Psychology of African Teacher in Pedagogy in Mathematics during Covid-19 Epoch in Uganda: Evidence from Albertine Region

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Abstract

Over the age Psychology of African teacher has shown that, hands on pedagogy in mathematics greatly influence the acquisition of the taught concepts empirical experiences from Albertine Sub-Region of Uganda.The study was guided by three objectives: (i) To examine the effects of Psychology of African teacher in pedagogy of mathematics during Covid.19 period.(ii)To access the influence of teachers' pedagogical competence to students 'comprehension of learnt concepts during Covid 19 period. (iii) Analyze influence of education Psychology the teaching of Mathematics and students learning of problem solving during the Covid-19 age. The study used mixed methods, a case study, and a positivist paradigm to analyze 200 students. Results showed a significant positive influence of African teachers' psychology on students' learning and understanding of mathematical concepts. The study also found that teacher and experience impacts significantly on teaching mathematics. The study concludes that, Teachers' inexperience and competence significantly enhance students' interest and conceptualization of mathematical concepts. The study recommends incorporating African teachers' psychology in mathematics pedagogy, involving active engagement and hands-on learning, and adopting advanced innovations to translate mathematical concepts into reality. This approach can improve student performance in the Albertine sub-region of Uganda.

Keywords: *Pedagogy, Mathematics, Psychology, Programme transformative, Albertine*

1.1 Introduction

The article examined Psychology of African Teacher in pedagogy of Mathematics in Albertine sub-Region of Uganda, Great Lakes Region of East Africa, Education Psychology of African teacher greatly influence and impact on the teaching of Mathematics (Xenofontos, 2019). There are major discussion and debates in education Psychology of African teacher and the impact of

hands on pedagogy in Mathematics discipline in Uganda. In this education Psychology of African Teacher particular reveals the education Psychology works on both the teacher and learners. The common agreement of this psychological model is based on hands on and active involvement the learners in the teaching and learning process (Akbar et al., 2023). The psychological model of African Teacher illustrates that hands on teaching based model aids learning of mathematical concepts for effective understanding. The hand on pedagogy technology and give real life experience; a person must perform the fundamental operations of arithmetic skills with confidence and effectiveness of education psychology in logical plans of problem solving (Experts, 2022). However, it is important to note that, education **Psychology** suggests integration of the four disciplines. All these can be achieved through hands on operations if one is to learn Mathematics illustrations appropriately and the science of problem solving during this era of Covid-19 age in the Great Lakes Region and the entire World. The Psychology of African Teacher and hands on pedagogy give mathematics and science plays a central role of in the acquisition and understanding of Mathematical concepts in Africa. The education Psychology has it that, effective teaching and learning of mathematics in Uganda and the Albertine Region greatly depends on active engagement of learning of the learning and teachers competence.

The teachers' competence is so paramount in the teaching of mathematics and engineering concepts and therefore the Psychology of Africa Teacher aids learning. In a global perspective hand on pedagogy is one of the best approaches in teaching and learning process of Mathematics. Psychology of African Teacher encourages the teaching and learning of mathematics in Uganda with a particular focus to hands on pedagogy. In the same vein education Psychology trends has it that, for effective teaching and learning process during covid-19 age we need innovations and practical illustration. One may wonder how African Teacher can practically engage his learners while using advanced podium of e-learning. There are many apps and applications of teaching mathematics we have to adopt for effective teaching and learning process. Developed economies in continents like Europe, America, Asia have undergone a number of reforms during this covid-19 era and Africa is not exceptional.

Many of the African counties' like those located in the Great Lakes Region where Uganda is no exception especially during this period of Covid-19 need to adopt and use Psychology of Africa Teacher in order to make a difference in the teaching and learning process during age of Corona Virus. In the African perspective and Uganda in particular, there are a number of scientific significant reforms in the teaching of Mathematics concepts and illustrations of education Psychology (Akbar et al., 2023). These mainly focuses hands on pedagogy approaches and reforms are associated with a number of challenges such as inadequate teachers, teachers' competence, instructional materials, poor facilities and inadequate infrastructure all these affect the effectiveness and efficiency in service delivery (Makoelle et al., 2023). The Ministry of Education and Sports in Uganda has undergone similar reforms which include making Mathematics a compulsory subject at Secondary and secondary school levels. Despite all those effort there is still a gap in the teaching and learing of Mathematics in Uganda and the entire great Lake region of East Africa. This is reflected in the Education Act of 1970.

Another reform is the "Educations for All" (EFA) which gave rise to the famous educational Psychology known as Universal Secondary Education. Harlow et al., (2022) argues that in order to achieve any given competence successfully, a teacher must have acquired sub-competencies. He goes ahead to say that there are many small tasks which a competent teacher must do before embarking on a given task if she/he is to performs it to the expected standards with specific

competence. To achieve that competence, the teacher must have been trained and acquired a relevant certificate. The teacher must also be able to correctly identify the lessons to be taught to the relevant learners, make good preparation, choose relevant teaching methods and learning aids to enable him/her to facilitate the teaching and learning process effectively. A competent teacher must also be able to assess the daily academic progress and performance of the Students in a particular lesson taught in that subject.

Huang et al., (2021)emphasizes that in order to achieve a certain standard of performance, the school administration plays a very important role in ensuring that teachers are well organized, motivated, equipped with relevant knowledge, skills and instructional materials to enable them facilitate the teaching process very well. The level of teachers' qualification and competence plays an important role in the teaching and learning process. It should be noted at this point that the teachers' level of education, knowledge, experience and attitude effect the teaching and learning process of Students in Mathematics at all levels.

This came along with many challenges that have affected the quality of academic performance in different subjects and including Mathematics (Experts, 2022). There are a number of challenges in Africa and East Africa where USE reform is practiced among others there is inadequate competent teachers and instructional materials, yet hands on pedagogy calls for these aspects. In order to achieve appropriate results in pedagogy we need conducive environment to enable effective service delivery in education syPsychology . In Africa and Great Lakes Region it is a common practice in most of our schools, we have inappropriate infrastructure, poor management, monitoring services and some incompetent teachers which affect the teaching and learning process in Mathematics.

BELOW ARE MAPS OF AFRICA AND EAST AFRICA INDICATING THE STUDY AREA?

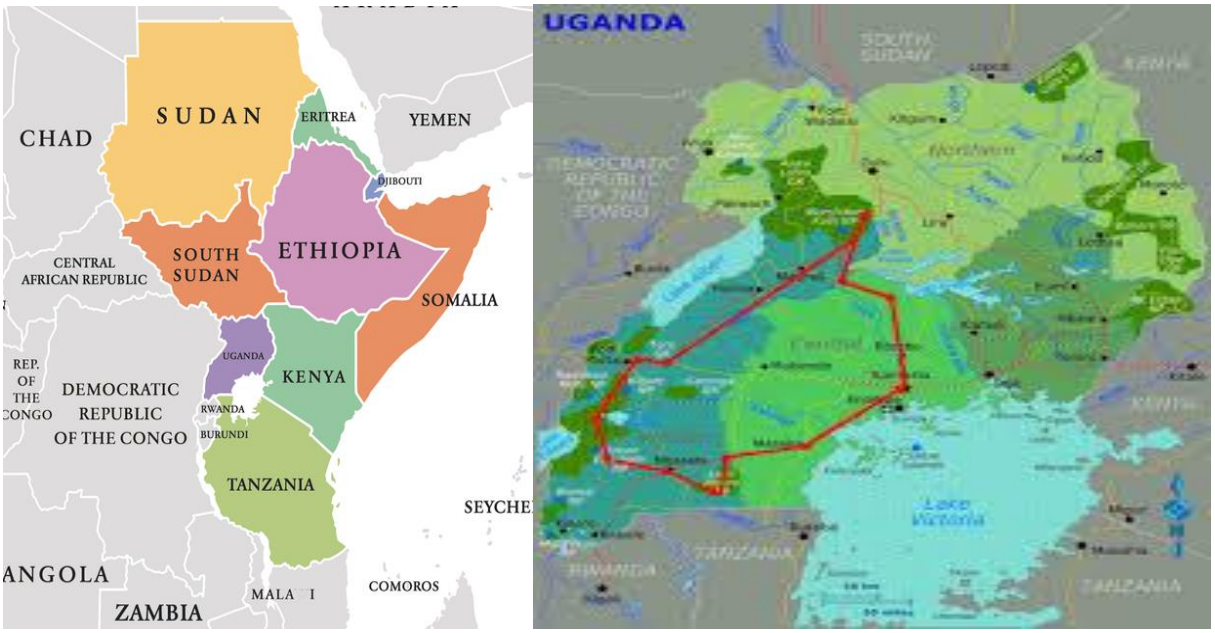

Figure 1: Map of Study Area

(Source, Google image maps)

The discussion of the paper is based on the empirical evidence classroom from Uganda Albertine sub-region in the Great Lakes Region. In respect to the sequence of tool based illustration model hands on directions. This approach of pedagogy requires experienced teacher and a particular framework to follow during the mathematics lessons. The overreaching pedagogical approach can easily bridge the pedagogical practices and gaps so as to make the learning of mathematics more meaningful especially during the Covid19 era (Cupani et al., 2023).

Bista & Pinder, (2022) argues that Diploma teachers have the potential and ability to effectively and efficiently facilitate the teaching and learning process of the Students in Secondary Schools. It should be noted that this is a basic requirement and minimum standard of the teachers at Secondary school level.

Despite a glorious record of achievement in technology, the US lags behind many less developed nations in psychology education in elementary, secondary and higher education. As the US invests more money and efforts to promote improvement in psychology education, the number of foreign students and workers in these fields is increasing significantly" (Gonçalves et al., 2022)

The main goal for teachers teaching psychology subjects is to ignite a passion for these subjects in their students. Psychology subjects are the subjects in school that students have been seen to struggle with the most. According to The Commuter, "The gap between people who perform mathematical operations without any difficulties and those who have the hardest time understanding essential math concepts is growing at a disturbing pace in the United States" (2014). Teachers need to find a way to make these subjects interesting, so students will have an easier time grasping the materials.

The government White Paper (1992) emphasizes that, "No education Psychology can be better than the quality of her teachers''. This implies that in order for a country to have quality education Psychology, it must have knowledgeable, skilled and competent teachers (Lee, 2023) . The teachers' competences have a significant bearing on the learners' academic performance. For instance, schools with well trained and qualified Mathematics teachers who are knowledgeable and experienced, equipped with various methods used in teaching of Mathematics, do play a vital role in influencing the learners' academic performance in the subject. Many a time, the Students' academic performance in Ugandan education Psychology countrywide is affected at the end of Secondary level by the low scores obtained in Mathematics subject (Junkers, 2022). There are low performances of Students in Mathematics in secondary level largely on weak pedagogy competence of the teachers. The Students' good academic performance is largely attributed to teachers' competence and ability to handle the teaching and learning process of the subject appropriately in order to achieve the expected standard of performance. It is against the above background that the researcher was interested in finding out the influence of teachers' competence on Students' academic performance in Mathematics of Secondary (Mammarella et al., 2019).

The integration approach and hands on pedagogy education administration has tried their level best to improve on teaching and learning of Mathematics in Uganda. Despite all efforts made The Ministry of the Education and Sports has invested a lot of financial resources, trained teachers, provided text books and other instructional material (Nicholson et al., 2022))to ensure hands on pedagogy effectiveness in Mathematics and psychology service delivery. There is a gap towards achieving quality academic performance in Mathematics. The academic performance has not been matching with the presence of qualified teachers and instructional materials provided in Secondary schools within Uganda Albertine Sub-region. The Uganda National Examination Board

Assessment Report (2018) on Secondary Examination results was not good as expected. The study sets out to examine hand on pedagogy in Mathematics and factors that hinder efficiency of psychology so as to underpin them in order to increase its influence the Students' academic performance in Mathematics in Secondary in Albertine Sub-Region of Uganda, Great Lakes Region. The question hands on pedagogy competencies on effectiveness of the psychology in Mathematics, guided the study.

2.1 Methodology

The study adopted a mixed methodology that enabled collection of quantitative and qualitative data. The study also used a cross sectional research design that helped the study to get in-depth and clear understanding of the variables. The universal secondary served as unit of analysis whereby detailed information was drawn from the targeted population which served as unity of inquiry in this case. The researcher employed positivism paradigm that posted into ontological and epistemological stance which helped to have clear and ultimate understanding of the study variables. The study was arched on John Dewey, Piaget, and Vygotsky' constructivism theories that rigors guided the study in different approaches were paramount in the study for they provided deeper comprehension of the relevant variables in the study (Mansell et al., 2023). The study further adopted positivism philosophy in the study. Triangulation approach was applied to provide empirical evidence and reflect a real picture for better understanding and producing meaningful patterns, checks and balances at different levels of the research process. The study scientifically selected different secondary school in Albertine Sub-Region practicing psychology of Africa Teacher as unit analysis (Education, 2021). It is from schools where the unit of inquiry sample of 200 participants was scientifically taken which included Inspectors of Schools, Headteachers, Teachers of Mathematics and students. The research participants were arrived at using purposive, simple random and stratified sampling techniques. The diverse population helped the researcher to get real facts related to hands pedagogy and effectiveness of the programme and academic performance in Mathematics in Secondary Schools. The survey, interviews and documentary review was used in data collection.

3.1 Data Analysis

The study used both Quantitative and qualitative data analyse approaches. The data quantitative a Statistical Package for Social Sciences (SPSS) was used for analysis. Results were obtained and summarized in tables, figures, and pie charts (Ocholla et al., 2024). Measures of Albertine tendency, frequencies and percentages were also determined. Rana et al., (2023)Contend that content data analysis is suitable qualitative data analysis technique; narratives were used and specific questions. Qualitative data generated from focus group discussions and interviews as well as from unstructured questionnaires was analysed and classified into meaningful categories in order to bring out essential patterns of the research based on the objectives of the study. The patterns arising from the analysis, together with the literature enabled the researcher to draw logical conclusions from the study.

4.1 Results of the Findings

The study findings clearly indicate that there major three perspectives of hand on pedagogy in Mathematics and they have commonalities had a positive and significant contribution in students' learning of taught subject matter and get clear understanding illustration of problem solving. The findings also indicated hands on have a domain of scientific inquiry-based learning which enable the learners to comprehend and solve the mathematical problem (Oluwunmi & Ansa, 2022).

Lastly it revealed that there is a domain of making Psychology of Africans an inquiry in a problem situation. All this approaches have made hands pedagogy suitable and applicable during the lockdown of Covid 19 period. The hands on pedagogy differ in the processes of usual teaching and teachers' competence and experience is not the only contributor though it had an impact and active Transformative learning among the students in Uganda. However the findings during this covid19 period clearly show that hands on pedagogy have different presentations of learning reality. That is physical reality, abstract reality and tool dependent reality (Al-Emran et al., 2023).

Psychology of African Teacher and hand on pedagogy in mathematics

The study findings indicate during the Covid 19 the pedagogical approaches of teaching Mathematics has change their own domain and buyin innovations so as fit in the contemporary situation and significantly contribution to students' learning (Makoelle et al., 2023). It was also revealed that teachers' pedagogical experience and their level of education had a significant influence the learners understanding of the taught subject matter and perception of illustrations in problem solving. The results of the findings indicated that (76.9%) of the respondents said learners interest was paramount to the learning of Mathematics during this era of Covid 19 in the study area. The findings further indicated that (12.8%) of the respondents observed that parents contribution were required in the teaching of Mathematics. While only (10.3%) said that there was need for specialist teachers of Mathematics to aid the teaching and leaching of Mathematics in the Albertine region.

Hands on pedagogy and Students learning in Mathematics concepts

The findings revealed focus group discussions among the students had a significant relationship to their conceptualization of the subject matter and understanding of the problem solving approaches. It was also noted in the findings that using discussion and inquiry based approach assist the students to develop their own ideas of problem solving. Inquiry based learning during covid 19 era has proved to be the best as opposed to teachers' experience and skills in the teaching of Mathematics as a subject (Hedtke, 2023).

The findings demonstrated a number of skills and critical think innovations have emerged among the learners during this period of Covid 19 in the Albertine Region. The students could illustrate and solve mathematical problems with ease using the constructivists' pedagogy in science education. This implies that some of Students were comfortable with their own interest, developed ideas, experience and skills they had from teachers of Mathematics before the Covid19 lockdown of schools. However, it was notable in the study that some students from well to do schools had good command of Mathematical knowledge and language; while others from rural schools had difficulties in solving mathematics problems.

Teaching and Learning of Mathematics in Albertine Sub-Region

The findings clearly indicate during investigation that there were a number of factors that affected the teaching of Mathematics in Albertine Sub-Region during this period of Covid 19 era (Makonye & Ndlovu, 2023). The findings clearly indicated that (74.3%) of the respondents said that the Students have low morale and interest towards learning Mathematics as a subject. Other respondents (92.3%) said that the students had inadequate teaching materials provided to them during this period of Covid 19 lockdown. While (87.1%) said that they were poorly motivated by their parents and teachers to use hands on pedagogy. Finally the findings (58.9 %) of the

respondents said that there was poor planning by the ministry of education and sports to this approach of hands on pedagogy in mathematics in the Albertine region.

Parents' Contribution towards students learning Mathematics

The study critically analyses parents' contribution to the students learning Mathematics during the period of Covid 19 lockdown in Albertine sub-region.

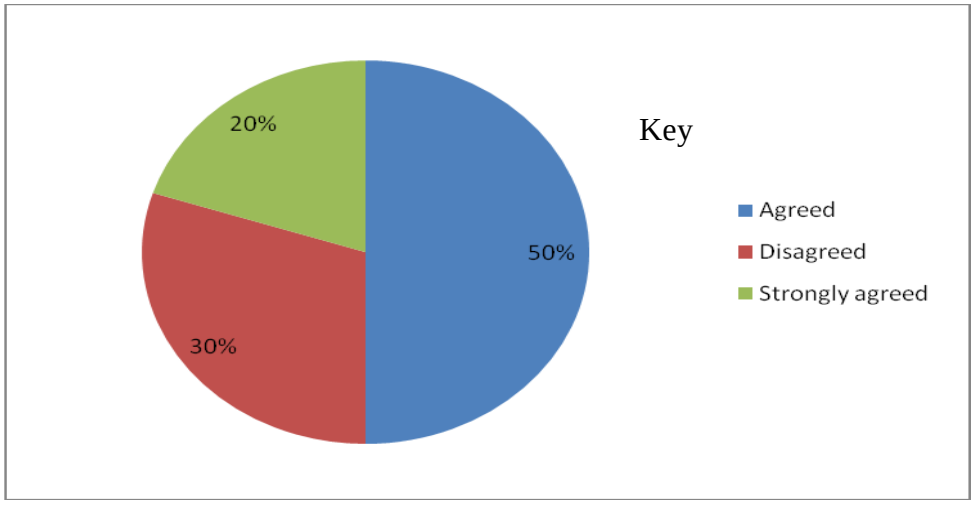

Figure 2: Parents' Contribution towards students learning Mathematics

(Source: Data from field, 2021)

The findings from figure (ii) above, 50% of the respondents agreed that parents contribute much to students learning of mathematics during this period of lockdown. However, the do encourage the students to spare time and attend to their lessons and they made some efforts to ensure the students have access to study materials.

The findings indicated that 30% of the respondents disagreed with the parents' contribution and they said some parents are not bathed with students' pedagogy of hands on, it upon the students to ensure the study. It was only 20% who strongly agreed with parents' contribution is significant and has a positive influence in hand on pedagogical approach (Georgette et al., 2020). Hands on pedagogy being an innovation in the region most of the students were accustomed to the formal teaching and learning process where a teacher could aid the teaching and learning.

Parents' Provision of Basic Mathematics Learning Materials to their Children

According to the findings from respondents, it was revealed that the majority of the Students were provided with all the basic necessities and relevant learning materials as required for hands on pedagogy. Besides the materials provided by the Ministry of education and sports some parents bought text books and other relevant materials for their student's education. Therefore it was incumbent on the students to apply the three pedagogical domains of Mathematics so as to remain focused in the learning of mathematics as subject. The responses from some students in the study region revealed that good parent –student interpersonal relationship enables parents' provision of the basic Mathematics learning materials was fairly good and created a cordial environment for hands on pedagogy.

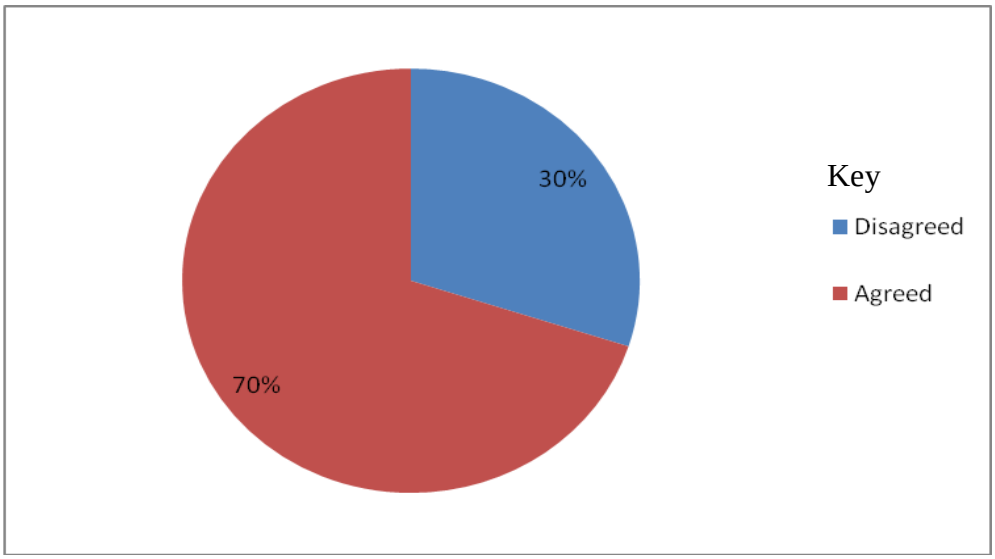

Figure 3: **Provision Basic Mathematics Learning Materials**

(Source: Data from field, 2021)

Figure 3 clearly shows that the majority of the respondents 70% agreed with the assertion that parents do not provide them with all the basic Mathematics learning materials from the Ministry of Education and Sports and complemented with Mathematics exercise books.

While only 30% of the respondents that agreed that their parents do provide them with the basic Mathematics learning materials, Mathematical sets, pens and other necessities to aid hands on pedagogical methodology which is being used in the study region and elsewhere in Uganda today during Covid 19 period.

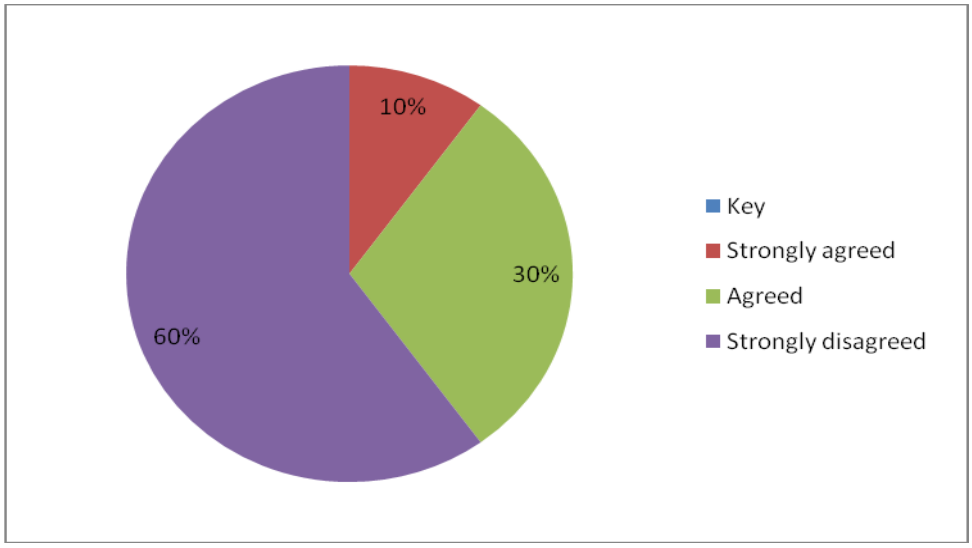

Figure 4: Provision of Mid-day Meals to Students

(Source: Data from field, 2021)

From Figure 4, 60 % of the respondents strongly agreed that they were provided with lunch at their homes during the Covid 19 Corona Virus period. On the other hand 30% disagreed that their parents could pack for them mid-day food and 10% strongly disagreed and said that their parents did not cater for their lunch and they could only have one meal a day. The small group of 10% respondents' disagreement indicates that the failure to have lunch could interrupt their studies.

The related factors that affect the teachers' teaching competence

The findings from across sectional survey conducted in students within Albertine Sub-Region indicated Students' interest and willing to take on the mathematics as a subject played a big role in hands on pedagogy. The findings clearly shows that most of the Students interviewed (53.5%) liked Mathematics very much and they had a positive response towards hands on pedagogy and good assertiveness towards the subject. The researcher's findings in the table above also revealed that (46.5%) did not like Mathematics and the hands on practice proved rather hard for them. This implies that a good number of the students were no very comfortable with Mathematics and hands on pedagogy in the Albertine region. They could use it because it was the only way to go which seemed cheaper and no other option the Television and Radio options where rather hard and expensive. These two domains for active attention and gifted students were the only ones who could easily benefit to this pedagogical methodology.

The Influence of Mathematics Knowledge to the Learning of other Science Subjects

The findings reveals that (52.5 %) of the respondents said that Mathematics increases one's knowledge in other science related subjects. The mathematical pedagogical model calls for active participatory and interest of the learners in the subject.

The findings also clearly indicate that (22%) of the respondents agreed that the learning of mathematics, increases one's rate of understanding and critical thinking. That is why Psychology of African Teacher is anchored on an inquiry based approach was suitable for hands on pedagogy. A small number of (2.5 %) said that the learning of Mathematics subject needed teachers' competence to aid the teaching and learning process. This implies the influence of students' interest and their willingness to solve mathematical illustrations does not necessarily need teacher's competence with the Albertine region.

The students' performance in Mathematical problem solving in Albertine Region

The findings from the critical data analysis of students' academic records for the last four years indicated that the majority of Students scored low marks in Mathematics in the study area revealed that performance of the students in Mathematics was not so good.

From findings the analysis of results record for four years, it was observed that 133 out of 2647 (5.0%) of Students passed Mathematics with distinction for the last four years.

The findings further indicate that 695 out of 2647 (26.3%) scored credits in the subsequent four years and 951/2647 (35.9%) failed Mathematics. This implies that good number students within the Albertine region have not been doing well in Mathematics for the last four years. The failure in mathematics this year is not only going to attributed to hands on pedagogy but to many other factors that contributes to their inability to conceptualization of mathematical problems.

General Academic Performance of the Students in Albertine Sub-Region

The study findings indicates 62 out of 2647 (2.3%) of the Students were able to pass in division one and 578 out of 2647 passed in division two. The majority good number of the Students 947 out of 2647 (35.8%) passed in division three while 423 out of 2647 (16.0%) of the children failed. According to the analysis of the Students' results and scores, it was observed that Mathematics was the major problem to these candidates and affected their overall performance (Meda & Chitiyo, 2022). However it is also revealed that, the children academic performance in mathematics is general low in the region. This alone implies the teacher need to improve on their pedagogical skills and approaches in influence learners love mathematics as a subject in the Albertine region.

Table 1: Annual Analysis of Results of Sampled Schools in Albertine Sub-Region for 2019

School	**D1**	%	**D2**	%	**D3**	%	**D4**	%	**DU**	%	**Total**
S_1	**01**	2.7	**17**	45.9	**11**	29.7	**04**	10.8	**04**	10.8	**37**
S_2	**03**	4.6	**20**	31.2	**36**	56.2	**08**	12.5	**--**	--	**64**
S_3	**00**	00	**38**	52.8	**23**	31.9	**01**	1.4	**10**	13.9	**72**
S_4	**00**	00	**39**	49.4	**10**	12.7	**26**	32.9	**04**	5.1	**79**
S_5	**02**	2.8	**48**	66.7	**12**	16.7	**10**	13.9	**--**	--	**72**
S_6	**00**	00	**32**	42.1	**07**	8.9	**30**	39.5	**07**	9.2	**76**
S_7	**01**	4.8	**14**	66.7	**06**	28.6	**--**	--	**--**	--	**21**
S_8	**02**	2.6	**35**	44.9	**21**	27.0	**18**	13.1	**02**	2.6	**78**
S_9	**00**	00	**08**	19.0	**34**	81.0	**--**	--	**--**	--	**42**
S_{10}	**00**	00	**07**	14.3	**21**	42.9	**10**	20.4	**11**	22.4	**49**

(Source: Data from field, 2021)

Findings from Table 1; above shows the PLE results of selected schools in Albertine Sub-Region in the year 2008. It was observed that only 9 out of 825 (1.1%) Candidates passed in division one. The results revealed that 258 out of 825 (31.2%) passed in second division, then 147 out 825 (17.8 %) passed in third Grade. The analysis further indicates 107 out of 825 (13 %) passed in four division while 38 out of 825 (4.6%) Candidates failed. This implies that, it rather vey difficulty to effectively teach mathematics without physical interaction with the learners in the teaching and learning process in the Albertine region.

5.1 Conclusions

The article concluded that:

The generic idea of hand of teachers pedagogical experience have a significant positive influence the effectiveness of psychology of Africa teacher and academic performance of the Students in Mathematics in Albertine Sub-Region. It also concludes that hands on pedagogy practices largely depended on teachers' levels of education and knowledge of practical influence that facilities their potential and ability for effective teaching.

The study concludes most of the teachers who were engaged in they had no experience in hands on pedagogy and they had inadequate skills in teaching mathematics and this affected psychology of African Teacher (Rocha et al., 2020).

The study concludes that inappropriate performance of the Students in Mathematics largely depended on teachers' pedagogy instructional that had inadequate integration approaches as the result of having not experience in hands on pedagogical technology.

The study concluded that, skilled and experienced teachers in hands on pedagogy were competent and offered quality teaching services in the schools. Their teaching skills and experience of handling the Students appropriately positively influenced the learning progress.

The study concludes that, were many factors including teaching environment, pedagogical technology which significantly contributed to inappropriate academic performance of the Students in Mathematics in the Albertine Sub-Region (Nicholson et al., 2022).

These included poor teaching environment, inadequate infrastructure, poor planning by school administration, inadequate basic learning materials, lack of Students' lunch while at school, and inadequate external support supervision. The study concluded that, there was need for the district local government with the Albertine Sub-Region to work jointly with other school stakeholders to address the challenges of hand on pedagogy that affect teachers' competence and improve on academic performance in Mathematics.

6.1 Recommendations

The empirical findings and discussion deduced the following recommends:

The Psychology of African teacher should be adopted in the teaching and learning of Mathematics. This is because it significantly influences hands on pedagogy in mathematics during this era of Covid 19 age as advanced (Makonye & Ndlovu, 2023) and evidenced in the discussion of the study findings. The article further recommends practical teaching of mathematics should employ active engagement of the learners in real life experience. The learners should apply the mathematical concepts in real life activities integrate illustration scientifically more so using arithmetic knowledge and improve on their learning approaches.

The article recommends that Parents who are serving as Teachers during this period of Covid 19 should advocate for innovations and change to better active teaching methods of practical illustration model of Mathematics principles so as to aid learning of their children. It also recommends for application of Mathematics principles in the attempt to facilitate learning in daily practice during the time of Covid 19 phase. Being a practical subject and applicable to daily life experiences, the way Mathematics is taught should be made simple and appropriate to the learners

Headteachers should engage the teacher to uphold the psychology of an African teacher in order to make a difference ensure that there are continuous staff development pedagogy sessions and giving teachers refresher courses to improve on their existing skills, widen their knowledge in teaching approaches and help them improve on the of use poor dry theoretical methods of teaching Mathematics (Makonye & Ndlovu, 2023).

The article recommend full blast adoption of an African Teacher psychology in pedagogy of mathematics concepts in Albertine Sub-Region, school administration, teachers, parents and other stakeholders need to work jointly in improving school infrastructure and teaching/ learning environment for Mathematics. The Ministry of Education and Sports should work collaboratively with the Psychologists who are well grounded with African perspectives and local governments in monitoring teaching of Mathematics concepts during the Covid 19 period (Reimers & Marmolejo, 2022).

The parents who are serving as teachers of Mathematics should integrate the practical skills and participatory models of teaching so as to enhance the understanding and conceptualization of the taught subject matter in Mathematics. The current existing psychological concepts of an African Teacher of hands on methods should adequately adopt instruction materials so as to avoid dry theoretical approaches when teaching mathematics. Teachers teaching Mathematics should be oriented to new teaching collaborative pedagogical approaches that draw Students' interests and make Mathematics lessons more practical and participatory

The article finally recommends that African Teachers should innovative use hands on mechanism in the teaching of mathematics in order to cultivate a positive attitude and celebrate their achievements and encourage themselves to like Mathematics as subject. This is because Mathematics is a mother of all science related subjects and facilitates learners' logical thinking and equips them with problem solving skills.

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