Original Article

Institutional Support as a Catalyst for Academic Writing and Research Skills among Graduate Students in the Selected Public Universities in Uganda

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ABSTRACT

The study examined the influence of institutional support on graduate students' academic writing and research in selected public universities in Uganda. It involved the use of an embedded design with a dominant quantitative approach. It involved graduate students, academic staff and academic administrative staff as the study population. These participants/respondents were purposively selected from four public universities in the different regions of Uganda. Each of the four universities was represented by 100 students of which 50 were selected from the science faculties/colleges and 50 from the humanities faculties. The respondents were sampled using stratified random and purposive sampling. Data from graduate students were collected using a self-administered questionnaire (SAQ). A FGD for graduate students was the second data collection tool. Data from academic administrative staff and academic staff were collected using an interview guide. Descriptive quantitative data were analyzed using means and standard deviations while the study hypothesis was analyzed using, Pearson's Correlation Co-efficient Index and Simple Linear Regression Analysis. Qualitative data was thematically analyzed. Findings from this study revealed a positive significant relationship between institutional support and academic writing and research among graduate students, where $r = 0.441**$, P - value = 0.000 less than 0.05. The study concluded that institutional support significantly relates to graduate students' academic writing and research skills. It was further concluded that as graduate students are offered a conducive research environment like high-quality supervisory support, research funds, ICT facilities, library facilities, and mentorship among others, this would cultivate a positive writing behaviour and mentality which would eventually lead to scientific writers and researchers. The study recommended that there should be an emphasis on academic writing development programs as viable strategies to enhance scholarly writing and research. In addition, supervisors should be encouraged to provide proper guidance, feedback and adequate consultation time to individual graduate students especially those struggling at different stages of their research projects.

INTRODUCTION

Academic writing and research skills are vital for graduate students to excel in their programs and prepare for future careers in academia or other professional fields. By investing time and effort in developing these skills, graduate students can enhance their academic performance and prepare themselves for success in their chosen fields of study (Brown, 2017). Likewise, institutional support for academic writing and research is crucial for graduate students to successfully complete their studies and produce high-quality research. Despite this crucial role of academic writing and research, many graduate students face challenges in navigating the writing process, managing their time effectively and balancing their research responsibilities with other academic demands. In response, institutions of higher learning have begun to recognize the need for targeted support systems to help graduate students overcome these challenges. This has increased the demand for academic writing development programs as a viable strategy to enhance scholarly writing and research required by graduate students and faculty (Pineteh, 2014). For instance, in Uganda's Higher Education system, evidence has shown that in many universities, scholarly writing and research are not given the attention they deserve (NCHE, 2020). Students' academic writing in assignments and research lacks the required proficiencies, is not well designed, does not measure up to the expectations' of their peers, lacks access to effective research sources, is unable to address emerging research problems, is plagiarized and above all fail to meet assignment deadlines (Omaswa, 2014, NCHE, 2020, Rwendeire Report, 2017). This current project aimed at establishing the influence of institutional support on academic writing and research among graduate students in selected public universities in Uganda

The study was guided by the Institutional Efficacy Theory of Goddard 2003. This theory states that students' perception of their institution's ability to support their learning has a significant impact on their academic performance. It posits also that when students perceive their institution as supportive they feel more confident and motivated to learn which in turn enhances their sense of institutional efficacy. In line with the institutional support theory, this current study assumes that the ability of universities to support graduate students greatly determines their confidence to engage in academic writing and research. This support was deemed to be in the form of providing a conducive research environment,

supervisory support, and library facilities, among others. Therefore, when institutions demonstrate a strong sense of efficacy it enhances student achievement, improves teacher morale and eventually promotes academic writing and research skills.

Problem Statement

As the pursuit of higher education continues to grow globally, graduate programs in universities play a crucial role in fostering the next generation of scholars, researchers, and professionals. Meanwhile, the academic landscape of higher education has undergone significant changes in recent years, with the increasing importance of research and publication as a key aspect of a graduate student's career development. Thus, there are several moves aimed at making universities research-led and focused on generating knowledge on how societal problems can be solved. Despite these critical roles in the higher education land scape, a significant body of research suggests that graduate students often lack the necessary writing and research skills to produce high-quality research and publishable manuscripts (Bialik, 2018; Hartley & Barksdale, 2013). More still, many graduate students struggle with the demands of academic writing and research, which are essential components of the graduate school experience. Likewise, (Omaswa Report, 2014; Rwendeire Report, 2017; and NCHE, 2020) all indicated that academic writing and research in Uganda's public universities lack strong emphasis and still lag behind in fulfilling national ideologies. Many graduate students struggle to develop knowledge, skills and research abilities due to a lack of writing and research skills. Furthermore, these students are not highly innovative and creative since they lack the requisite generic research skills needed while at work. Several studies (Russel and Morrison, 2017; Van der Molen, 2018), have tried to explain the challenge of failure to develop academic writing and research skills. Consequently, this leaves many graduate students haphazardly prepared in academic writing and research skills that are essential in transforming a nation from a less developed country to a middle-income status state. This skill gap can lead to difficulties in completing research projects, meeting publication expectations, and achieving academic success (Boice, 2000). Therefore, based on the institutional Efficacy Theory of Goddard (2003), this study suspected that lack of adequate institutional support could primarily be responsible for students' negative attitudes towards academic writing and research. Therefore, this study aimed to establish the influence of institutional support on graduate students' academic writing and research skills in selected public universities in Uganda.

LITERATURE REVIEW

Efforts were made to conduct studies on institutional support and academic writing and research. Among these studies included: Jeyaraj et al., (2020) in a framework for supporting postgraduate research writing, insights from students' writing experiences. Based on qualitative data that was thematically analyzed results revealed that institutional support, services, and supervisory support services were critically essential in supporting postgraduate students' research writing. Supervision in this study was revealed as a specialist form of teaching where students are taught how to conduct research, write grant proposals, literature review, conduct data analysis and manage the entire research project. However, this study was qualitatively done while the current study was quantitatively done. Meanwhile, Josslin and Widlund's (2021) academic writing workshop to support students writing bachelor's and master's theses, based on thematic analysis technique results revealed that supporting staff and students through workshops positively enhances their academic writing and research activities. However, these findings were from a workshop organized to boost academic writing and research while the current study was empirically done with field study findings.

Rawls (2019) in an empirical analysis, assessed research productivity from an institutional effectiveness perspective. Results revealed that universities with a clear framework for supporting academic writing and research had their students and staff doing well on this subject. However, this study was not done with the use of institutional efficacy theory. Meanwhile, Frantz et al. (2017) revealed that building a strong institutional culture by universities was considered to boost research productivity and writing proficiencies. This was also considered essential in increasing research capacity, the implementation of appropriate management infrastructure and the adoption of research policies were effective strategies. Furthermore, it was established that supporting research publication and publication performance management was similarly identified to improve writing and research productivity. However, in terms of content, this current study viewed institutional support in the form of providing a conducive academic research environment, developing research-led policy, and provision of funds among others, that were not considered in the afore mentioned study.

Similarly, Ocampo et al. (2022) investigated research productivity for augmenting the innovation potential of higher education institutions. Results from the Structural Equation Modeling Model applied revealed that institutional support in rewarding researchers, creating a reward system, research funding, monitoring and electric information resources provision were important factors influencing research and academic writing productivity. However, the reviewed study did not use the institutional efficacy theory of Goddard as was the case with the current study.

Nonetheless, Kramer and Libhaber (2016) investigated writing for publication and revealed that the enabling environment facilitates not only the development of writing skills per se but also the dissemination of the generated knowledge. Alternatively, this study did not use inferential statistics as a data analysis technique which the current study did. Su and Huag (2022) in line with the previous results showed that pedagogical suggestions related to academic writing and research greatly determined the extent to which it was effective. Results revealed that innovative academic writing pedagogies allowed for the improvement of peer feedback activities in academic writing. However, the extent to which academic writing and research teaching sessions were creative and allowed a two-way information flow was not empirically established as was the case with this current study.

Meanwhile, Jeyaraj (2020) investigated the academic writing needs of postgraduate research students in Malaysia. Results from interviews conducted revealed that students needed support in three areas; writing, supervision and ICT. Many students with English as a second language needed language support workshops, and programs to support their thesis writing. In terms of research, guidance was needed from supervisors to enable greater clarity on writing and institutional processes and procedures. Besides, this study was subject-specific, unlike the current study which was multi-disciplinary in approach. In the same conundrum, Ooi et al. (2022) opined that as part of institutional support students need required supervision assistance in the process of their academic writing and research. In this conundrum, supervisors are not only expected to provide encouragement and support but to supply students with resources, information, comments and thesis writing guidelines. Besides, this study was qualitative in nature while the current study was a mixed methods approach.

In addition, Sulaiman (2022) indicated that educational institutions commonly provide support in academic writing and research but this support varies. Some universities in Malaysia have a dedicated centre for students to approach and seek assistance in their writing skills. Similarly, some universities made it a requirement for their

undergraduate students to sit in class to learn academic writing skills as part of their degree program. However, this study was done in Malaysia while this current study was done in public universities in Uganda. In another empirical analysis, Yu and Jiang (2022) studied doctoral students' engagement with reviewers' feedback on academic writing. Results revealed institutions which encouraged doctoral students' engagement in supervising other students' research works encouraged academic writing and publishing on the side of these students. However, this study was not as statistical as with the current study.

METHODOLOGY

The study used an embedded design with a dominant quantitative approach. It involved graduate students, academic staff and academic administrative staff as the study population. These participants/respondents were selected from four public universities in the different regions of Uganda. Each of the four universities was purposively selected due to the fact these are public universities expected to do intensive research. These universities were represented by 100 students of which 50 were selected from the science faculties/colleges and 50 from the humanities side. The respondents were sampled using stratified

random and purposive sampling. Data from graduate students were collected using a self-administered questionnaire (SAQ). A FGD for graduate students was the second data collection tool. Data from academic administrative staff and academic staff were collected using an interview guide. Descriptive quantitative data were analyzed using means and standard deviations while the study hypothesis was analyzed using, Pearson's Correlation Co-efficient Index and Simple Linear Regression Analysis. Qualitative data was thematically analyzed.

RESULTS

Description of Students' Attitudes towards Academic Writing and Research

In this section, academic writing and research among graduate students were operationalized using four major parameters that are structure, evidence-based, language and critical analysis. Graduate students were requested to do a self-rating using a Likert Scale ranging from 1= Strongly Disagree, 2= Disagree, 3= Not Sure, 4= Agree, 5= Strongly Agree. Descriptive results that is; means and standard deviations on the four parameters of academic writing and research are provided in Table 1:

Table 1: Descriptive Statistics Means and Standard Deviations on Academic Writing and Research

Variables of Items	Mean	Standard Deviation
Structure of AWR	3.11	0.59
Evidence-based	3.88	0.69
Language	3.89	0.67
Critical Analysis	3.68	0.62

Table 1 shows average mean values for the four parameters of academic writing and research. The first parameter which was the structuring of academic text had an average mean of 3.11 which implied that graduate students who participated in this study were not sure if they could structure their academic work properly. While the standard deviation of 0.59 was low implying that respondents' views did not vary from one

respondent to another. On the second parameter which was evidence-based, the average mean was 3.88 which was almost close to code 4 equal to the agreement on the Likert Scale used. This suggested that graduate students had agreed that they were able to give/produce concrete evidence to support their claims. Whereas the standard deviation of 0.69 was low implying that respondents' views were

somewhat similar from one graduate student to another.2

Conversely, on the parameter of language, the average mean was 3.89 equal to code 4 on the Likert Scale that was used. This suggested that graduate students had agreed that they could use formal academic language in their academic texts. While the standard deviation of 0.67 was low implying that respondents' views did not differ from one respondent to another. Lastly, on the parameter of critical analysis, the average mean value of 3.68 was almost equal to code 4 agreement on the Likert scale that was used. This implied that respondents had agreed that they somehow are critical while doing research projects. The standard deviation of 0.62

was low implying that respondents' views were similar from one respondent to another. Generally, from the four parameters used to measure academic writing and research, graduate students had almost agreed that academic writing and research were not that complex.

Descriptive Results on Institutional Support

Institutional support was studied using quantitative and qualitative items. On the quantitative side, fourteen closed-ended items were used. These were studied using a Likert Scale ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree and 5 = Strongly Agree. Pertinent Means and Standard Deviations are offered in Table 2:

Table 2: Means and Standard Deviations on Institutional Support (IS)

Items on institutional support_$\bar{x}$	Mean	SD
The university provides a conducive writing environment for students	3.696	1.082
The university has incentives to entice students to write and publish their academic work	3.094	1.240
The university has a policy on academic writing and research	3.490	1.123
The university provides funds to enable students to do research	2.730	1.158
The university has a mechanism for rewarding graduate students who write and publish their academic work in high-impact journals	2.86	1.130
The university provides free internet services that facilitate information access	3.773	1.110
The university library is registered and has access to reputable databases	3.76	0.968
When writing an academic piece of work, I always receive support from my supervisors/ mentors	4.00	0.925
The supervisors provide timely feedback as per graduate students' expectations	3.541	1.137
The supervisors are friendly and unbiased and exhibit behaviour that builds good relationships with graduate students	3.89	3.085
The supervisors give adequate time to graduate students in their academic journey	3.472	1.054
The directorate of quality assurance is very supportive of graduate students when it comes to writing publications	3.240	0.993
The Directorate of Research and Graduate Training has the necessary capacity to support graduate students	3.584	0.941
The university has a research-led agenda that prioritizes graduate research training	3.56	1.069

Table 2 shows that the majority of the study respondents agreed that the university provides a conducive academic writing environment for students. This was confirmed by the mean value of

3.696 was close to code 4 agreement on the Likert Scale that was used, hence confirming agreement with the provision of a conducive learning environment. The above quantitative findings on the

research environment were corroborated by qualitative findings from interviews collected from academic administrative staff interviews. For instance,

Qualitative findings on the research environment from Makerere University revealed that

> *Makerere University's research policy has created an enabling environment for research and innovations. This research policy has strengthened research management and coordination and eventually improved research and publication, providing and supporting platforms for dissemination of research outputs and promoting of ethical conduct of research in the university.*

This suggested that Makerere University has created a research system that supports graduate students in their journey of academic writing and research.

Alternatively, findings from Gulu University, Busitema University, and Mbarara University of Science (MUST) and Technology indicated that the research environment for graduate students was not conducive to academic writing and research. Most of the academic administrative staff interviewed in the aforementioned universities revealed that they had limited infrastructure in terms of research resource centres, databases, internet access and relevant reading materials in the library. This implied that the research environment in some of the public universities where this study was conducted was not favourable for the research agenda of these universities.

Study respondents/graduate students agreed that the university offers incentives to entice students to write and publish academic works. Such findings revealed that indeed the university offers incentives to entice students to write and publish academic works. The mean value of 3.094 was equal to code 3 almost equal to Not Sure on the Likert Scale that was used implying that they were moderate with the view that they receive incentives to entice them to

write and publish academic works. Meanwhile, the standard deviation 1.240 was low implying that respondents' views did not vary from one respondent to another.

Regarding research policy, results revealed that the majority of the study respondents agreed that the university has a policy on academic writing and research. This was confirmed by a mean value of 3.490 which showed that to some extent there are policies on academic writing and research in these universities. Such findings implied that there are policies on academic writing and research in the universities where the study was done. These findings were supported by qualitative results from administrative staff.

An interview with one of the academic administrative staff from Makerere University revealed that the university has a research and innovations policy which aims at strengthening research capacity and output so as to increase the contribution of Makerere University to the world of knowledge and innovations.

Similarly, an administrative staff from MUST also confirmed that,

> *The university had put in place a research policy which provides minimum standards for the implementation of research and other related activities that encourage effective communication, efficient, ethical and honest research conduct and availability of essential human and material resources.*

Meanwhile, an administrative staff from Busitema University stated that,

The university has a research policy that aims at ensuring that the university has an outline of guidelines and procedures for conducting research in a responsible, ethical, and productive manner.

Relatedly, an interaction with one academic administrative staff from Gulu University results revealed that,

> *The university has a research policy which aims at strengthening the research capacity that would result in the transformation of both individuals and institutions. This policy clearly defines the standards for research quality, methodology, and ethics, ensuring that research is rigorous, and original, and contributes to the advancement of knowledge in a particular field.*

Whereas academic staff in an in-depth interview from Gulu University revealed that,

> *I hear Gulu University has a research policy; however, this policy has not been publicized to all staff members.*

This finding implied that academic administrative and academic staff at Gulu University had confirmed that there was a research policy to support academic writing and research skills enhancement. However, this policy has not been fully disseminated to all stakeholders. This view was in agreement with the students' responses in a focused group discussion who indicated that they have information on the existence of a university research policy but it has not been fully publicized to enable students to work on their research projects according to the university research policy.

One of the students from Gulu University in the FGD stated that,

> *"The university has a research policy but it has not been put online or disseminated for easy access among graduate students in Gulu University. There are a few aspects of the policy mentioned by our supervisors like publication before one graduates with a PhD, doing the anti-plagiarism test before submitting a dissertation/thesis or manuscript before submission and following ethical considerations during data collection".*

These findings implied that all the universities where the study was done had research policies. However, there were challenges related to making those research policies accessible to graduate students and faculty and establishing a framework for promoting excellence in research, including setting standards for research quality, methodology, and ethics. At the same time, the research policy encourages collaboration among researchers, departments, and faculties by providing guidelines for interdisciplinary research, research partnerships, and knowledge transfer.

Most of the study respondents disagreed that universities provide graduate students with funds to do research. These results were in line with the mean value of 2.730 which was slightly below code 3 neutral on the Likert Scale that was used. This implied that research funds are not provided to graduate students as would be anticipated thus limiting their efforts to write and do research. Therefore, limited funding affects higher-quality research outcomes, as graduate students are not able to conduct more extensive and rigorous research, collect more data, and analyze results more thoroughly.

The standard deviation 1.123 was low meaning that these respondents' views regarding non-provision of research funds did not vary from one another. These quantitative results were in tandem with the qualitative findings collected from different participants across the selected public universities. For instance, an academic administrative staff from Makerere University indicated that,

> *There are inadequate funds for postgraduate students' research and academic writing. It is only in exceptional cases that PhD students are offered a chance to apply for data collection funds whereas it is not easy for one who is not actively engaged in university activities and programs to even know whether these funds are available or not.*

Meanwhile, one of the academic administrative staff at Makerere University stated that,

> *All research projects done in my school are largely funded by donor/development partners. For instance, we have so many donors and funders who request our students to forward their project proposals and they are funded.*

This is corroborated by the findings from the graduate student FGDs from Makerere University where one of the graduate students noted that,

> *Graduate students' research in the science disciplines is funded by bodies from abroad. This has helped to solve some financial challenges that we would encounter especially those that require getting equipment and doing experiments. However, these research funding opportunities are largely provided to graduate students at Makerere University, unlike other public universities.*

Results from one of the academic administrators from Gulu University showed that,

> *Funding is very important for research because researchers must be remunerated and motivated. Funds are needed for acquiring research equipment and educational facilities such as computers, internet facilities, textbooks and laboratory equipment. At the same time, adequate funding enables both students and faculty to enable publishing opportunities, attend conferences, publish papers, and disseminate research findings through various channels, which is essential for getting one's work noticed by the academic community.*

Conversely, an academic administrative staff from Busitema University illustrated that,

> *Inadequate budget provision in the national and university budgets inevitably makes the university remuneration system and funding for research defective. This coincides with the perceptions of academic staff and graduate students who indicated that limited funding cripples their endeavours to publish, do research and come up with credible findings.*

> *This accounts for why there is a serious loss of talent where reputable researchers have exited many public universities in search of greener pastures.*

These findings meant that funding of research and academic writing in the four public universities where the study was done is still at a minimal scale. This further presupposes that there are efforts by the university to finance research projects. However, this money is not adequate to enable students to do quality research.

A significant number of the study respondents 37.5% were non-committal with the view that the university has a mechanism for rewarding graduate students who write and publish their academic work in high-impact journals. This was opposed to 33.2% who disagreed while 29.2% were neutral on the Likert Scale that was used. This meant that graduate students were not highly sure whether they would be rewarded when they published in high-impact journals. This finding was in agreement with the mean value of 2.856 for not sure on the Likert Scale that was used. It implied further that these respondents were not sure about rewarding students who publish in high-impact journals.

Graduate students agreed that their universities provide them with free internet services to facilitate information access, these results were supported by a Mean Value = 3.773 which confirmed that there was an agreement among students that their universities endeavour to provide free Internet services to allow information access. The standard deviation of 1.110 was low implying that there was a commonality of views from one graduate student to another.

Relatedly, a significant number of respondents agreed that the university library is registered and has access to reputable databases. This was confirmed by Mean 3.756 almost equal to the code 4 agreement on the Likert Scale that was used hence signaling that they had agreed with the registration of the university with a reputable database.

Quantitative findings on the afore-presented items were in the same vein as qualitative findings from participants in the interviews conducted in the four public universities where the study was done. Results revealed that these public universities have put in place the necessary infrastructure to support academic writing and research skills among graduate students. A case in the picture was from one of the academic administrative staff from Makerere University who revealed that,

> *The university has created an electronic system where the university library is registered to a reputable database for staff and students to have access to credible and reputable information. Such databases include Springer, Elsevier, Sage, Tylor and Francis, and Emerald among others. Graduate students orient themselves with the database and their literature cited was considered as more authoritative than data collected from other sources which are considered as predatory.*

These findings revealed that the university had played its role by registering to a scientifically credible and reputable database to allow students to do research and come out with scientific dissertations/theses, conference papers and journal articles.

In Mbarara, Gulu and Busitema Universities, interviews from academic administrative staff were identical when it came to establishing internet access for both academic staff and graduate students. Internet availability and access were relatively weak and, in some circumstances, unavailable. The ICT infrastructure was a significant challenge in that one could hardly find a well-equipped computer laboratory; WiFi and internet were unstable.

Most of the public universities where this study was done had limited or no access to reliable and high-speed internet, making it difficult for students to access online resources, participate in online courses, and collaborate with international peers.

The results suggested that most of the public universities still have a long way to go when it comes to ICT infrastructure, internet access and usability.

The majority of the study respondents agreed that when writing an academic piece of work, they always receive support from supervisors. This was based on the mean value of 4.00 which was equal to code 4 agreement on the Likert Scale that was used. This hence suggested that supervisors for graduate students in public universities give them all the support they need to be better researchers and writers. The standard deviation 0.925 was low implying that these respondents had similar views and opinions regarding receiving support from supervisors. These quantitative results were more or less similar to qualitative findings from interviews conducted with study participants.

One of the faculty from Makerere University revealed that,

> *Mentors/supervisors are expected to play the role of the subject experts, gatekeepers of academic standards, resource persons and advisors on research literature, research methodologies, mid wife of the dissertation, directors, project managers, shapers, scaffolder and supporters, editors and promoters of students' research efficacy.*

Meanwhile, another interview with an academic staff from MUST opined that,

> *Graduate supervision is a highly demanding task in which the supervisor plays a pivotal role in supporting students towards realizing their potential. The supervisor with feedback after each review of work submitted. This is always done to enable these graduate students to do corrections and proceed.*

Meanwhile, an interview with an academic administrative staff from Makerere University revealed that,

Delaying to give students feedback on submitted works is a great disservice to the profession. Knowing this better I can sacrifice everything and review students' work as quickly as possible and give timely feedback. This helps students to track all the corrections as immediately as possible.

These results meant that academic staff/supervisors do give feedback to graduate students during their journey of academic writing and research. These results were to some extent confirmed by the views of graduate students in the focused group discussion where one of the students from Makerere University stated that,

I get my feedback within one to three days of submitting it to my professor for review. At times when I submit hard copies, the secretary calls me to come for feedback from my supervisor.

Whereas another graduate student in Busitema University stated that,

All my two supervisors can review the submitted work in less than three days and give feedback. I really feel that this approach will allow me to complete my thesis within the stipulated time.

This implied that some of the supervisors worked within the expected time in terms of reviewing students' research projects. This has a positive impact on the work ethic of graduate students which eventually influences completion rate. Alternatively, some of the students' narratives on feedback digressed from these earlier ones. For instance, one of the graduate students in MUST stated that,

I would have completed my dissertation but my supervisors delayed giving timely feedback whenever I submitted my work for review. I submitted my draft two weeks ago and up to now nothing has been delivered back for me to proceed to another level of my research project.

Yet another supervisor from Busitema University emphasized that,

Supervision relationship is a two-way process, but some of our students do not proactively seek feedback when needed. At the same time, some students because of their background consider mentors or mentors as a figure of authority and this makes them struggle to seek feedback.

Relatedly, another graduate student from Busitema University stated that,

Graduate training has a challenge related to the lack of capacity to give feedback to the supervisor. Even my colleagues have complained of supervisors who take too long to read and review their research projects which has affected their morale and eventually some of them have ended up dropping out of graduate studies.

These results suggest that some mentors or supervisors are not giving graduate students timely feedback which interferes with their academic progress. Respondents agreed that supervisors possess friendly and unbiased behaviour that builds good relationships with graduate students. A mean value of 3.88 was low implying that these students had cordial relationships with their supervisors. Hence it suggested further that they could receive the necessary support and guidance when writing and doing research.

Findings from the earlier quantitative questions were triangulated with the qualitative views of the study participants. Results revealed that when supervisors interact with graduate students, the question that resurfaces from the students are always more personal aspects which are nonetheless relevant from the professional standpoint of research pedagogy. Specifically, one of the academic staff from Makerere University said that;

The difference between supervision and mentorship is not clearly defined and good supervisors often adopt both roles, although the

focus may differ depending on the stage the student is in their program.

Similarly, another academic staff from Busitema University emphasized that mentorship is all about creating a supportive and stimulating environment that enables students to learn essential methodologies, concepts and culture of academic writing and research in line with their disciplines.

Meanwhile, a graduate student from Makerere University revealed that,

Supervisors and doctoral committee members were regarded as a primary source of mentorship because they possess expertise in academic writing and research. This was envisaged in the way they handle a multitude of graduate students with divergent study concerns, emotions, and study problems that require adequate knowledge and expertise in handling diverse research projects.

All in all, academic supervisors/mentors felt that they were shepherding the process and facilitating academic writing and research among graduate students. It is imperative to note that irrespective of students' level of academic writing competencies, the supervisors believed that mentorship was the moment of interaction through which graduate students grasped the genre of academic writing and research.

In addition, graduate students agreed that their supervisors give adequate time to graduate students in their academic writing journey. The mean value of 3.472 was equal to code 3 non-committal of the Likert Scale that was used. This hence implied that respondents/ graduate students are fairly offered adequate time by their supervisors which can help them to improve on their academic writing and research. This implied that graduate students could effectively consult, write and publish credible and reputable academic pieces of work.

These results from quantitative findings were collaborated with qualitative findings, where an academic staff from MUST stated that;

I typically interact with my supervisor two to three times a month and the total number of hours I spend with him for meetings was between one to two hours.

Meanwhile, another student from Gulu University showed that,

I interact with my supervisor two to four times a month though our meetings are always short.

Whereas a student from Busitema University argued that,

I interact with my supervisor four to six times a month with at least one hour of interaction per meeting. These results suggested that graduate students in the selected universities where the study was done frequently interact with their supervisors. This signals that they were likely to receive the mentorship required in their journey of academic writing and research.

These results were not any different from the view of academic staff regarding time allocation with their supervisees. For example, in an interview with an academic staff from Makerere University, it was indicated that,

I always meet my supervisees three times a month. These three times are at least respected by these students and with this approach majority of the students have been able to complete their research projects in time.

Meanwhile, another academic staff from MUST stated that;

I reserve adequate time for my supervisees/mentees, some students respond to the reserved time while others postpone scheduled arrangements. However, I often meet my supervisees in the course of the week.

Whereas a supervisor from Busitema University stated that,

> On my side, I respect scheduled time for graduate students' research supervision. I reserve two days for student supervision in a week. However, very few students adhere to this schedule leading to delays in thesis/dissertation writing and other academic writing assignments.

This suggested that academic staff/supervisors in the universities where the study was done spare some time for graduate students during their journey of research and academic writing. The time given to students helps them refine their writing style, structure, and organization, making their arguments clear and easy to follow. It would also encourage students to think critically about their research, arguments, and methodology, leading to more nuanced and well-supported conclusions. Eventually, this interface helps students understand the importance of proper citation and referencing, ensuring that their work is original and respectful of others' intellectual property.

Most of the study respondents were neutral on the view that the directorate of quality assurance is supportive of graduate students when it comes to writing publications. These results were supported by a mean value of 3.240 which was equal to code 3 non-committal on the Likert Scale that was used. Meanwhile, the standard deviation of 0.993 was low implying that graduate students' views did not vary from one respondent to another. The quantitative findings earlier presented were supported by the narratives from the interviews conducted with different participants.

For example, an academic administrative from Makerere University in the Quality Assurance Directorate stated that,

> Makerere University has come up with a research and ethics committee and anti-plagiarism software to improve the quality of academic works produced. So far, from this arrangement unethical practices like plagiarism, collecting data without ethical consent, replication of knowledge, defamation, and falsification are highly detected. This has improved the quality of research and innovations hence working in line with the research-led agenda of the university.

This implies that there is adequate support provided to graduate students at Makerere University to come up with quality research and innovation works that can be used for socio-economic transformation.

Respondents agreed that the Directorate of Research and Graduate Training had the necessary capacity to support graduate students. The mean value of 3.56 almost equal to code 4 agrees with the Likert Scale that was used indicating that the support given by the school/department of graduate training to graduate students was relative and needed serious improvement. Finally, most of the study respondents agreed that their university has a research-led agenda that prioritizes graduate training and research. These results implied that in public universities where this study was done, the research-led agenda was clearly upheld. These percentages were in line with the mean value 3.56 almost equal to code 4 on the Likert Scale that was used. This affirmed that public universities where the study was done are guided by the research-led agenda.

The frequencies and percentages presented above indicate that the institutional support of academic writing and research at the university is strongly respected. Hence it was found that mentorship support, providing a conducive research environment with the Internet, requesting students to publish, and recommending viable databases, among others were all adequately supported by the university. However, institutional support was lacking in terms of rewarding mentors and providing funds to graduate students to facilitate their writing and research skills. To get an average view of how students rated on institutional support.

The average index for all items on I-support an acronym for Institutional Support was generated as in Figure 1:

Figure 1: Histogram and Curve Showing Distribution of Respondent on Institutional Support.
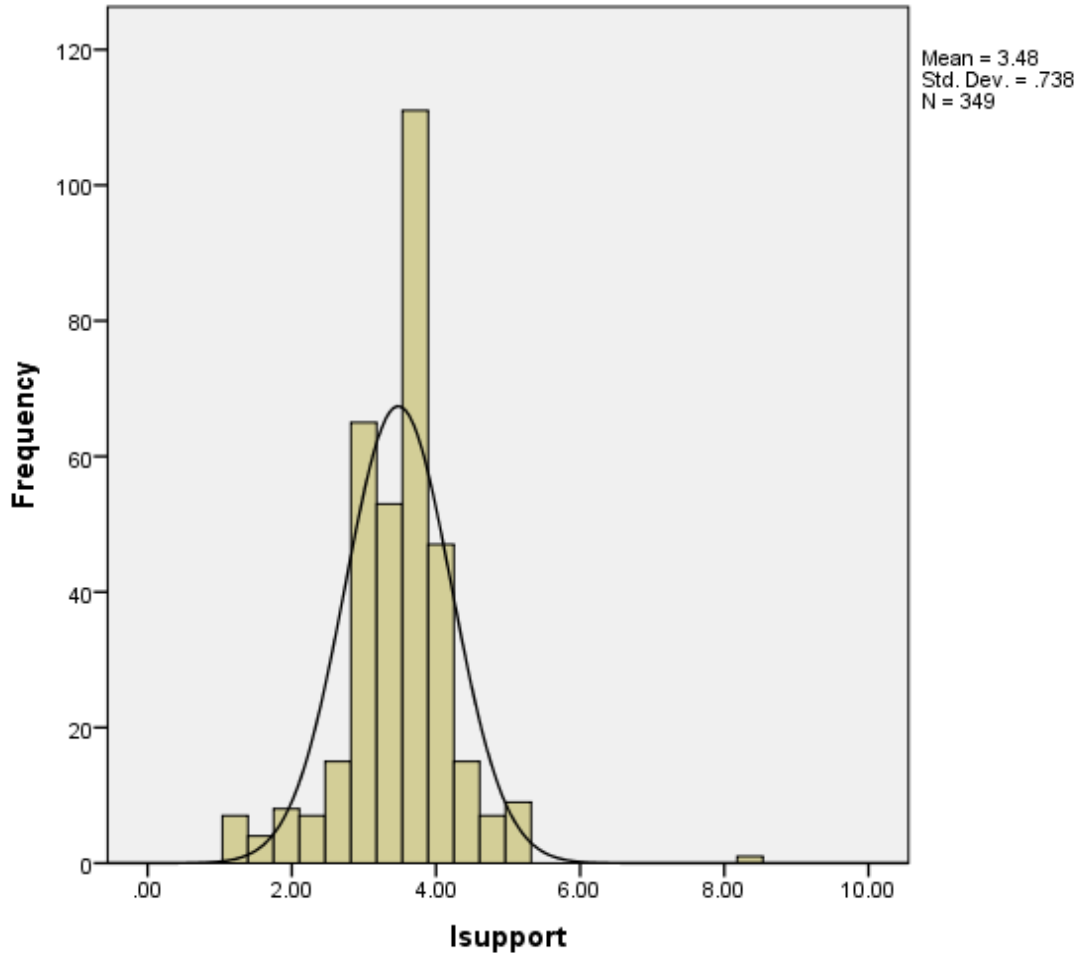
The figure shows that respondents were fairly distributed on the histogram and curve suggesting that universities fairly offer the required support to these graduate students when embarking on their academic writing and research. These results suggest further that public universities where the study was done put more effort into providing adequate support to allow graduate students to do research and make publications. To find out whether there was a relationship between institutional support and graduate students' academic writing and research skills, Pearson's Correlation Co-efficient results were presented in Table 3:

Table 3: Pearson's Correlation Co-efficient Index between Institutional Support and Academic Writing and Research.

_		Academic writing and research	Institutional support
Academic writing and research	Pearson's correlation	1	0.441**
	Sig (2. tailed)		0.000
	N	337	337
Institutional support	Pearson's correlation	0.441**	1
	Sig (2. tailed)	0.000	
	N	337	349

Correlation is significant at the 0.01 level (2. tailed)

Table 3 shows Pearson's Correlation Coefficient index between institutional support and academic writing and research, r = 0.441**, sig = 0.000 less than 0.05. This implied that there was a positive significant relationship between institutional support and academic writing and research at the one percent level two-tailed. Therefore, research hypothesis H1 which stated that there was a significant influence between institutional support and academic writing and research was accepted while the Null Hypothesis H0 which stated that there was a negative influence between institutional support and academic writing and research among graduate students in the selected public universities in Uganda was rejected. Such findings implied that the institution/university provides necessary support to students in the form of offering mentorship, library facilities, ICT facilities, opening up publishing houses, motivating supervisors, and increasing funding for research among others would positively influence graduate students' academic writing and research skills. These findings were supported by qualitative findings on the influence of institutional support on graduate students' academic writing and research skills.

One of the academic staff from Makerere University revealed that,

> *Mentors/supervisors are expected to play the role of the subject experts, gatekeepers of academic standards, resource persons and advisors on research literature, research methodologies, mid wife of the dissertation,*

> *directors, project managers, shapers, scaffolders, editors and promoters of students' research efficacy.*

These findings suggested that institutional support offered by mentors during the journey of academic writing and research offers students an opportunity to orient themselves with aspects of academic writing and research. This in turn gives them expertise in academic writing through generating research ideas, being analytical, critical and using scientific academic language.

Findings showing a positive significant relationship between institutional support and graduate students' academic writing and research skills were supported by qualitative interview findings. Specifically, one of the academic administrative staff from Makerere University stated that,

> *Makerere University's research policy calls for creating an enabling environment for research and innovations, strengthening research management and coordination, improving research and publication, culture, providing and supporting platforms for dissemination of research outputs and promoting ethical conduct of research in the university.*

This finding shows that the university creating an enabling research environment would impact graduate students' academic writing and research skills. To confirm the quantitative findings, a Simple Linear Regression analysis was computed and results are provided in Tables 4, 5 and 6:

Table 4: Model Summary in the Regression Analysis between Institutional Support and Academic Writing and Research

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.441[a]	.194	.192	1.69410

a. Predictors: (Constant), I-support

The model summary Table 4 shows the adjusted r2 = 0.192. This meant institutional support explains 19.2% of the change in academic writing and research. Hence this suggests that the remaining 80.8% of the change in academic writing and research was accounted for by other factors not considered in this study.

Table 5: Regression ANOVA Table on the Influence of Institutional Support on Academic Writing and Research

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	231.710	1	231.710	80.736	.000[b]
	Residual	961.443	335	2.870		
	Total	1193.153	336			

a. Dependent Variable: AWR
b. Predictors: (Constant), Institutional Support

The ANOVA results in the Simple Linear Regression Model revealed that the regression was sufficient, F value of 80.736 and a significant P value of 0.000 less than 0.05. This implied that institutional support was positively significant in academic writing and research skills among graduate students in the public universities where the study was done. It hence presupposed that graduate students are supported through the provision of adequate reading materials, ICT facilities, library facilities, academic writing courses, research funding opportunities, mentorship programs, writing centres, research incubators, incentives and recognition and faculty-student collaboration among others, academic writing and research would positively be enhanced. These findings were confirmed by Regression Co-efficient Table 6:

Table 6: Regression Coefficient on the Influence of Institutional Support on Academic Writing and Research

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.802	.439		15.499	.000
	Institutional support	1.114	.124	.441	8.985	.000

a. Dependent Variable: Academic AWR

The regression coefficient revealed a Beta value of 0.441 and a significant P value of 0.000 less than 0.05. This hence suggested that there was a positive significant influence of institutional support on academic writing and research among graduate students at the one percent level two-tailed. This

hence suggested that as the institution/university supports students by providing financial support, guidance and counselling, reading materials, ICT facilities and other necessary supports, students' academic writing and research are enhanced and while failure to provide these would mean that the reverse is true.

DISCUSSION

Findings on this objective revealed a positive significant relationship between institutional support and academic writing and research among graduate students in the selected public universities in Uganda. These findings suggested that public universities provide the necessary support to graduate students in the form of offering mentorship, library facilities, ICT facilities, opening up publishing houses, motivating supervisors, and increasing funding for research among others would positively impact graduate students' academic writing and research skills. This finding was in consonance with Jeyaraj, et al; (2022) whose results revealed that institutional support services and supervisory support services were critically essential in supporting postgraduate students' research writing. Supervision in the aforementioned study was revealed as a specialist form of teaching where students are taught how to conduct research, write grant proposals, literature review, conduct data analysis and manage the entire research project. Hence through institutional provisions for academic writing development such as a dedicated writing support department and non-institutional factors, such as peer collaboration once considered, this would promote scientific research among graduate students.

Findings that institutional support significantly relates to academic writing and research were in agreement with Frantz et al.; (2017) who revealed that building a strong institutional research culture by universities was considered to boost research productivity and writing proficiencies. This was manifested through increasing research capacity, implementation of appropriate management infrastructure and adoption of research policies that would be effective in supporting research productivity within higher education settings.

In the same vein as the study findings, Ocampo et al. (2022) revealed that institutional support in the form of rewarding researchers, creating a reward system, research funding, monitoring and electronic information resources provision are important factors influencing research and academic writing productivity. Similarly, the findings of the study were in support of Kramer and Libhaber (2016) who revealed that creating an enabling academic writing and research environment facilitates not only the development of writing skills per se but also the dissemination of the generated knowledge. The findings of the study were in direct support of Jeyaraj (2020) who revealed that students needed support in three areas; writing, supervision and ICT. Many students with English as a second language need, language support workshops, and programs to support their thesis writing. In terms of research, guidance was needed from supervisors to enable greater clarity on writing and institutional processes and procedures. Therefore, institutional support especially in terms of high-quality supervisory support is an integral part of the academic writing and research journey of graduate students.

From the study findings and discussion, this study concludes that institutional support significantly relates to graduate students' academic writing and research skills. This was based on results that graduate students are offered a conducive research environment like high-quality supervisory support, research funds, ICT facilities, library facilities, and mentorship among others, hence cultivating positive writing behaviours and mentality and eventually creating positive writers and researchers.

CONCLUSIONS

The study concluded that institutional support significantly relates to graduate students' academic writing and research skills. The study concluded that as graduate students are offered a conducive

research environment like high-quality supervisory support, research funds, ICT facilities, library facilities, and mentorship among others, this would cultivate a positive writing behaviour and mentality which would eventually lead to scientific writers and researchers.

Recommendations

The study recommended that if graduate students' academic writing and research are to be improved, stakeholders like the university council, senate and relevant agencies need to support novice researchers in the form of providing a conducive academic writing and research environment. Furthermore, there should be an emphasis on academic development programs as a viable strategy to enhance scholarly writing and research. In addition, supervisors should be encouraged to provide proper guidance, feedback and adequate consultation time to individual graduate students especially those struggling at different stages of their research projects. Similarly, universities should empower supervisors/mentors in ways that allow them to provide greater levels of support to graduate students. Public universities where this current study was done must come up with several strategies that make graduate students aware of the role of academic writing and research in their academic journey. These strategies would involve organizing symposiums, and research retreats, and offering rewards like scholarships to the best researchers to improve their attitudes and those of academic staff regarding academic writing and research.

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