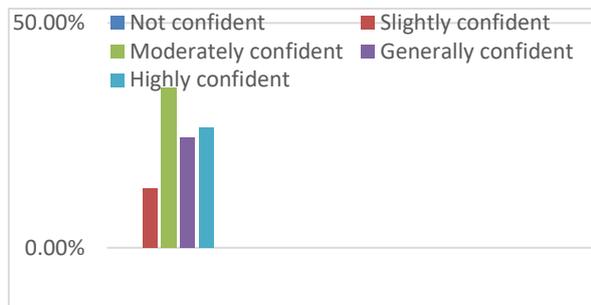
Another factor that was rated was the counsellors' ability to keep confidential files for students and counselees. 24.4 percent of the principals said they were slightly confident with the counsellor's ability to keep confidential files for students and counselees, 26.7 percent said they were moderately confident, 20.0 percent said they had general confidence. 28.9 percent of the principals said they were highly confident. This is presented in figure 4.76 below.



**Figure 4.76:** *Able to keep confidential files for students and counselees.*

This implies that most of the principal (51.1%) had below average confidence in the school counsellors' ability to keep students' information confidential. The results agree with Wambu and Fisher (2015) who noted that the school counsellor should follow the KCPA guidelines on ethical issues that would affect them during counselling.

It is also important to note that 13.3 percent of the principals had slight confidence, 35.6 percent of them had moderate confidence, and 24.4 percent had general confidence while 26.7 percent had high confidence in the school counsellors' ability to keep students' information confidential. This



is illustrated in figure 4.79.

**Figure 4.79: Keeps student's information confidential.**

This implies that slightly above half of the principals (51.1%) had confidence levels between general and high confidence in the counsellor's ability to keep student's information confidential. The results agree with Wambu and Fisher (2015) who noted that confidentiality is important to maintain although sometimes in a school setup the school counsellor is pushed by the school principal, teachers to get to know what the problem is with the student. Hence the need to develop a school counsellor code of ethics.

## CONCLUSION

The students had no confidence in the counsellor's ability to use the computer and modern technology when counselling, neither were they able to trust them to keep confidential files for students and counselees. The students also felt that the school counsellors were not able to work with external organizations to help students, they were of the view that the school counsellors did not have the capacity to analyse data to identify patterns of

achievement and behaviour of the students. They had no confidence in the school counsellor's ability to keep the student's information confidential and to conduct and keep a well laid out school counselling program.

The issue of the use of technology to support student's achievement and advancement through the academic programs by use of modern technology was an area most of the school counsellors (83.30%) either had no confidence or had very little confidence. The results from the principals paint a completely different picture from that painted by the students and the school counsellors. The principals seemed to be in the dark about what was going on in their schools as far as counselling was concerned. They reported that their school counsellors were highly confident and yet the counsellors themselves indicated they had no confidence.

## RECOMMENDATIONS

- Regular well-organized workshops and seminars should be put in place to keep the well-trained school counsellors abreast with current trends, theories and innovations in guidance and counselling in secondary schools. The programs should be well structured and be officially implemented by the ministry of education.
- The universities that train counsellors for schools should endeavour to equip the school counsellors with the relevant knowledge and skills and ensure that they are individuals with the right attitude to enable them effectively handle the counselling services in schools.

- The advent of technology begs the need to seriously entrench the use of technology in counselling in schools and to help ensure the confidentiality of student information.
- School counselling centres should be established at the county headquarters to be manned by trained and professional school counsellors. The centres would act as a hub to serve as referral centres for schools and coordinate the counselling services in the county.
- Heads of schools should be given regular in services courses and workshops to help them understand what school counselling entails.

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