

# INFLUENCE OF MANAGEMENT OF CLERKSHIP TRAINING ON STUDENTS' ACQUISITION OF CLINICAL SKILLS IN MBALE CITY HEALTH TRAINING INSTITUTIONS, UGANDA. A CROSS-SECTIONAL STUDY.

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## ABSTRACT.

### Background:

This study focused on assessing the influence management of clerkship training on Students' Acquisition of Clinical Skills in Health Training institutions in Mbale City.

### Methodology:

The study adopted the cross-sectional design with a sample of 124 respondents from the medical staff in Mbale Regional Referral Hospital, Data was collected using questionnaires and interview guides for quantitative and qualitative data respectively. Data was analyzed using SSPSS software and content analysis respectively.

### Results:

The study targeted 127 respondents but got a response rate of 124 participants and among these, nurses comprised 53(44.2%) of the sample, 46(38.3%) were Allied Health, 13(10.8%) were Midwives while 8(6.7%) were medical officers. The duration planned for clinical clerkship training is appropriate to promote students' skills acquisition (Mean=2.11, Standard deviation=0.994). The decision rule is that the calculated p-value (level of significance) must be less than or equal to 0.05. Since the calculated p-value of 0.000 is less than 0.05, the regression model was found to be statistically significant (F=105.838, Df=1,  $p < 0.05$ ,  $\beta=0.688$ ) hence the Management of the Clerkships Training positively influences Students' acquisition of clinical skills.

### Conclusion:

Management of the Clerkships has a significant positive influence on Students' acquisition of clinical skills. This was interpreted to mean that if Health Training Institutions in Mbale City enhance on Management of the Clerkships, there will be a positive enhancement in Students' acquisition of clinical skills.

### Recommendation:

Health Training Institutions in Mbale City should work more towards boosting the Management of the Clerkships towards supporting Students' acquisition of clinical skills.

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**Keywords:** Management of Clerkship, Students' Acquisition of Clinical Skills, Mbale City, Health Training Institutions  
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## BACKGROUND TO THE STUDY.

Globally, there has been a realization that many health professionals cannot effectively manage the health problems of their patients and communities because they are not adequately trained in some essential competencies required for their jobs (Kiguli & Baingana, 2014). As such, medical Students' acquisition of clinical skills is paramount and if well executed is one of the most essential components of a modern medical curriculum to empower students with the necessary skills in health institutions for safe health care delivery in the community (Houghton et al., 2012).

Clinical Clerkships are a full immersion of learning experiences in practice-based facilities, where students will have one-on-one patient interactions and application of

clinical sciences. The educational aspect of the clinical clerkship is shared by the preceptor (staff) - who is with the students regularly, and the academic administration - the Dean, Director of Education, Instructional officer, etc. Thus, management of clerkship involves overseeing the clinical aspects of the training, scheduling, and taking charge of logistics and other resources.

A review by Haidet (2004) shows that explicit emphasis on the development of clinical skills during clerkship training can enhance the acquisition of these skills. The study also recommends the use of structured assessments and feedback to guide the learning process and promote the acquisition of clinical skills.

The study seeks to evaluate the influence of Management of the Clerkship Training on Students' acquisition of clinical skills in Health Training Institutions in Mbale City.

## METHODOLOGY.

### Research Design.

The study employed a cross-sectional survey research useful for assessing information at one point in time. This design was chosen because it allowed the collection of data at one point in time, was economical, and allowed statistical tests where it was possible to conclude from the statistical test results. This cross-sectional survey research, allowed quantitative data to be collected using the questionnaire as an instrument and could be supplemented with an interview guide which was the case with this study.

### Study setting.

The study was conducted in Mbale city particularly in Mbale Regional Referral Hospital (MRRH) where all the health training institutions place their students as the practicum site throughout the training. This study area is found in Eastern Uganda with a sizable catchment area of more than 14 districts of Uganda, Mbale district being inclusive. Mbale RRH as a study unit is located in Mbale city 300m along Mbale Kampala road from the city Centre. The hospital carries out both student pre-service training and in-service training and is suitably in line with the study management of clinical training and students' acquisition of skills. The

study time scope was limited to the period between the years 2016 to 2019 when most Uganda communities grappled with several increasing ill health conditions that were attributed to inadequate skills of health workers trained in Uganda.

### Study population.

The study population comprised the Medical staff and Ward in-charges as managers who work in the Hospital. The study targeted 9 wards with a minimum of 20 experienced staff making 180 medical staff who may observe medical students interact with patients and caretakers, appraise them, and at times help in record keeping while they are for hospital placements. The study also considered 4 ward in-charges who have worked in the hospital for at least seven years from 2016 to 2019 with vast experience as managers. Ward in-charges are managers who supervise, motivate students, manage resources, make decisions, and provide accountability for all activities carried out in the departments.

### Study sample size.

The sample size was 127 respondents from a study population of 180 medical staff determined using Krejcie and Morgan table (1970) for determining the sample size of a known population. The study also considered 4 ward in-charges with experience of more than seven years.

**Table 1: Summary of population, sample, and sampling techniques.**

Category of respondents	Population	Sample	Sampling techniques
Medical staff	180	123	Simple random sampling
Ward in-charges	4	4	Census inquiry
Total	184	127	

### Sampling techniques.

The researcher employed probability sampling for the medical staff where a simple random sampling was used. Simple random sampling was used during the collection of data from medical staff where each member of the population had an equal probability or chance to be included in the sample. Simple random sampling was used to choose individuals to represent the target population. The study also employed a non-probability sampling of a purposive sample to interview wards in charge based on the experience of seven years and more.

### Bias:

Any bias in the target population was equally spread among the individuals with the use of simple random sampling (Creswell, 2018). A list of medical staff was requested from the ward in charge and every even number was chosen for the study to eliminate bias.

### Data Collection Methods and Instruments.

The researcher made use of questionnaires and interview guides as research instruments for collecting data from the field. The items of both the questionnaire and interview

guide were, developed in line with the objectives of the study.

### Questionnaires.

In this study, the researcher designed a Management of Clinical Training and Students Skills Acquisition Questionnaire (MCTSSAQ) for medical staff to respond to the questions and then return them to either the researcher or the research assistant. A five-point Likert scale was adopted i.e. 5-Strongly Agree [SA], 4-Agree [A] 3- Neutral [N], 2-Disagree [D], 1- Strongly Disagree, [SD] and was designed, consisting of five parts; that is section A containing personal information of the respondents, section B containing information on medical staff, section C consisting of information on clerkship training, Section D containing information on Clinical Instructional Materials

and Section E consists of information on Students' Acquisition of skills. The researcher employed the use of questionnaires because data could easily be collected from very many respondents within a short time and also the guarantee of privacy given the fact that respondents have the opportunity to give original and authentic responses.

**Interview Guide.**

This study used an in-charge medical clinical training interview guide (GMCT) for collecting data from the ward in charge to supplement the data that was collected from the medical staff in the initial phase. The interview guide was semi-structured based on the research objectives. The interviews were conducted for at least 20 minutes on average, within the ward office, and recording was done immediately.

**Data quality control.**

**Table 2: Content Validity Index Results.**

Content Validity Index Results for Questionnaires			
Variables	Number of items	Valid items	Content validity Index
Management of Preceptorship Training	7	6	0.857
Students' acquisition of clinical skills	6	5	0.833
Total	13	11	0.846

Source: Primary data, 2023

Table 2 reveals that all items on Management of Clerkship Training and Students' acquisition of clinical skills were above 0.7 when the Content Validity Index coefficient test was computed hence all of them being valid. The CVI was found to be 84.6%.

**Management of the Clerkships of instruments.**

To ensure Management of the Clerkships of the instrument, the instrument was pilot-tested and administered to the

The data collection instruments were subjected to both validity and reliability to minimize bias in the study

**Validity of instruments.**

The content validity was achieved through the use of research experts from the Department of Educational Management and Administration to evaluate the quality of the questions in the instruments. The supervisor of this study also accessed the instrument to ascertain if the items measured what they were supposed to measure through face validity. The content validity was computed and evaluated as recommended by Nadasday (2019) that an instrument is considered to be valid when the average content validity (CVI) index is 0.7 and above.

$$\text{Content Validity Index (CVI)} = \frac{\text{No. of items rated relevant}}{\text{The total number of items rate}}$$

respondents in Jinja Regional Referral Hospital which was similar to Mbale RRH, and the irrelevant questions in the questionnaire were eliminated before the instrument was used for data collection. Then the Cronbach's alpha coefficient in the Statistical Package for Social Sciences (SPSS) software was used to analyze and determine the Management of the Clerkships of the instruments. The general rule of the Cronbach alpha of 0.70 and above is regarded as good

**Table 3: Cronbach Reliability Coefficient test.**

Variables	Number of items	Valid items
Management of Clerkship Training	7	7
Students' acquisition of clinical skills	6	5

Source: Primary data, 2023

In this study, all the items on each variable (Management of Clerkship Training and Students' acquisition of clinical skills) were above 0.7 when the Cronbach Reliability

Coefficient test was computed. The findings from Table 3 above indicated that all the items were reliable.

**Table 4: Cronbach Reliability.**

Cronbach' Alpha	Cronbach's Alpha based on standardized items	Number of items
0.904	0.901	25

Source: Primary data, 2023

Table 4 given above is the Reliability Statistics Table, which provides the value for Cronbach alpha, which in this case is 0.904 reflecting the high reliability of the measuring

instrument. Furthermore, it indicates a high level of internal consistency concerning the specific sample.

### Methods of data analysis.

The filled questionnaires were collected, coded, and analyzed using Statistical Package for Social Sciences (IBM SPSS). SPSS is a Windows-based program that could be used to perform data entry and analysis and to create tables and graphs. The quantitative data was analyzed by descriptive statistics of frequencies, percentages, mean, and

standard deviations. The inferential statistics used the regression model of statistical analysis.

The data from the interview guide was analyzed through content analysis.

The data were presented in tables for interpretation about the specific objectives which were discussed following the literature review.

**Table 5; Measurements of variables.**

Variable	Description	Measurement
Students acquisition of skills	History taking skills	Ordinal scale: The scale of measurement will be the 5-point Likert scale of strongly Disagree (SD), Disagree (DA), Neutral (N), Agree (A) and strongly Agree (SA).
	Examination skills	
	Carrying out investigations	
	Clinic reasoning skills	
	Documentation skills	
Management of Clerkship	Communication skills	Ordinal scale: The scale of measurement will be the 5-point Likert scale of strongly Disagree (SD), Disagree (DA), Neutral (N), Agree (A) and strongly Agree (SA).
	Social interaction with peers	
	Clerkship setting	
	Occupational safety and Hygiene	
	Patient and caretaker's interaction	
	Time for placement	

The scale of measurement was the 5-point Likert scale of strongly Disagree (SD), Disagree (DA), Neutral (N), Agree (A) and strongly Agree (SA).

voluntary participation, and avoiding harm to participants the researcher was impartial and cited all sources of data to prevent issues of plagiarism.

### Ethical considerations.

The researcher followed appropriate research guidelines to protect respondents from the risk of harm. There was approval of the academic research and the proposal was subject to the Mbale Hospital Research Review Board (HRRB) before instruments were administered to the respondents. The researcher ensured the quality and integrity of the research by obtaining informed consent from respondents, confidentiality, the anonymity of respondents,

### DATA PRESENTATION, INTERPRETATION, ANALYSIS, AND DISCUSSION OF FINDINGS.

#### Response rates.

The study sought the response rates of the respondents with the intent of generalizing results to the population sampled. In this study, the targeted sample size was 127 of (123) Medical staff and (4) ward in-charges as presented in Table 6.

**Table 6: A response rate of respondents.**

Category of respondent	Sample size (N=127)	Actual responses (N=124)	Percent
Medical staff	123	120	97.6
Ward in-charges	4	4	100
Total	127	124	97.6

**Source:** Primary data, 2023

Consistent with Table 6, the researcher administered 123 questionnaires to the medical staff. A total of 120 questionnaires were returned fully completed, giving rise to a response rate of 97.6%. This number was fully exploited in further computational analysis of the data. Since the study was triangulated, the researcher also managed to schedule interviews with the key informants (Ward in-charges). The researcher was able to obtain a high response rate because

he utilized the capacity of the two (2) research assistants who were versatile and industrious in this study.

#### Demographic characteristics of respondents.

The demographic information collected from the respondents included Gender, the highest level of education, period of service, and Profession as presented in Table 7.

**Table 7: Demographic characteristics of respondents.**

Variables	Categories	Frequency	Percentage (%)
Gender	Male	55	45.8
	Female	65	54.2
Highest level of education	Certificate	11	9.2
	Diploma	57	47.9
	Bachelor's degree	45	37.8
	Master's degree	6	5
	1-5 years	13	10.8
Period of service	6-10 years	42	35.0
	11 years and above	65	54.2
	Medical officer	8	6.7
Profession	Allied Health	46	38.3
	Nurse	53	44.2
	Midwife	13	10.8

**Source:** Primary data, 2023

Data presented in Table 7 on gender show that female respondents were more than their male counterparts. Among the respondents, females comprised 65(54.2%) of the sample and males comprised 55(45.8%) of the sample interpreted as females being more than their male counterparts. According to Ngobua (2020), a USAID report on Gender Equality and Social Inclusion (GESI) Analysis in Nigeria revealed the overall health workforce is a female-dominated gender which conforms with this study's finding. This facilitated capturing views representative of both gender groups on the Management of Preceptorships on Students' acquisition of clinical skills in Health Training Institutions in Mbale City.

Table 7 shows that the majority of the respondents 57(47.9%) had attained Diplomas, while 45(37.8%) had attained degrees, and 11(9.2%) had attained Certificates. Those with Masters were only 6 (5%) of the sampled population. This was interpreted to mean that the study generated data from an informed pool of respondents whose perceptions contributed to the Management of Preceptorships and Students' acquisition of clinical skills in Health Training Institutions in Mbale City.

It is evidenced from Table 7 that most of the respondents 65(54.2%) had served for 11 years and above, 42(35%) had served between 6 years and 10 years while 13(10.8%) had served between 1 year and 5 years. This was interpreted to mean that different durations of service were represented in the study. This assisted the researcher in capturing diverse opinions according to a period of service on the perception of Management of Clinical Training and Students' acquisition of clinical skills in Health Training Institutions in Mbale City. This finding agrees with the quantitative paradigm of Kanyumba (2022) who used a closed-ended structured questionnaire to elicit responses from 80 healthcare workers at Manama Mission Hospital in Gwanda, Zimbabwe, revealing that practical hands-on experience supported by effective supervisor and guidance from experienced health workers aids effective service delivery.

Data presented in Table 7 on profession show that nurse respondents were more than their counterparts. Among the respondents, nurses comprised 53(44.2%) of the sample, 46(38.3%) were Allied Health, 13(10.8%) were Midwives while 8(6.7%) were medical officers. Whereas nurses were more than their counterparts, the results show that various medical professionals were also involved in the study. This finding conformed with a cross-sectional survey, by Ahmat et al. (2022), of 47 countries in the African Region using a semi-structured questionnaire. Data were collated and analyzed in Epi Info and Microsoft Excel. The results of that study on a total stock of health workers was approximately 3.6 million across 47 countries. Among these, 37% of the health workers were nurses and midwives, 9% were medical doctors, 10% were laboratory personnel, 14% were community health workers, 14% were other health workers, and 12% were administrative and support staff. This facilitated capturing views representative of the various medical professionals on the Management of Preceptorships and Students' acquisition of clinical skills in Health Training Institutions in Mbale City

### **Analysis of Likert-Type Data.**

The questionnaire had three sections that applied the Likert scale questions. The scales used comprised 5-point Likert items ranging from 5 = strongly agree, 4 = agree, 3 =Neutral, 2 = disagree and 1 = strongly disagree. The items in each section ranged from 1 to 8 items. The analysis of the Likert scale was based on Oben's (2021) arguments and weighting criteria that indicated that Strongly Agree (SA) ranges between 4.2 and 5.0; Agree (A) ranges between 3.4 and 4.2; Neutral (N) ranges between 2.6 and 3.4; while Disagree (D) ranges between 1.8 and 2.6; and Strongly Disagree (SD) ranges between 1 and 1.8, hence giving an equidistance of 0.8. This criterion was adhered to during the analysis and interpretation of the results of the Likert-type data.

Descriptive statistics on the study variables included training, Management of the Clerkships Training, and Students' acquisition of clinical skills. Descriptive statistics

were then presented in the form of percentages, frequencies, mean and standard deviations. The respondents were asked to indicate the extent to which they agreed or disagreed with Statements describing the various variables. The items were measured using a 5-point Likert scale ranging from 5 = strongly agree, 4 = agree, 3 = Neutral, 2 = disagree and 1= strongly disagree. Cronbach's Alpha coefficient was used to measure reliability which ranges from 0 to 1 and for this study, the composite Cronbach's Alpha coefficient was 0.904. Standard Deviation being a measure of variations from the mean was computed. As a good estimator of the population means, the standard deviation of the sample means would be near the center (mean) while a large standard deviation would indicate that data points were spread out over a larger rate of values.

### Empirical arrangement and analysis of the study findings.

The empirical results are presented, interpreted, and analyzed with an overall goal of demonstrating the influence of Management of the Clerkships Training on Students'

acquisition of clinical skills in Health Training Institutions in Mbale City. The descriptive statistics were approached using frequencies and percentages as illustrated in forthcoming discussions. This section provides descriptive statistics before computing inferential statistics. Since the ordinal variable (Likert scale) measure was used in taking care of the Management of the Clerkships, and Students' acquisition of clinical skills. The inferential statistics were used to measure the level at which one variable was affected by another. This was done using a regression analysis as presented later in this report.

### State of students' acquisition of clinical skills in Health Training Institutions in Mbale City.

The researcher probed respondents on the state of Students' acquisition of clinical skills in Health Training Institutions in Mbale City. In exercising the probing session, the researcher used primary data sources, suggesting that primary data was used in the testing of hypotheses and frequencies about Students' acquisition of clinical skills as presented in Table 8.

**Table 8: Frequencies for Students' acquisition of clinical skills.**

Students' acquisition of clinical	SD	D	N	A	SA	Mean	Std.Dev
Students gain adequate competencies in taking history from patients and caretakers	7 (5.8%)	48 (40%)	30 (25%)	29 (24.2%)	6 (5%)	2.83	1.026
Students can perform a thorough patient examination to elicit patients' diagnostic signs	10 (8.3%)	44 (36.7%)	37 (30.8%)	24 (20%)	4 (3.3%)	2.73	0.989
Students can communicate professionally during patient care to exhibit professional ethics	2 (1.7%)	34 (28.3%)	45 (37.5%)	33 (27.5%)	6 (5%)	3.06	0.91
Students' level of documentation of clinical findings follows ethical and standard guidelines	4 (3.3%)	31 (25.8%)	54 (45%)	27 (22.5%)	4 (3.3%)	2.97	0.869
The graduate students can provide health care services to the community with minimal supervision	1 (0.8%)	24 (20.2%)	50 (42%)	40 (33.6%)	4 (3.4%)	3.18	0.823
Students refer patients to higher-level management as a result of skills deficits	4 (3.4%)	3 (2.5%)	19 (16%)	67 (56.3%)	26 (21.8%)	3.91	0.883

Source: Primary data, 2023

Note: SD=strongly disagree, D=Disagree, N=Neutral, A=Agree, SA=strongly agree

Table 8 revealed that the majority of the respondents 55(45.8%) refuted (disagreed and strongly disagreed) that students gain adequate competencies in taking history from patients and caretakers. 30(25%) preferred to be non-committal to the statement. However, 35(29.2%) conceded with the statement. Founded on the Mean=2.83 and the standard deviation=1.026, it comes perhaps true that the respondents preferred to be non-committal to this statement. From this analysis, an interpretation can be made that perhaps clinical reasoning skills and documentation skills are significant pointers of students' acquisition of clinical skills in Health Training Institutions in Mbale City for which acquisition of clinical skills is underscored.

An interviewee from the preceptor in the Health Training Institution in Mbale City named MBA – 03 had this to say: "not sure whether our students gain adequate competences in taking history from patients" [Date: 14-07-2023, Source: Primary information from key informant]

The above statement seems to indicate that some respondents conceded that perhaps students may not be gaining adequate competencies in taking history from patients.

Moreover, the majority of the respondents 54(45%) also refuted that students can perform a thorough patient examination to elicit patients' diagnostic signs. A moderately larger percentage 37(30.8%) preferred to be non-committal to the statement. Instituted on the Mean=2.73 and the standard deviation=0.989, it follows that perhaps the respondents preferred to be non-committal to this statement. This was interpreted to mean that perhaps examination skills and carrying out investigations are significant indicators of students' acquisition of clinical skills in Health Training

Institutions in Mbale City for which acquisition of clinical skills is still a distant reality.

When the researcher sought the opinions of the respondents on whether students can communicate professionally during patient care to exhibit professional ethics, 36(30%) of the respondents refuted the statement. This could be attributed to the fact that students' level of documentation of clinical findings rarely follows ethical and standard guidelines (Mean=2.97, standard deviation=0.869). An interviewee from the preceptor in the Health Training Institution in Mbale City named MBA – 04 had this to say:

*“Majority leave the institution when they can communicate professionally”* [Date: 14-07-2023, Source: Primary information from key informant]

The above statement seems to indicate that some respondents conceded that students can communicate professionally during patient care to exhibit professional ethics.

There is significant evidence from Table 8 that graduate students can provide health care services to the community with minimal supervision (Mean=3.18, Standard deviation=0.823). Based on the Mean score=2.73 and the standard deviation=0.989, it follows that the respondents agreed with the statement. This was interpreted to mean that perhaps history-taking skills, examination skills, carrying

out investigations, clinical reasoning skills, and documentation skills significantly predict well students' acquisition of clinical skills in Health Training Institutions in Mbale City for which acquisition of clinical skills is scored.

Results in Table 8 show that perhaps students refer patients to higher-level management as a result of skills deficits. The results revealed that the majority 93(78.1%) of the respondents conceded with the statement. A small percentage of 7(5.9%) refuted the statement while 19(16%) were neutral on this statement. This result was interpreted to mean that perhaps history-taking skills, examination skills, carrying out investigations, clinical reasoning skills, and documentation skills significantly predict well students' acquisition of clinical skills in Health Training Institutions in Mbale City for which acquisition of clinical skills is scored.

### Management of the Clerkships and Students' acquisition of clinical skills.

Regarding this objective, the researcher probed respondents on the influence of the Management of the Clerkships on Students' acquisition of clinical skills. The results of the computations are presented in Table 9.

**Table 9: Frequencies for Management of the Clerkships.**

Statements	SD	D	N	A	SA	Mean	Std.Dev
Student placements are done in appropriate training departments in the hospital	2 (1.7%)	30 (25%)	36 (30%)	47 (39.2%)	5 (4.2%)	3.19	0.919
There is always a promotion of cooperation between students' trainers, staff, patients, and fellow students in the hospital	1 (0.7%)	30 (25%)	52 (43.3%)	35 (29.2%)	2 (1.7%)	3.06	0.802
Students' occupational safety and hygiene are taken care of while on hospital placement	7 (5.9%)	26 (21.8%)	56 (47.1%)	29 (24.4%)	1 (0.8%)	2.92	0.855
The duration planned for clinical clerkship training is appropriate to promote students' skills acquisition	35 (29.2%)	54 (45%)	15 (12.5%)	15 (12.5%)	1 (0.8%)	2.11	0.994
A manageable number of students is allocated per clinical area of placement	46 (38.3%)	45 (37.5%)	10 (8.3%)	17 (14.2%)	2 (1.7%)	2.03	1.092
Students are exposed to as many different health conditions during their clinical placements	21 (17.5%)	43 (35.8%)	22 (18.3%)	32 (26.7%)	2 (1.7%)	2.59	1.111
Follow-up is being done to ensure that students practice their clinical skills in hospital	39 (32.5%)	42 (35%)	19 (15.8%)	18 (15%)	2 (1.7%)	2.18	1.100

Source: Primary data, 2023

Note: SD=Strongly disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly agree

Results from Table 9 show that perhaps there is substantial effort by the Health Training Institutions in Mbale City to improve on Management of the Clerkships. Results show that probably students' placements are done in appropriate training departments in the hospital (Mean=3.19, Standard deviation=0.919). Results also show that there is always moderate promotion of cooperation between students' trainers, staff, patients, and fellow students in the hospitals (Mean=3.06, Standard deviation=0.802). These results were interpreted to mean that perhaps social interaction with peers

and patients and caretaker interaction predict well carrying out investigations, clinical reasoning skills, history-taking skills, examination skills, and documentation skills. An interviewee from the trainer in the Health Training Institution in Mbale City named MBA – 03 had this to say: *“As ward in charge, we teach and instruct students on matters concerning clerkships but given the skeletal staff and busy workload we may not be effective in monitoring students' clerkships”* [Date: 14-07-2023, Source: Primary information from key informant]



Yet, results show that numerous gaps are still prevailing, perhaps the need to beef up, particularly in social interaction with peers and patients and caretaker interaction for which students' acquisition of clinical skills may be scored.

The above finding probably could be in line with the findings of many more scholars. For instance, Kavili, 2020; found an influence between clinical nurse instructor practices and clinical performance. Clerkships provide health professionals with many opportunities for a greater association with client's buildings the necessary confidence to acquire clinical skills by students

As regards whether students' occupational safety and hygiene are taken care of while on hospital placement, results show that the majority of the respondents preferred to be non-committal to this statement (Mean=2.92, standard deviation=0.855). However, they enormously refuted that the duration planned for clinical clerkship training is appropriate to promote students' skills acquisition (Mean=2.11, Standard deviation=0.994). These results were interpreted to mean that perhaps clerkship setting and occupational safety and hygiene predict well carrying out investigations, clinical reasoning skills, history-taking skills, examination skills, and documentation skills. Yet, results point out that gaps are still prevailing that may need to be mended especially in clerkship settings and occupational safety and hygiene for which students' acquisition of clinical skills may be scored. An interviewee from the preceptor in the Health Training Institution in Mbale City named MBA – 02 had this to say:

*“As instructors, we teach and instruct students on matters concerning clerkship setting and occupational safety and hygiene for which students' acquisition of clinical skills is promoted in the institution”* [Date: 14-07-2023, Source: Primary information from key informant]

The above statement seems to indicate that some respondents conceded that students' occupational safety and hygiene are taken care of while on hospital placement.

The finding coincides with the findings of previous scholars. For instance, Kavili, 2020 found an influence between clinical nurse instructor practices and clinical performance. Thus, management of clerkship should involve overseeing the clinical aspects of the training, scheduling, and taking charge of logistics and other resources for which students'

acquisition of clinical skills is scored in terms: history history-taking skills, examination skills, carrying out investigations, clinical reasoning skills and documentation skills.

Moreover, Kavili, (2020) indicated that Management of the Clerkships is a significant factor in students' acquisition of clinical skills in Health Training Institutions as clerkships provide health professional students the chance to spotlight various aspects of rural and underserved healthcare careers and understand the implications of educational training in certain locations for future professional options.

10(8.3%) preferred to be neutral (Mean= 2.03, Standard deviation=1.092). Results also show that perhaps students are moderately exposed to as many different health conditions during their clinical placements (Mean=2.59, Standard deviation=1.111). Ironically, follow-up is weakly being done to ensure that students practice their clinical skills in the hospital (Mean=2.18, standard deviation=1.100). These results were interpreted to mean that perhaps social interaction with peers, occupational safety and hygiene, patient and caretaker interaction, and duration for placement predict well carrying out investigations, clinical reasoning skills, history-taking skills, examination skills, and documentation skills. Yet, results point out that gaps are still prevailing that may need to be mended particularly in occupational safety and hygiene, patient and caretaker interaction, and duration for placement for which students' acquisition of clinical skills may be scored. Practical placement in health training provides opportunities for students to work in real-life situations under supervision (Musoke, 2017).

### Hypothesis testing.

Is there an influence of management of clerkship training on students' acquisition of clinical skills in health training institutions?

H<sub>0</sub>2: There is no statistically significant influence of the management of clerkships on students' acquisition of clinical skills in Health Training Institutions. The Regression Analysis coefficients were computed to estimate the strength of the effect between the study variables. The results are reflected in Table 10.

**Table 10: Model summary of the management of clerkships on Students' acquisition of clinical skills.**

Model	R	R square	Adjusted R square	Std. The error of the estimate
1	0.688	0.473	0.468	0.436

Predictor: (Constant), Management of clerkships

Source: Primary data, 2023

Table 10 presents the Model summary of the management of clerkships on Students' acquisition of clinical skills. The study findings R<sup>2</sup>=0.473 and adjusted R square of 0.468 suggest that Management of clerkships accounts for 47.3% of the variance in Students' acquisition of clinical skills. This was interpreted to mean that there are other factors other than Management of clerkships that contribute to

Students' acquisition of clinical skills in Health Training Institutions in Mbale City.

To evaluate the overall significance of the regression model for the Management of clerkships on Students' acquisition of clinical skills, Analysis of variance (ANOVA) and regression coefficients were generated and the results are presented in the table 11.



**Table 11: ANOVA and Regression coefficients for Management of clerkships on Students' acquisition of clinical skills.**

Model		Sum of Squares	Df	Mean Square	Standardized	Beta	Sig.
					coefficients	t	
1	Regression	20.119	1	20.119			0.000 <sup>b</sup>
	Residual	22.431	118	0.190			
	Total	42.550	119		0.688	10.375	

a. Dependent Variable: Students' acquisition of clinical skills

b. Predictors: (Constant), Management of clerkships

Table 11 presents ANOVA and Regression coefficients for Management of clerkships on Students' acquisition of clinical skills. In determining whether a regression model is significant, the decision rule is that the calculated p-value (level of significance) must be less than or equal to 0.05. Since the calculated p-value of 0.000 is less than 0.05, the regression model was found to be statistically significant ( $F=105.838$ ,  $Df=1$ ,  $p < 0.05$ ). This was interpreted to mean that the Management of clerkships has a strong significant influence on Students' acquisition of clinical skills in Health Training Institutions in Mbale City.

To establish whether Management of clerkships is an interpreter of students' acquisition of clinical skills and determine the magnitude to which Management of clerkships contributes to Students' acquisition of clinical skills, standardized Beta and t coefficients were generated. For the magnitude to be significant, the decision rule is that the t-value must not be close to 0 and the p-value must be less than or equal to 0.05. Since the t – t-value of 10.375 is not close to 0, and the p-value  $< 0.05$  ( $=0.000$ ), the study confirmed that the Management of clerkships is an interpreter of students' acquisition of clinical skills.

The null hypothesis, that there is no statistically significant influence of management of clerkships on students' acquisition of clinical skills in Health Training Institutions was rejected. The results from the table further show a standardized Beta coefficient of 0.688 means that; every 1-unit enhancement in the Management of clerkships will lead to an increase of 0.688 in Students' acquisition of clinical skills.

### CONCLUSIONS.

The study concluded that Management of the Clerkships has a significant positive influence on Students' acquisition of clinical skills. This was interpreted to mean that if Health Training Institutions in Mbale City enhance on Management of the Clerkships, there will be a positive enhancement in Students' acquisition of clinical skills. In this study, Management of the Clerkships was rated at position number one in influence on Students' acquisition of clinical skills out of the 3 predictor variables.

### RECOMMENDATIONS.

Regarding the Management of the Clerkships, this study recommends that Health Training Institutions in Mbale City should work more towards boosting on Management of the Clerkships towards supporting Students' acquisition of

clinical skills. This is significant because clerkships aid tutors and students to do all the clinic or hospital paperwork and generate reports of all transactions that transpired in a day's work. The medical clerk may also process admission and discharge papers, and medical charts, properly file and safeguard all patient records, and secure them from unauthorized access. Management of clerkships in Health Training Institutions in Mbale City could be enhanced perhaps through ensuring that students gain relevant experience, gain the required skills (attention to detail, focus, organization, customer service skills, communication skills, and professionalism), and pursue continued professional development.

### AREAS OF FURTHER RESEARCH.

Further studies can be conducted in such areas that can improve the training of medical students in Uganda:

- The effects of management of technological advances on students' clinical clerkship placement in hospitals
- The influence of mentorship motivation on the medical student's completion rates in health training institutions.

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#### **ABBREVIATIONS AND ACRONYMS.**

**HOD:** Head of Department

**ICT:** Information Communication and Technology

**IEC:** Information Education and Communication materials

**MOH:** Ministry of Health

**MRRH:** Mbale Regional Referral Hospital

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#### **CONFLICT OF INTEREST.**

The author declares no competing interests.

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