Stimulus of Time-Management Supervisory Skill on Completion of Research Process for Postgraduate Students In Northern Zone Universities, Tanzania

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Abstract
This study examined the extent to which time management skills employed by research supervisors enhance the completion of postgraduate students' research process in universities, of the Northern Zone, Tanzania. Anchored in Face-to-Face Interactive Dissertation Supervision Theory proposed by Wang and Li in 2011, the study employed a convergent design under the mixed-methods research approach. The target population of 1454 including 6 Directors of postgraduate studies, 14 heads of departments, 175 supervisors, 390 PhD continuing students, 635 masters continuing students, 84 PhD alumni, and 150 masters alumni, to make a total of 214 respondents sampled through probability and non-probability techniques. Questionnaires, interview guides, and document analysis guides used to collect data were validated by three research experts from the Faculty of Education at MWECAU. The Cronbach Alpha method and peer debriefing were employed to determine the reliability of questionnaires and interview guides respectively. Quantitative data were descriptively analysed, while qualitative data were thematically summarized and presented in direct quotations. It was found that time management skills are deployed to a moderate extent by supervisors to stir up postgraduate students' research process. The study revealed further that students' delays are often due to supervisors' feedback taking longer than expected, low levels of supervisor-student cooperation, and supervisors not being reachable and not present during consultation hours. The study concluded that supervisors differ in their approaches to time management practices in stimulating and accelerating postgraduate students' research process across universities. The study recommended that universities should regularly provide supervisors and postgraduate students with time management training so that the research process can be completed on schedule.

Keywords; Time management skills, Completion, Postgraduate, Research Process

Introduction
Time management is crucial for researchers to minimize delays in the completion of postgraduate students' research process. It involves allocating time to activities that help achieve goals. Approaches to time management include monitoring, setting goals, prioritizing, planning, delegating, and analysis of time spent. Monitoring involves keeping a log of time usage and identifying habits of procrastination, interruptions, and lack of discipline. Setting goals involves identifying and recording objectives with measurable components and a time limit. Prioritizing goals involves working on the highest priority goal first and consistently until exhausted resources are used. Planning involves creating daily "to-do" lists, breaking tasks into manageable components, and minimizing interruptions. Delegating involves handling mail and email items only once, updating curriculum vitae, and deciding whether participation in activities contributes to prioritized goals. Analyzing time spent involves identifying possible barriers and working to minimize them in the future (Oliver, 2024).

Postgraduate students in various disciplines worldwide take a long time to complete their studies due to factors related to the university, supervisors, and students themselves. Students with poor time management skills may avoid supervision sessions that require time and can be a source of delay. Van et. al., (2021) maintain that high dropout rates, delays, and dissatisfaction among the PhD students are common problems in doctoral education. Rosemary et al. (2020) indicate that the Commission for University Education (CUE) issued a directive stating that only individuals with PhD qualifications would be eligible to teach at Kenyan universities starting in 2018. This decision stemmed from the recognition that many assistant lecturers were already enrolled in PhD programs, with some having taken up to eight years longer than the typical duration of three to four years to complete their degrees. The extended time required to finish a PhD has significant social and financial implications for both students and sponsors.

In various universities, though the programs spell out the minimal and maximum time set for the programs the actualization of the program's expectations has remained a mere wish. Supervisors are considered to be very instrumental in the research part of the programs. The selection of who is to supervise which student is guided by standards set by TCU (2021). For the supervisors to be able to successfully lead the students to complete their research process they are expected to be well-versed with time management skills among others. Khan (2020) emphasizes that time management skills enable supervisors to identify the needs of the supervisee, set goals to achieve these needs, and prioritize and plan tasks required to achieve these goals. Effective time management skills enable supervisors to allocate time to different activities. Supervisors with time management skills can boost productivity and efficiency. It enables the supervisors to understand what is urgent and what is important. It was based on all these that it was thought crucial to investigate how time management skills are used by supervisors to enhance the completion of postgraduate students' research process.

The standards and guidelines for universities in Tanzania 2019, require every university offering training programs to set up different programs by the levels as per the university qualification framework. Hence the recognized levels of postgraduate training are postgraduate certificate, postgraduate diploma, master's degree by course work, master's degree by thesis, Ph.D. by course work, and Ph.D. by thesis (TCU, 2021). This study focused on postgraduate studies of master's and Ph.D. degrees by coursework. The mode of delivery of the Postgraduate programs differs from one university to another. The recognized modes of delivery for Postgraduate training include Face-to-Face Contact; Open and Distance Education; E-Learning; and Blended Learning but this study will focus on Face-to-Face Contact. The program duration for a master's of education, business, and science degree by coursework and dissertation is 2-3 years, and 4 years for a master's degree in medicine but for a Doctor of Philosophy (PhD) Degree, the duration is 3-5 years depending on the program and PhD students of medicine registered as full time take 4 years or part-time students take 5 years. The TCU set a policy of supervision that each supervisor should be given 5 Ph.D. and 15 Masters students to supervise to reduce the workload and enhance completion rates but to date, the delay in completion on time is a reality. Despite the efforts made by TCU to prepare the program duration for postgraduate students, most candidates for postgraduate studies fail to complete their studies on time. Figure 1 shows enrolment and completion rates in Universities in the Northern Zone.

Figure 1 : Enrolment and Completion of Masters and Ph.D. Students from 2013 to 2021 in the Three Universities of the Northern Zone, Tanzania
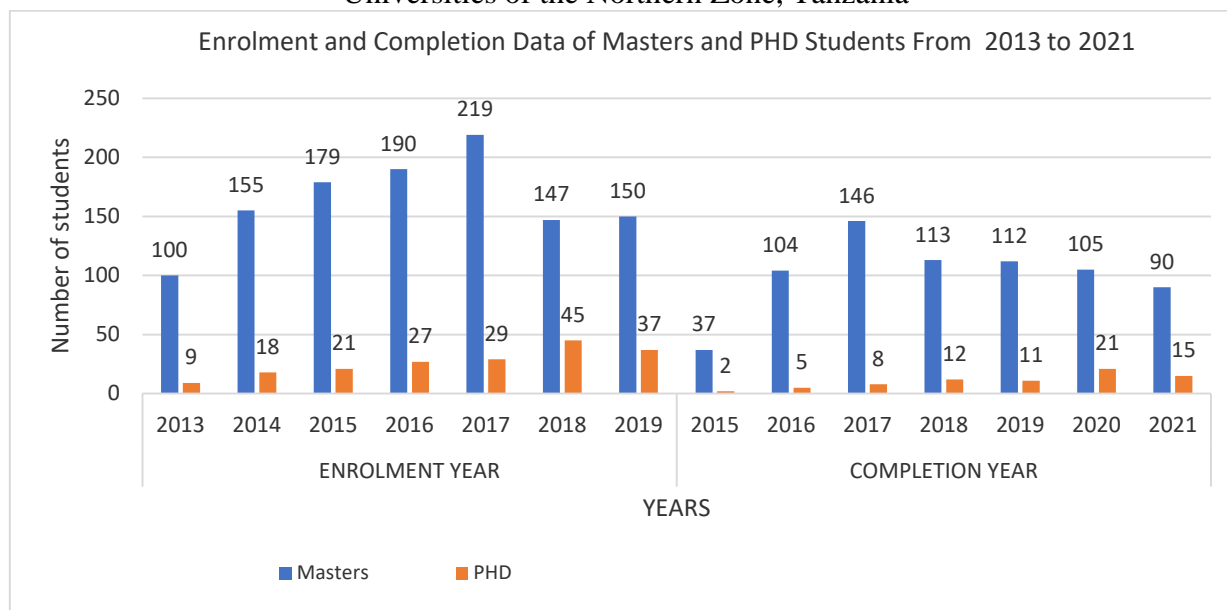
Source: Admission Office, (2022)

Figure 1 shows the number of postgraduate students who enrolled from 2013 to 2019 and their year of graduation from 2015 to 2021 from three universities in the Northern Zone of Tanzania. The number of enrolled students is not the same as those who completed the programs. The duration of studies for a Master's degree in science, arts, and business was 2 years, and for a medicine degree was 4 years; hence, students who enrolled in 2013 were expected to complete their studies in 2015. PhD students take 3-5 years; those enrolled in 2013 were expected to complete their studies in 2016. In 2013, among 100 masters and 9 PhD students who were enrolled, only 37 (37%) masters and 2 (22%) of PhD students were able to complete their research process in 2015, while 63 masters and 7 (78%) PhD could not (Admission Office, 2022) from Northern Zone Universities Tanzania. This attrition has triggered a lot of complaints from parents, postgraduate students, and employers because of the extra money incurred to fund postgraduate studies. This situation has laid a foundation for the current study, to investigate the extent time management skills employed by research supervisors enhance the completion of postgraduate students' research process in universities in the Northern Zone, Tanzania.

Statement of the Problem
Time management skill is a critical skill for research supervisors to stimulate and direct students to complete their research process. Many research supervisors struggle to manage their time in guiding students to complete their research process. The delayed completion of the research process for PhD and Master Students has tremendous effects on students and leads to psychological, social, and financial implications for the students (Rosemary et.al, 2020). It also causes anxiety, frustration, pressure, and stress to postgraduate students who take a long time to complete their research process. The delayed completion of postgraduate students in the research process raises a lot of concern by society and parents who incur extra costs in paying tuition fees and use extra money for other expenses. This situation has registered a lot of complaints from parents, employers, and postgraduate students.

Studies conducted by Van et al. (2021); and Oliver (2024) entail that Postgraduate students in various disciplines worldwide take a long time to complete their studies due to factors related to the university, supervisors, and students themselves. These studies did not indicate how postgraduate students should be guided to complete their research process within the time stipulated in the program. Studies did not show how supervisors used time management skills to stir up the completion of postgraduate students' research process. Hence the current study examined the extent to which time management skills employed by research supervisors stimulate the completion of postgraduate students' research process in universities in the Northern, Zone of Tanzania.

Research Objective and Hypothesis

The study was guided by one research objective and one hypothesis:

Research question; To examine the extent to which time management skills employed by research supervisors stimulate the completion of postgraduate students' research process in the Northern Zone Tanzania.

Hypothesis; Hi: There is a significant difference in mean scores on the extent to which time management skills employed by research supervisors from the faculties of education, science, business, medicine, and theology enhanced the completion of postgraduate students' research process in universities, in Northern Zone Tanzania.

Significance of the Study

The study's findings empower the directors of postgraduate students in Northern Zone universities to monitor the supervision of postgraduate students with clear guidelines and activities to be implemented by research supervisors and postgraduate students. Specifically, these findings assist research supervisors in setting clear goals, allocating resources, and monitoring the implementation of time management skills aimed at improving the completion of postgraduate students' research process. Additionally, the findings inform Postgraduate University Directors, Deans, and Heads of Departments on necessary activities, resource allocation, and the importance of fostering positive relationships with faculty members to support the completion of postgraduate students' research process. The research findings deepen the author's understanding of the use of time management skills in the context of postgraduate students' completion of the research process.

Theoretical Review

This study anchored in Face-to-Face Interactive Dissertation Supervision Theory stated by Wang and Li in 2011, followed by Manathunga, in 2012. The dissertation supervision theory is the theory that deals with the active engagement of the supervisor in guiding postgraduate students to identify the scope of the research and providing success in the completion of the research dissertation. This theory deals with active engagement by encouraging continuous interaction between the supervisor and supervisee. This theory emphasizes the benefits students gain from engaging in intellectual exchanges with their supervisors, which provides essential guidance on their research progress. Through the feedback process facilitated by supervisors, candidates develop into independent scholarly writers and become more competent in their research endeavors. These concepts underscore the importance of the relationship between the supervisor and the supervisee, highlighting how effective time management and support can enhance the student's academic development. The strength of the Theory is enabling the supervisor to give direction, control, and correct the student's work. The weakness of this theory capitalizes on supervisor availability. Students may experience delays if supervisors are unavailable for meetings, impacting the research timeline. This theory is relevant to this study because it enables supervisors of postgraduate students to use time management skills in guiding the postgraduate students to complete their research process. This theory makes supervisors more competent in guiding the students to identify their needs and perform different activities based on the time stipulated in the program.

Literature Review

Organizing and planning how to split up time between different tasks is known as time management. Postgraduate students who are adapted to managing their time can complete more tasks in less time, which can boost their output and lower their stress levels. Having excellent time management abilities can go a long way toward helping postgraduate students finish their research dissertations. To identify gaps to justify the carrying out of this study, the researcher reviewed various empirical studies on the extent to which time management skills employed by research supervisors enhance the completion of postgraduate students' research process worldwide.

The study conducted by Lukianova et.al (2019) indicates that time management is a pedagogical technology for PHD students' self-management in Ukraine. The study indicates the importance of time management problems and proves what is right for their research. The researcher describes the habit of time management as pedagogical technology concentrating on different principles to be followed in performing different activities. The researcher discusses time management as a pedagogical technology that helps solve five problems in various activities. Time management involves controlling time and using various tools for

planning, organizing, monitoring, prioritizing, delegating, and determining goals. The study used questionnaires and interviews to collect data, with 156 respondents selected. The findings showed that time management improved PhD students' research competence and self-management skills. Since the previous study focused on the habit of time management as pedagogical technology concentrating on different principles to be followed in performing different activities, the current study focused on the extent to which research supervisors use time management skills to enhance the completion of postgraduate students' research process in Northern Zone Tanzania.

The study conducted by Ferreira (2020) indicates how time management is important for postgraduate students. The focus of the study was to investigate the standing of the successful use of time management for postgraduate students. The study, which was conducted at the National College of Ireland, found that effective time management skills are crucial for postgraduate students to achieve their goals. The findings suggest that clear supervision and proper use of time are essential for achieving these goals. The previous study focused on the importance of successful use of time management. However, the study couldn't indicate how students should be guided to spend their time in research writing. Hence, the current study focused on how time management skills employed by research supervisors enhance the completion of postgraduate students' research process in Universities in the Northern zone of Tanzania.

Khan et al. (2019) investigated the connection between Pakistani university students' academic success and their ability to manage their time well. The study's main goal was to determine how students' usage of time management techniques improved their academic performance. The study employed a quantitative research design; however, the design was not identified clearly. The study aimed to examine the relationship between time management skills and research writing completion among bachelor's degree students. A random sampling technique was used to sample 900 students from three universities. Data were analyzed using mean, standard deviation, T-test, and Pearson's coefficient correlation. The hypothesis was tested using SPSS software and presented in frequency tables. The study found a moderate relationship between time management skills and academic achievement in students. Good time management led to higher achievement, while poor skills delayed studies. The current study focuses on postgraduate students in Tanzania, examining supervisors' time management skills' impact on research process completion. Since the previous study was conducted in Pakistani universities its findings might be not the same as those found in Tanzania due to different contexts.

Kharadze et al. (2022) show that less attention is given to free time management among master's degree students in Georgia, US, hence leading to increased stress. The research suggests that proper time management reduces stress and maintains a conducive learning environment. Since the previous study focused on attention to free time management, the current study explored more on to what extent research supervisors' time management skills enhance the completion of postgraduate students' research process in universities in the Northern Zone of Tanzania.

Generally, the reviewed empirical studies indicated that poor time management brings delays in the completion of the research process; however, the study did not explain the extent to which time management skills should be used to enhance the completion of the research process. Since most reviews conducted worldwide were in different contexts, their findings were different from those found in Tanzania. The current study investigated the extent to which time management skills employed by research supervisors enhance the completion of postgraduate students' research process in universities in the Northern zone of Tanzania.

Methodology
This study employed a convergent design under a mixed-methods research approach (Creswell, & Creswell, 2018). The target population was 6 universities in the Northern zone of Tanzania, 6 directors of postgraduate studies, 175 supervisors of postgraduate students, 14 heads of departments who offer postgraduate studies from Science, Education, Business, Medicine, and Theology, 635 masters continuing students, 390 PhD continuing students, 84 PhD alumni and 150 masters' alumni to make the total of 1454 respondents from Northern zone Tanzania (Admission offices, 2022). The researcher used proportionate stratified and simple random sampling techniques to get 36 supervisors, 55 PhD continuing students, and 89 Masters continuing students. Convenience purposive sampling was used to sample 15 Masters alumni and 8 PhD Alumni, an expert purposive sampling technique was used to sample 5 directors of postgraduate studies, and a criterion

sampling technique was used to sample 6 heads of department to make the total sample of 214 respondents which was 14.7% of 1454 entire population of the study. According to Creswell & Creswell (2018), a sample of approximately 10-30 of the population is sufficient.

Questionnaires for research supervisors and continuing postgraduate students, and interview guides for Directors of postgraduate studies, Alumni postgraduate, and heads of departments were used to collect the required information. The researcher validated questionnaires and interview guides in terms of face and content validity giving instruments to three (3) research experts who supervise PhD and master's students in educational planning and management from Mwenge Catholic University. The researcher pilot-tested the instrument using 1 university whereby 1 director, 1 head of department, 10 supervisors, 10 PhD, and 10 masters' continuing students, 2 alumni PhD and 2 alumni masters were involved. The reliability of the quantitative research instruments was determined by using the Cronbach Alpha method which measures the internal consistency of the items in the Likert scale (r = 0.936 for continuing postgraduate students, and r = 0.933 for research supervisors), and qualitative research instruments were determined by the peer debriefing technique and triangulation of information.

The researcher analysed quantitative data by using descriptive statistics. The data were organised, coded, and analysed using Statistical Package for Social Sciences (SPSS) version 21. Descriptive statistics summarised the data into frequencies, mean, and standard deviation and were represented in tables, charts, and figures. The qualitative data were analysed using 7 steps of thematic analysis proposed by Creswell and Creswell., (2023) namely; organizing and preparing the data, reading through the data, coding the data, identifying themes, developing a storyline, further analysing the data using an interpretive framework like narrative research, and finally representing and interpreting the data. Ethical principles of research were adhered to by getting informed consent from the respondents. Confidentiality and anonymity were also ensured. All cited works were acknowledged.

Results
The focus of the study was to examine the extent to which research supervisors employ time management skills to enhance the completion of postgraduate students' research process. The aim was to check whether supervisors were committed to their work and employed time management skills in enhancing the completion of postgraduate students' research process. To answer this question postgraduate students (PhD and masters) and supervisors were asked to fill out questionnaires containing Likert scale items rating from 1-5 options to get the student-supervisor interaction on completion of postgraduate students' research process. Percentages and means were interpreted according to (Taherdoost, 2019 and Eman et al. 2023). The questionnaire data were complemented by an interview guide from alumni postgraduates, heads of departments, and directors of postgraduate studies. Tables 1 and 5 summarise the responses of continuing postgraduate students, as well as supervisors.

Table 1 : Supervisors' Responses on the Extent to Which Time Management Skills Enhance the Completion of Postgraduate Students' Research Process (n=31)

S/N	Statement	VSE		SE		ME		GE		VGE		
		f	%	f	%	f	%	f	%	f	%	Mean
i.	I balance my teaching responsibilities and guide postgraduate students to complete their dissertations on time.	1	3.2	0	0	4	12.9	19	61.3	7	22.6	4
ii.	I use time management skills to understand differences in students' time and adjust workload to ensure their success.	1	3.2	0	0	4	12.9	20	64.5	6	19.4	3.9
iii.	Supervisors meet with postgraduate students to plan the workflow of their dissertation/thesis.	0	0	2	6.4	4	12.9	15	48.4	10	32.3	4
iv.	Supervisors understand the supervision schedule of activities and guide postgraduate students to complete writing their seminar papers and submit final documents for viva voce on time.	0	0	3	9.7	4	12.9	16	51.6	8	25.8	3.9
v.	Supervisors use monitoring forms to monitor the progress of postgraduate students in writing their dissertations.	3	9.7	3	9.7	11	35.4	8	25.8	6	19.4	3.3
vi.	Adequate supervision sessions were planned and understood by the students.	0	0	1	3.2	8	25.8	13	42	9	29	3.9
vii.	Supervisors discuss the research title with the	1	3.2	1	3.2	1	3.2	18	58.1	10	32.3	4.1

		1		2		3		4		5		Mean
	student and come up with a clear title to reduce time wastage.											
viii.	Supervisors guide postgraduate students to remain focused on their study problems.	1	3.2	1	3.2	2	6.5	17	54.8	10	32.3	4.1
ix.	Supervisors read the student's work and provide feedback timely	0	0	4	12.9	4	12.9	14	45.2	9	29	3.9
x.	My students bring their research work for correction in a timely **The grand mean score**	0	0	7	22.6	2	6.5	11	35.5	11	35.5	3.8 **3.9**

Source: Field data (2023)

Key: 1 =To a very small extent, 2= To a small extent, 3= To a moderate extent, 4= To a greater extent, 5= To a very greater extent

Data in Table 1 indicate that a great majority of supervisors (90.4%) to a great extent discussed with the student about the research title and came up with a clear title to reduce time wastage, while 3.3% rated moderate and 6.4% to a small extent with the mean score of 4.1. This implies that 90.4% of supervisors discussed the research title with the students greatly. The study findings indicate that most supervisors recognized the importance of clearly defining the research title and were actively involved in the process with the students. A small percentage of supervisors rated 3.3% as moderate and 6.4% to a small extent. This shows that a minority of supervisors did not discuss the research title extensively with the students. The mean score of 4.1 reinforces the finding that a great majority of supervisors discussed the research title with postgraduate students to a great extent; however, a minority of supervisors did not engage in discussion with the students about their research titles, which contributed to delays in the completion of the research process for some students. The study's findings revealed that the engagement of research supervisors in discussing the research title with the students reduces the likelihood of time wastage and stimulates the students to stay on track throughout the research process. The findings of the study indicate that supervisors used time management skills to a great extent to guide postgraduate students to come out with clear titles and write the required information in their research process.

This information contradicted the responses of continuing postgraduate students in Table 1 with a mean score of 2.9, where 40.5% of masters and 40.4% of PhD students rated to a small extent, 15.7% of masters and 9.6% of PhD students to a moderate and 43.8 % of masters and 50% of PhD to a greater extent that supervisors set aside enough time to discuss with the student about the research title and come up with a clear title to enhance completion of the research process. This shows that most supervisors were not careful with the students' time limit in writing their research dissertations. They were busy with their activities, as reported by postgraduate alumni who denoted, "It depends on the supervisors. For example, one of my supervisors was so busy, so I worked with one supervisor most of the time" (PAL. 13, personal communication, 20th September, 2023). This implies that close contact between the students' guidance in the research process and supervisors' commitment must be monitored by the university administration. The findings of the study revealed that, to a greater extent, supervisors guided and stimulated postgraduate students to come up with clear titles. Still, some supervisors were not aware of the limit of time, leading to some students delaying completing their research process.

Data in Table 1 show that a great majority of supervisors (80.7%) to a great extent met with postgraduate students to plan their workflow of the dissertation, while 12.9% rated moderate and 6.4% to a small extent with a mean score of 4. This implies that the majority of supervisors (80.7%) meet with their postgraduate students to a great extent in planning the workflow of the dissertation. This suggests that many supervisors had regular meetings with their postgraduate students to work together, to plan and coordinate different activities of the research dissertation to the completion of the research process. A smaller percentage of supervisors (12.9%) rated their meeting level with postgraduate students as moderate. This suggests that while most supervisors meet with their students to plan different activities of the research process, there are still some supervisors who meet with their students at a more moderate level for dissertation planning. A minority percentage of supervisors (6.4%) rated their level of meeting with postgraduate students to a small extent. This implies that, while the majority engaged extensively, a small fraction of supervisors had relatively less frequent meetings with their postgraduate students for dissertation planning. The mean score

of 4 indicates that supervisors tend to meet with postgraduate students to a great extent in planning the workflow of the dissertation.

The findings of the study suggest that most supervisors recognized the importance of meeting with their students and stimulating them through the research process; however, a moderate number of supervisors and a small number of supervisors were not meeting with their students to plan research activities. This could mean there was still room for improvement regarding supervisor-student engagement and collaboration in the research process. The study's findings indicate that regular meetings and planning sessions between supervisors and their students are important for guiding postgraduate students in completing the research process. When supervisors do not make time for these meeting planning sessions, it leaves students feeling unsupported and hinders the progress of the research process. To address this gap, the university administration should emphasize the importance of supervisor-student engagement throughout the research process to stir up the completion of the research process. This could involve providing training to all supervisors to prioritize regular meetings and joint research planning with their students.

Data in Table 1 show that a majority of supervisors (71%), said to a great extent, their students bring their research work for correction on time while 6.5% rated the statement as moderate and 22.6% to a small extent. This suggests that most students were diligent in submitting their work for review and feedback from their supervisors. The data also shows that 6.5% of supervisors rated the timeliness of student submissions as moderate, while 22.6% rated it as a small extent. This indicates that some students did not submit their work promptly, as perceived by their supervisors. The minority of students (22.6%) rated the submission of their work to a small extent, suggesting that there may be room for improvement in terms of time management and adherence to deadlines among certain students.

The study's findings revealed that a high percentage of supervisors rated the timeliness of student submissions as a strong indicator that good policies in the research process are implemented to help students meet their deadlines. However, the findings also highlight the need for the university administration to implement targeted interventions, such as additional time management workshops, closer monitoring, and mentoring of these students in meeting their research obligations to equip students with the necessary skills and resources to succeed in their research process. Hence, continuous improvement of time management is required to stimulate and maintain a good standard of postgraduate students' completion of their research process. To crosscheck the information with heads of departments' responses from interviews, one of them said:

> Supervisors have a lot of responsibilities, particularly those related to their departments, and because they spend much of their time conducting department meetings and performing official tasks, they don't always have time to assist students. However, supervisors frequently utilize their additional time to assist the student in completing the research process (HOD 6, personal information, 19th April, 2024).

The head of the department 3 denoted that:

> It is challenging to assist a student who is not prepared to complete their studies; hence it is incumbent upon the student to cooperate and be dedicated to fulfilling their obligations. The readiness of the student to write research dissertations and make revisions from the supervisor determines whether or not the student completes their studies (HOD 3, personal information, 17th April, 2024).

The interview information from heads of departments supports the information from Table 1 that supervisors have a great role in guiding students to plan schedules of activities. Although some supervisors are busy with teaching and engaged in official activities, they manage to prepare their timetables well and pay attention in directing the students to perform their duties; however, some students do not show cooperation with their supervisors. The information from PAL 13 contradicts the information from HOD 3. Although the student was assigned two supervisors, who were given a mandate by university administration to guide the student in writing a research dissertation, only one supervisor sat with the student to prepare the schedule of activities with realistic time and guide the student to write the research dissertation, the other supervisor was not showing support to the student. However, heads of Department 3 contradict this information by saying that some postgraduate students were not showing cooperation with their supervisors; hence, delays in the completion to a small extent occurred due to mismanagement of time by some supervisors and postgraduate

students in completing their research process. The study's findings show that to a larger extent with a mean score of supervisors 4, they said that they meet with postgraduate students to plan their workflow of the dissertation/thesis. Hence, time management skills employed by research supervisors enhance the completion of postgraduate students' research process, with some improvement in time management for students who face challenges managing their time.

The data in Table 1 indicate that the majority of supervisors (74.2%), to a great extent, read the student's work and provided feedback timely, while 12.9 were moderate and 12.9 rated to a small extent. This implies that feedback helps students understand their strengths, weaknesses, and areas for improvement, and supervisors are closely responsible for monitoring their students' progress. The high percentage (74.2%) of supervisors who read the student's work and give feedback to a great extent suggests that they take this responsibility seriously and recognize its importance. The willingness of the majority of supervisors to read and provide feedback on their students' work indicates a strong commitment to the student's completion of their research process. However, the 25.8% of supervisors who were moderate and provided feedback to a small extent could be that they faced various challenges, such as time management constraints, which could have influenced their ability to provide more extensive feedback.

The findings of the study show that the majority of supervisors, to a great extent, provided timely and thorough feedback to their students; however, some supervisors faced time management constraints that limited them from providing feedback timely to the students, thus contributing to delays in the completion of the research process to some postgraduate students. The current study's findings differed from those of the study by Razalia et al. (2018) in Malaysia, who researched the impacts of time management on students' academic achievements. The findings of Razalia's study revealed that students did not have enough time to complete all the assigned tasks. This contradicted the current findings, which said that some supervisors had time management constraints that prevented them from providing timely feedback. This implies that to a great extent, supervisors provided feedback timely to postgraduate students; however, some postgraduate students were moderate, and others, to a small extent, supervisors gave feedback to postgraduate students timely.

The data in Table 1 indicate that 45.2% of supervisors maintained that, to a great extent, they used monitoring forms to monitor the progress of postgraduate students in writing their dissertations, while 35.4% rated moderate and 19.4% to a small extent to the use of the monitoring forms. The mean score of the statement was 3.2. The use of monitoring forms, to a great extent by 45.2% of supervisors, suggests that they consider it an effective tool to track the progress of postgraduate students in writing their dissertations. Monitoring forms can provide a structured and consistent approach to ensure students stay on track and meet their deadlines. The moderate use of monitoring forms by 35.4% of supervisors indicates that they rely on other methods to monitor student progress, such as regular meetings and feedback. The 19.4% of supervisors who use monitoring forms to a small extent could be due to the trust they gave to their students to manage the dissertation writing process independently.

The mean score of 3.2 suggests that supervisors used monitoring forms to a moderate extent, which implies that their use was not a universally adopted practice. This could be influenced by factors such as supervisor preferences and institutional policies. The study's findings indicate that there were different ways that supervisors monitored the progress of postgraduate students writing their dissertations. A small group of supervisors, 45.2%, use monitoring forms to keep track of their student's progress to a great extent. However, a large group, 54.8% of supervisors, only use these monitoring forms moderately and to a small extent. This indicates that Supervisors have different methods that work better for some students than others to stir the completion of postgraduate students' research process. The study's findings reveal that postgraduate supervision involves a range of time management skills to help students complete their dissertations.

To crosscheck the information of research supervisors, the researcher tested a null hypothesis to determine whether there was a significant difference in mean scores on the extent to which time management skills employed by research supervisors from the faculty of education, science, business, medicine, and Theology enhanced the completion of postgraduate students' research process. The one-way ANOVA was used to help a researcher know whether or not there are significant differences between the means of an independent

variable. Anova Test is useful Because when a researcher understands how the means of each group in the independent variable differ, the researcher starts to understand which has a connection to the dependent variable. The findings are summarized in Tables 2, 3, and 4.

Null Hypothesis

Ho: There is no statistically significant difference in mean scores on the extent to which time management skills employed by research supervisors from the faculty of education, science, business, medicine, and theology enhanced the completion of postgraduate students' research process in Northern Zone Tanzania.

Significant level: The hypothesis was tested at a 0.05 significance level since it is commonly accepted in social sciences research.

Assumptions:
- It has more than two groups.
- The independent variable contains categorical data (groups), and the dependent variable contains numerical and continuous data (scores).
- The observations are independent of one another.
- There are no significant outliers.
- The dependent variable should be approximately normally distributed within each group.

Before the actual hypothesis testing, the researcher carried out a normality test to ensure that assumptions were not violated. Since the sample size was less than 2000, Shapiro-Wilk was used to Test Normality. The result is summarised in Table 2.

Table 2: Test of Normality

| | GROUPS | Test of Normality | | |
| | | Shapiro-Wilk | | |
		Statistic	Df	Sig.
Scores	Education	.944	11	.572
	Science	.859	7	.149
	Business	.883	5	.324
	Medicine	.873	4	.310
	Theology	.961	4	.783

Source: Field data (2023)

The data in Table 2 indicate that the P-value of education = .572, science = .149, business = .324, Theology = .783, and medicine = .310. Since the P-value of each group was greater than the significance level of .05, the dependent variable was normally distributed within each group. Hence, testing of the hypothesis was allowed.

The researcher also tested the homogeneity of variance to ensure that the assumptions were not violated. The test was done by checking the null hypothesis of equal variance (Homoscedasticity). The result is indicated in Table 3.

Table 3 : Test of Homogeneity of Variance

Test of Homogeneity of Variances			
Scores based on mean			
Levene Statistic	df1	df2	Sig.
1.958	4	26	.131

Source: Field data (2023)

Since the p-value (.131) was greater than the significance (.05), the null hypothesis failed to be rejected, meaning the group variances were equal; hence hypothesis testing was allowed.

Decision Rule:

The hypothesis was tested at a 0.05 level of significance. Therefore, if the P-value is less than a significance level of 0.05, reject the Null hypothesis ($P < \alpha$ 0.05), and if the P-value is greater than the significance level of 0.05 ($P > \alpha$ 0.05), fail to reject the null hypothesis. The hypothesis results are summarized in Table 4.

Table 4: The One-way ANOVA Output of the extent means scores of research supervisors' Time Management Skills from the Faculty of Education, science, business, medicine, and Theology in enhancing the completion of postgraduate students' Research process.

ANOVA
Scores

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.833	4	.208	.474	.754
Within Groups	11.426	26	.439		
Total	12.259	30			

Source Field data (2023)

The data in Table 4 indicate that the independent groups were divided into Faculty studies such as Faculty of Education, science, business, medicine, and Theology. The findings determined by one-way ANOVA were summarised as (F = .474, P = .754). The data in Table 4 indicate that the P-value was greater than the .05 significance level. Therefore, the null hypothesis failed to be rejected and concluded that there was no significant difference in mean scores of supervisors' time management skills from faculty of education, science, business, medicine, and Theology in enhancing completion of postgraduate students' research process. This implies that research supervisors from all faculties employed time management skills to enhance the completion of postgraduate students' research process. Research supervisors guide postgraduate students in writing research dissertations/theses in universities. Hence, they have enough information on the use of time management skills to enhance the completion of postgraduate students' research process. This information was supported by the findings of Lukianova et al. (2019) in Ukraine, who revealed that the use of time management skills positively made PhD students more competent in writing their research and developing self-management skills that enabled them to perform their work well. This revealed that postgraduate students were familiar with the time management skills employed by supervisors in completing the research process.

Apart from collecting data from the research supervisors, Directors of postgraduate studies, Heads of Departments, and Postgraduate Alumni, the researcher also administered questionnaires to continuing postgraduate students, Table 5 summarizes their responses.

Table 5 : Continuing postgraduate students' responses on the extent to which time management skills employed by supervisors enhance the completion of the research process (n=141)

	Statement		VSE f	VSE %	SE f	SE %	ME f	ME %	GE f	GE %	VGE f	VGE %	M
i.	My supervisor allocates specific time for students' consultation to guide postgraduate students' research process completion.	M	5	5.6	5	5.6	16	18	39	43.8	24	27	3.8
		P	3	5.8	0	0	5	9.6	29	55.8	15	28.8	4
ii.	My supervisor spends enough time understanding students' differences and ensuring their success.	M	5	5.6	12	13.5	20	22.5	30	33.7	22	24.7	3.5
		P	2	3.8	5	9.6	5	9.6	20	38.5	20	38.5	3.9
iii.	My supervisor gives direction and guides postgraduate students to ensure the flow of ideas in their dissertations.	M	4	4.5	4	4.5	16	18	39	43.8	26	29.2	3.8
		P	6	11.5	10	19.2	6	11.5	24	46.3	6	11.5	3.2
iv.	My supervisors provide enough time to correct students' work and enhance the completion of the research process.	M	19	21.3	11	12.4	15	16.9	29	32.6	15	16.9	3.1
		P	10	19.2	12	23.1	2	3.8	17	32.7	11	21.2	3.1
v.	My supervisors use a monitoring form to guide postgraduate students in writing their dissertations.	M	8	9	6	6.7	21	23.6	35	39.3	19	21.3	3.5
		P	5	9.6	6	11.5	6	11.5	23	44.2	12	23.1	3.6
vi.	Supervisors spend enough time discussing research titles with students and coming up with clear titles to enhance the completion of the research process.	M	24	27	12	13.5	14	15.7	25	28.1	14	15.7	2.9
		P	13	25	8	15.4	5	9.6	21	40.4	5	9.6	2.9
vii.	Supervisors understand the fixed time of the research presentation and guide the students to adhere to the deadline.	M	29	32.6	15	16.9	9	10.1	27	30.3	9	10.1	2.6
		P	12	23.1	13	25	2	3.8	16	30.8	9	17.3	2.9
viii.	Supervisors keep modifying the students' research titles by considering the time stipulated in the program.	M	21	23.6	17	19.1	12	13.5	25	28.1	14	15.7	2.9
		P	15	28.8	9	17.3	2	3.8	18	34.6	8	15.4	2.9
ix.	My supervisor reads students' work and provides feedback timely	M	6	6.7	9	10.1	9	10.1	36	40.4	29	32.6	3.8
		P	4	7.7	3	5.8	8	15.4	18	34.6	19	36.5	3.8

x	My supervisors emphasize students submit their research work for correction timely.	M P	14 49	15.7 17.3	14 7	15.7 13.5	18 14	20.2 26.9	30 17	33.7 32.7	13 15	14.6 9.6	3.1 3.13
	Grand Mean	**M**											**3.3**
		P											**3.3**

Source: Field Data (2023)

Key: To a very small extent (VSE)=1, To a small extent (SE)=2, To a moderate extent (ME)=3, To a great extent (GE)=4, and to a very great extent (VGE)=5, M= Masters, P= PhD students, M= mean.

The data in Table 5 show that a majority of masters (70.8%) and a great majority of PhD students (84.6%) to a great extent rated that supervisors allocated specific time for students' consultation in writing their dissertations/thesis and provided feedback timely, while 18% for masters and 9.6% for PhD were moderate and 11.2% of masters and 5.8% of PhD students rated to a small extent supervisors allocated specific time for consultation. The mean scores of the statement were 3.8 for masters and 4 for PhD students. This implies that both masters and PhD students were satisfied with the supervisors' time for consultation hours and were guided by their supervisors to complete their research process as stipulated in the program.

The study's findings revealed that both master's and PhD students thought their supervisors could set aside more dedicated time for consultation, with 18% rating moderate and 11.2% small extent for master's students and 9.6% moderate and 5.8% small amount for PhD students. The distinctions between master's and PhD students show that PhD students got more time for consultation with their supervisors than master's students. The lower percentage for PhD students suggests that PhD students received more consultation time from their supervisors than master's students. The study's findings contradicted the study of Kharadize et al. (2022) in Georgia, US, which demonstrated that less time is paid to free time management, which is the basis of increased stress situations. Conflict situation management among master students became the subject of research in the study. Since the current study revealed that supervisors specified time for consultation hours, students can plan their activities and prepare their time well. This raised awareness of students in managing their time and reduced stress because they knew consultation hours to meet with their supervisors. During those hours, students were free to make a consultation with their supervisors and made good progress with their research.

The data in Table 5 show that a majority of masters (73%) and PhD (57.8%) students said that, to a great extent, supervisors gave direction and guided postgraduate students to ensure the flow of ideas in their dissertations, while 18% of masters and 11.5% of PhD were moderate and 9% of masters and 30.7% of PhD students rated to a small extent. The mean scores of the statement were 3.8 for masters students and 3.2 for PhD students. This indicates that the majority of both master's and PhD students maintained that their supervisors provided direction and guidance in stimulating the flow of ideas in their dissertations, with master students reporting a higher degree of this contribution compared to PhD students.

The findings of the study could imply that master students receive more support and guidance in ensuring the flow of ideas in their dissertations compared to PhD students. The higher percentage of PhD students (30.7%) who rated the supervisory guidance as "to a small extent" compared to master students (9%) could imply that PhD students were given time to be more independent in writing their research dissertation. The contrasting mean scores (3.8 for masters, 3.2 for PhD) indicate that master students had enjoyed more guidance than PhD students, leading to some PhD students delaying completing their research process. The study's findings show that both masters and PhD students were given guidance by their supervisors to a greater extent; however, master students were guided more than PhD students because the focus of PhD students is to develop time management skills in their research process.

When postgraduate alumni were interviewed, one of them responded, "Schedules of activities have been planned well with the supervisor. The purpose of doing this is to manage time and work with the target" (PAL 1, personal communication, 12th September, 2023). The other alumni said, "Since most of the activities at PhD and Master level are done by the students, it is necessary to manage time; otherwise, delays in completion might occur due to students' irresponsibility in performing their jobs" (PAL 2, personal communication, 14th September, 2023).

The responses obtained from the postgraduate alumni (PAL) highlight the management of time in enhancing the completion of the research process. These responses always lead to the planned schedules of activities done by supervisors in managing time. Students' irresponsibility in performing their responsibilities on time leads to delays in completion.

The findings are similar to the study conducted by Khan et al. (2019) in Pakistan, which revealed a moderate relationship between time management and students' performance. The students who spend enough time writing research dissertations complete their studies on time. Similarly, a study conducted by Lukianova et al. (2019) in Ukraine demonstrated that the use of time management positively made PhD students more competent in writing their research and developing self-management skills that enabled them to perform their work well. Furthermore, these findings align with Sergiovanni's supervision practice theory (1982), which suggests that the method of scientific process identifies the appropriate teaching instruction and proper interaction between teachers and students. The relationship between the findings of the current study and the previous study is that proper management of time in scheduling research activities employed by supervisors enhances the completion of students' research process.

The data in Table 5 show that the majority of masters (73%) and PhD students (71.1%) to a great extent said supervisors read students' work and provided feedback timely, while 10.1% of masters and 15.4% of PhD rated moderate and 16.8% of masters and 13.5% of PhD students rated the statement to a small extent. This implies that the majority of both master's and PhD students, with a percentage of 73% for masters and 71.1% for PhD students, said that their supervisors read their work and provided feedback on time. This implies that the majority of both master's and PhD students confirmed that their supervisors are committed to the supervision process and provide feedback on time to contribute to the completion of the postgraduate students' research process. The study's findings show that postgraduate students improved their research work. The minority of postgraduate students who rated the statement moderately and to a small extent, could imply that some supervisors were not committed to their work of reading the students' documents, others were busy with administrative activities and paid little time in guiding the students to complete their research process. Hence, further improvement in reading the students' work and providing clear feedback should be addressed and monitored by the university administration.

The data in Table 5 show the majority of masters (60.6%) and PhD students (67.3%) said to a great extent, supervisors use a monitoring form to guide postgraduate students complete writing their dissertations, while 23.6% of masters and 11.5% of PhD said they were using it to a moderate extent and 15.7% of masters and 21.1% of PhD students rated its use to a small extent. The responses show that the postgraduate students' supervision process had mechanisms to support students in progressing through their research process. The use of a monitoring form was an effective way for supervisors to track students' progress, provide feedback, and ensure that students were on track to complete their dissertations on time. The moderate and small extent ratings by masters and PhD students indicate that while the majority of postgraduate students are satisfied with the use of monitoring forms to control the progress of postgraduate students in the research process, some supervisors were not using it to control the progress of postgraduate in the research process. There was still a minority of students who did not perceive it as being used to a great extent. Therefore, the research supervisors should keep improving in ensuring proper implementation of supervision practice across the program of masters and PhD students.

On the other hand, data in Table 5 indicate that a minority of masters (49.5%) and a moderate percentage of PhD (53.9%) said that, to a great extent, their supervisors provided enough time for correcting students' work to enhance the completion of the research process. In comparison, 16.9% of masters and 3.8% of PhD students were moderate and masters 33.7% and PhD students 42.3% rated the statement to a small extent This implies that while some supervisors were committed to their work and utilized time effectively to correct the research dissertation, others did not set aside enough time to correct the students' research dissertation, leading the students to collect the document with many errors and produce unclear documents, which contributed to delays in the completion of postgraduate students' research process. There is a need for improvement in the postgraduate student supervision process. Adequate time for review and feedback is important for students to refine their work, address any issues, and complete their research process successfully.

Data in Table 5 indicate that a minority of masters (43.8%) and PhD students (50%) said that their supervisors spent enough time discussing with students about research titles to come up with a clear title to enhance the completion of the research process. In comparison, 15.7% of masters and 9.6% of PhD students were moderate and 40.5% of masters and PhD students 40.4% rated the statement to a small extent. According to the findings, half of PhD students (50%) and a slight majority of masters students (56.2%) said their supervisors did not spend enough time discussing with the students and coming up with clear study titles. This implies that research supervisors need to make a lot of improvements in the skill of discussing the titles with students before starting to write the background of the problem. Supervisors must modify the students' titles at the very early stage of their research process because the research title is an important element that focuses on a student's dissertation in the research process.

However, most responses from PhD and master's students indicate that many supervisors did not collaboratively spend adequate time and attention checking the students' titles, which contributed to delays in the completion of postgraduate students to a greater extent. Also, heavy workloads, and poor mentorship skills, contributed to delays in the completion of postgraduate students' research process. The study's findings showed that supervisors should provide their students additional time for in-depth conversations regarding developing and deciding on research titles. More guidance in this area may significantly improve the standard and completion of the master's and doctoral research process.

The responses from the continuing postgraduate students are contrary to the supervisors' responses (90.4%) who maintained that, to a greater extent, supervisors discussed with postgraduate students and came up with clear titles. This implies that some supervisors were committed to their work, but a majority of supervisors were not holding discussions with the students about their research titles, which contributed to delays in completing the research process for masters and PhD students. Hence, more improvement is required in implementing time management skills. The study's findings show that to a moderate extent, time management skills enhanced the completion of postgraduate students' research process since it enabled supervisors to keep modifying students' titles. The study's findings revealed that modification of the students' titles was done from the day students started presenting the concept paper and writing the research proposal up to the final presentation. It was a continuous process in a research journey that involved not only supervisors but also examiners. The findings of the study are in line with the findings of Ferreira (2020), who revealed that time management skills were essential for postgraduate students to achieve their goals. Time cannot be retrieved and must be handled with proper attention. This implies that the achievement of any goal depends on the proper use of time.

Apart from seeking information on the extent to which time management skills enhanced the completion of the research process, the researcher sought out the trend of the number of postgraduate students who completed their research process within the time stipulated in the programme for five years from 2018 to 2022. The responses were rated as low, moderate, and high. Figure 2 summarizes the data.

Figure 2 : The trend of Graduated Postgraduate Students from 2018 to 2022
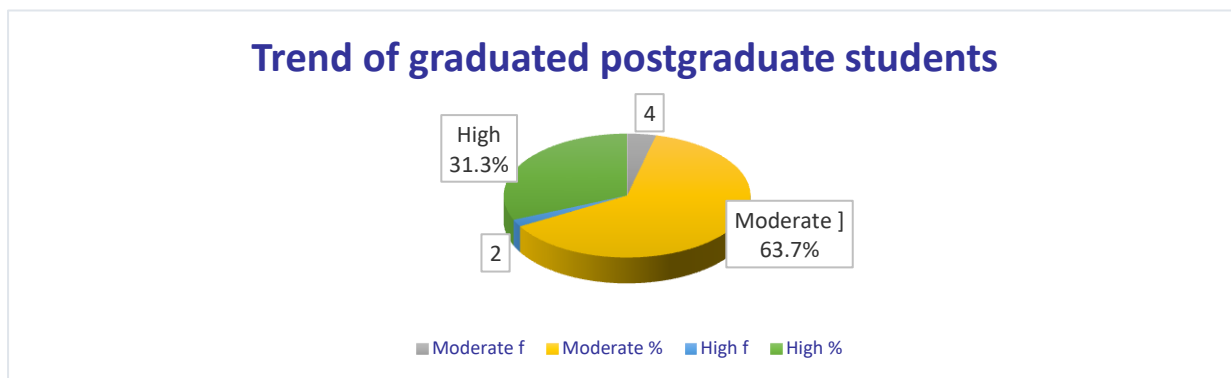
Source: Field data (2023) Key: Below 50% = low, from 50-70% = moderate, from 80 and above = High.
Data in Figure 2 show that supervisory skills played a significant role, with 63.7% of heads of departments rating the trend of graduated postgraduate students as moderate and 31.3% rating it as high. This suggests that effective supervisory practices enhanced the completion of postgraduate students' research process. The

current study's findings concurred with the study of Khauoe (2020), which identified poor time management as one of the challenges affecting postgraduate research completion in the South African context. To address the challenge identified in the previous research, the current study proposed that the supervisory skills employed by research supervisors were instrumental in enhancing the completion of the research process. Specific supervisory skills included: Preparing research activity schedules for students, utilizing consultation hours to regularly meet with students, understanding students' time constraints in writing research, and providing regular reminders to students to keep them on track with their work according to the university almanac. This suggests that the current study focused on the contribution of supervisory skills that could help alleviate the challenges postgraduate students face in their research.

The findings of the study show that to a great and moderate extent, time management skills employed by research supervisors enhanced the completion of postgraduate students' research process since it enabled supervisors to prepare a schedule of research activities for students, use consultation hours to meet with students, understand time limit of the students in writing research and keep on having a regular reminder for students to perform their work as stipulated in the almanac. However, some supervisors did not spend enough time collaborating with students on their research titles, delayed in giving feedback, and paid little attention to correcting students' research dissertations. Hence, there is a need to improve time management skills.

Apart from the questionnaires administered to research supervisors and continuing postgraduate students, and the interview guides conducted to Directors of postgraduate studies, heads of departments, and postgraduate alumni, the researcher also employed a document analysis schedule. This involved checking the documents concerning supervisory skills in enhancing the completion of postgraduate students' research process. The aim was to gather different recorded information on the frequency of students meeting with their supervisors during the research process. The responses are summarized in Table 6.

Table 6 : Universities' Document Analysis Schedule Showing the Frequencies of Students Meeting with their Supervisors (n=6)

Document.	Information Required.		
Monitoring form	The frequency of students meeting with their supervisors	f	%
University A	Supervisors meet with students 2,3 or 4 times per month	1	16.7
University B & D	Students meet with supervisors several times when faced with challenges	2	33.3
University C, A, F	The recommendation of students' progressive reports is filled twice per year	3	50
University E	Some supervisors meet with students once per month	1	16.7
University F	Some students are not reachable	1	16.7

Source: Field Data (2023), Key: F = Frequency, % = Percentage

Data in Table 6 indicate information on monitoring forms from universities A to F whereby university A (16.7%) indicates supervisors meet with students 2, 3, or 4 times monthly. This implies that postgraduate students received good guidance from their supervisors. In Universities B and D (33.3%) said, that students had access to meeting with their supervisors when faced with challenges, which implies that students were monitored to be busy with research dissertation writing. Universities C, A, and F (50%) showed that the recommendation of students' progressive reports is filled twice per year to monitor the progress of the supervisors in guiding the students to write their research, while the other three (3) universities were not using monitoring form for controlling the progress of the students. These made some students not reachable when needed by their supervisors and made some supervisors busy with their activities rather than guiding the students. Hence, all universities are required to use monitoring forms to determine the current status of each student's supervision.

Furthermore, university E (16.7%) indicated that some supervisors meet with students once per month. This implies that there was no close supervision of postgraduate students, which contributed to delays in the completion of the research process. University F (16.7%) indicated that some students were not reachable and were not consulting their supervisors. This implies that some postgraduate students are delayed in completion because of not having clear guidance from their supervisors, and some are not busy in the research process. Hence, university administration should cooperate with supervisors in guiding

postgraduate students to complete their research process. The monitoring mechanism form employed by universities enables supervisors to guide students in writing their research and reinforces students to consult with their supervisors when faced with challenges.

Having established the frequencies of meetings between the supervisors and students, the researchers did cross-tabulation to examine the responses of supervisors' job experience on using time management skills in guiding postgraduate students. Table 7 summarizes the information.

Table 7 : Crosstabulation of Working Experience for Research Supervisors on the Use of Time Management Skills in Enhancing Completion of Postgraduate Students' Research Process (n=31)

S/N	Statement	Working experience	VSE %	SME %	ME %	GE %	VGE %
i	I balance my teaching responsibilities and guide postgraduate students to complete their dissertations on time.	Less than a year	0	0	0	100	0
		1-5 years	0	0	0	66.7	33.3
		6-10 years	0	0	25	75	0
		11-15 years	0	0	12.5	25	62.5
		16-20 years	12.5	0	25	50	12.5
		Above 20 Years	0	0	0	100	0
ii	I use time management skills to understand differences in students' time and adjust workload to ensure their success	Less than a year	0	0	50	50	0
		1-5 years	0	0	0	66.7	33.3
		6-10 years	0	0	25	50	25
		11-15 years	0	0	0	62.5	37.5
		16-20 years	12.5	0	12.5	75	0
		Above 20 Years	0	0	16.7	66.6	16.7
iii	Supervisors discuss with the student the research title and come up with a clear title to reduce time wastage	Less than a year	0	0	0	100	0
		1-5 years	33.3			33.3	33.3
		6-10 years	0	0	25	50	25
		11-15 years	0	0	0	37.5	62.5
		16-20 years		12.5	0	62.5	25
		Above 20 Years	0	0	0	83.3	16.7
iv	My students bring their research work for correction timely	Less than a year	100	0	0	0	0
		1-5 years	0	0	0	3.3	66.7
		6-10 years	25	0	25	25	25
		11-15 years	12.5	0	0	50	37.5
		16-20 years	25	0	12.5	25	37.5
		Above 20 Years	16.7	0	0	25	33.3
v	Supervisors meet together with postgraduate students to plan their workflow for dissertation	Less than a year	50	0	0	50	0
		1-5 years	0	0	0	33.3	66.7
		6-10 years	0	0	25	75	0
		11-15 years	0	0	12.5	12.5	75
		16-20 years	12.5	0	0	75	12.5
		Above 20 Years	0	0	33.3	50	16.7

Source: Field Data (2023)

Key: To a very small extent (VSE)=1, To a small extent (SE)=2, To a moderate extent (ME)=3, To a greater extent (GE)=4, and to a very greater extent
The Data in Table 7 indicate that all (100%) of supervisors with working experience of less than a year,1-5 years, and above 20 years, said to a great extent they balance their teaching responsibilities and guide postgraduate students to complete their dissertations on time. The study reveals that supervisors with low work experience effectively manage their time and responsibilities to support and guide postgraduate students. Supervisors with moderate experience balance workloads and ensure timely dissertation completion. Supervisors with over 20 years of experience balance teaching responsibilities and guide students on time. This information could help institutions develop policies and training programs to enhance supervisory capabilities. Data in Table 7 show that supervisors with working experience from 6-10years, 11-15 years, and 16-20 years, respectively, with 75%, 87.5%, and 62.5 said to a great extent, they balance their teaching and guidance of postgraduate students, while 25%, 12.5%, and 25% rated the statement to a moderate and 12.5% of supervisors with working experience from 16-20 said to a small extent they balance their teaching and guidance of postgraduate students. This finding suggests that some experienced supervisors may face greater challenges in managing their time and effectively guiding their postgraduate students due to increased administrative responsibilities and other competing activities.

The data in Table 7 indicate that all supervisors with working experience of less than a year, 11-15 years and above 20 years, 66.6% with 1-5 years of working experience, and 87.5% of 16-20 years of experience said to a great extent supervisors discuss with the student about their research title and come up with a clear title to reduce time wastage while 33.3% of supervisors with working experience aged from 1-5 rated the statement to a very small extent while those aged from 16-20 year rated it to a small extent. This implies that supervisors with enough experience (11 years and above) understand the importance of discussing the research title with students to ensure clarity and reduce time wastage, while supervisors with relatively less experience (1-5 years) are still developing their mentoring skills and may not yet fully appreciate the value of discussing the research title with students.

In summary, the study found that time management skills employed by research supervisors are deployed to a moderate extent by research supervisors to stirring up the completion of postgraduate students' research process. Among other benefits of time-management skill in research process, the study found that it allows research supervisors to allocate specific time for students' consultation, spend enough time to understand students' differences and ensure their success, gives direction and guides postgraduate students to ensure the flow of ideas in their dissertations and provided enough time for correcting students' work to enhance completion of the research process. The study revealed further that students' delays are often due to supervisors' feedback taking longer than expected, low levels of supervisor-student cooperation, and supervisors not being reachable and not present during consultation hours.

Conclusion and Recommendation
Based on the findings the study concluded that research supervisors differ in their approaches to time management practices in stimulating and accelerating postgraduate students' research process across universities. As one of the critical abilities that postgraduate students develop through their research process, the study also found that students do not receive sufficient guidance on time management by dint of supervisory scaffolding. Based on the conclusion, the study recommended that universities should regularly provide supervisors and postgraduate students with time management training so that the research process can be completed on schedule and impose students with the intended skills.

References
1. Admission officers. (2022). Survey data of enrolment and completion of postgraduate students from 2013-2021 in Tanzania. Northern zone universities.
2. Creswell, J. W., & Creswell, J. D. (2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th Ed.) SAGE.
3. Creswell, J. W., & Creswell, J. D. (2023). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (6th Ed.) SAGE.
4. Eman E., Eman A., Spray E., Eman C., Susanne E., & Eman P. (2023). Interpretation of Mean and Standard deviation in the United States of America.
5. Ferreira, W. (2020). How Important the Successful Use of Time Management is for Postgraduate Students in Ireland.
6. Khan H. (2020) Responses on Top 10 supervisory skills of a good supervisor in the UK.
7. Khan, I. A., Ahmad, S., & Ullah, R. (2019). Relationship between University Students Time Management Skills and their Academic Performance in Pakistan.
8. Kharadze, N., Gulua, E., & Davit, D. (2022). Free-Time Management among Masters' Degree Students in Georgia US.
9. Khauoe, T. (2020). Factors impacting postgraduate throughput rates at a South African university of technology.
10. Lukianova, L., Andresh, C. I., & Barit, O. (2019). Time Management as a Pedagogical Technology of PhD Students: Effective Self-Management in Ukraine.
11. Oliver, L. (2024). The Use of Personal Disruption Strategies by Female Executives in the Property Management Industry for Career Advancement.
12. Razali, S., Rusiman, M., Gan, W., & Arbin, N. (2018). The impact of time management on students' academic achievement in Malaysia.

13. Rosemary, W. M., Elly, N., Joash, M. W., Niceta, W. I., & Francisca, W. N. (2020). Supervision challenges and delays in completion of PhD programmes in public and private universities: Experiences of supervisors and graduate students in selected universities in Nairobi, Kenya.
14. Taherdoost H. (2019). What is the Best Response Scale for Survey and Questionnaire Design; Review of Different Lengths of Rating Scale / Attitude Scale / Likert Scale
15. TCU. (2019). Handbook for Standards and Guidelines for University Education in Tanzania.
16. TCU. (2021). Ministry of Education, Science and Technology Stakeholder engagement plan, Higher education for Economic Transformation project, Dodoma Tanzania.
17. Van Rooij, E., Fokkens-Bruinsma, M., & Jansen, E. (2021). Factors that influence PhD candidates' success: the importance of PhD project characteristics. Studies in Continuing Education, 43(1), 48-67.
18. Van, E., Fokkens, M., & Jansen, E. (2019). Factors that influence PhD candidates' success: The importance of PhD project characteristics in the Netherlands.