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# Evaluation of the Effects of Workload on Academic Staff Productivity in Tertiary Institutions in Rivers State

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***Abstract***: *The study evaluated the effect of workload on academic staff productivity in tertiary institutions in Rivers State. Three research questions and three hypotheses guided the study. The study adopted the descriptive survey design. The study population consisted of 3,154 academic staff from Rivers State University, Ignatius Ajuru University of Education, and University of Port Harcourt. The sample size for this study was 330 academic staff of the three Universities. The sample size was determined using the Taro Yamane formula for the study's total population. The instrument used for data collection was "Evaluation of Workload Distribution on Academic Staff Productivity Questionnaire (EWDASPQ). Cronbach Alpha was used to establish a reliability index of 0.86. Mean and standard deviation were used to answer the research questions, while the One-way Analysis of Variance was used to test hypotheses at a 0.05 significance level. It was found that instructional hours, teacher-student ratio and administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent. The study recommended, among others, that tertiary institutions should adjust instructional hours to align with optimal productivity periods for academic staff, and appropriate student-teacher ratio used to support effective teaching and personalised attention.*

***Keywords:*** *Academic, effect, workload, staff, productivity.*

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## Introduction

Workload is the total amount of tasks and responsibilities assigned to an individual, team, or system within a specific timeframe (Olorunsola, 2020). It is a critical aspect of various domains, including education, employment, and technology. Effectively managing workload is essential for maintaining productivity, preventing burnout, and achieving optimal performance. In professional settings, workload often involves a combination of tasks such as projects, assignments, meetings, and deadlines. In academic environments, students face a workload comprising lectures, assignments, exams, and extracurricular activities. The ability to balance and prioritize these tasks is crucial for success (Reynolds & Lewis, 2017).

Hakanen, Bakker and Schaufeli (2006) revealed that there are factors contributing to the complexity of workload management. One key factor is the nature of the tasks themselves. Some tasks require more time and effort than others, and understanding their priority is vital. Additionally, the skills and expertise of the individual or team can influence how quickly and effectively tasks are completed. Deadlines also play a significant role in workload management. The pressure of time constraints can impact decision-making and stress levels. A well-organized

schedule that considers realistic timelines is essential for maintaining a manageable workload. Workload can be affected by external factors such as unexpected events, changes in project scope, or technological issues. Flexibility and adaptability are essential qualities for individuals and teams to navigate unforeseen challenges effectively.

Bakker and Demerouti (2007) emphasised that effectively managing workload requires implementing key strategies, with prioritization being a fundamental approach. By identifying high-priority tasks and addressing them first, critical objectives can be met efficiently. Breaking down larger tasks into smaller, more manageable parts further reduces the sense of being overwhelmed. Effective communication also plays a vital role in workload management. Open communication within teams and between supervisors and individuals helps clarify expectations, set realistic deadlines, and address any challenges, fostering a supportive work or academic environment. Additionally, technology enhances workload management by offering tools for scheduling, task tracking, and collaboration. Project management software, calendar applications, and communication platforms can streamline workflows and boost overall efficiency.

In academic settings, the concept of instructional hours defined as the time allocated for teaching and related activities is crucial (Yusuf & Adigun, 2019). These hours significantly influence the productivity of academic staff, affecting teaching quality, research output, student engagement, and job satisfaction. Adeyemi et al. (2022) and Eze (2023) explored the impact of instructional hours on academic staff productivity, highlighting the delicate balance required between teaching duties and other academic responsibilities. The relationship between instructional hours and productivity is closely linked to the workload and time management strategies employed. When instructional hours are excessive, academic staff may find it challenging to engage in research, professional development, and other scholarly activities, leading to reduced productivity. Conversely, well-structured instructional hours can boost productivity by allowing adequate time for preparation, student interaction, and continuous learning. Mohammed and Yaro (2023) revealed that academic staff with balanced instructional schedules were more engaged in research activities, contributing positively to the academic community.

By connecting workload management strategies with allocating instructional hours in academia, it becomes evident that prioritisation and effective time management are key to optimising productivity. Prioritization and communication can help academic staff manage their workloads, while a well-structured schedule of instructional hours ensures that they can balance teaching with research and professional development. Thus, fostering a supportive and efficient academic environment benefits both staff and students.

However, the effect of instructional hours on productivity is not uniform across different institutions and disciplines. For example, in the sciences and engineering, where research activities are often resource-intensive, excessive teaching hours can significantly hinder productivity (Obi & Mbah, 2021). Conversely, the effects may be less pronounced in the humanities, where teaching often involves more discussion and less lab work. Therefore, institutional policies on instructional hours need to be tailored to the specific needs of different departments and faculties to optimise productivity. Anene and Okeke (2024) underscored the importance of flexible instructional schedules that accommodate the diverse demands of academic disciplines.

In addition to the direct impact on productivity, instructional hours also influence academic staff's work-life balance, job satisfaction, and mental health. Excessive instructional hours can lead to burnout, increased stress levels, and reduced quality of life, all of which negatively affect

productivity. Ogbonna and Chukwu (2022) highlighted that institutions prioritising manageable instructional hours tend to have more motivated and productive staff. Further, instructional hours have a significant impact on student outcomes, which in turn affects academic staff productivity (Olayiwola, 2020). When instructional hours are well-planned and effectively utilised, students are more likely to achieve better academic results, which reflects positively on the productivity of the academic staff. On the other hand, poorly managed instructional hours can lead to disengagement, lower student performance, and increased pressure on academic staff to address these challenges (Ibekwe & Obi, 2023). Thus, institutions need to carefully consider the allocation of instructional hours to maximise both academic staff and student productivity.

The student-teacher ratio, which represents the number of students assigned to each teacher, is a critical factor that affects the quality of education and the productivity of academic staff in tertiary institutions. A lower student-teacher ratio is generally associated with more personalized attention, better student outcomes, and higher academic staff productivity (Folorunso & Adeniyi, 2017). Johnson and Adebanjo (2023) asserted that academic staff in institutions with lower student-teacher ratios tend to have more time for research, mentoring, and professional development, which are essential components of productivity in academia. The relationship between student-teacher ratio and academic staff productivity is complex, as it is influenced by various factors, including the nature of the discipline, institutional resources, and administrative support. For example, in disciplines that require a high level of student interaction, such as the arts and social sciences, a lower student-teacher ratio is crucial for maintaining the quality of instruction and ensuring that academic staff can effectively manage their workload (Uzoigwe, 2019). On the other hand, in disciplines that involve more independent study or lab work, the impact of the student-teacher ratio on productivity may be less pronounced (Egbule & Nwabueze, 2022).

Okonkwo and Amadi (2023) emphasised that a high student-teacher ratio can lead to increased workload, stress, and burnout among academic staff, negatively affecting their productivity. When academic staff are overwhelmed by the number of students they have to teach, they may struggle to provide the necessary attention and support to each student, leading to lower teaching quality and reduced job satisfaction. This, in turn, can affect their motivation and ability to engage in research and other scholarly activities (Okonkwo & Amadi, 2023). Additionally, the student-teacher ratio has implications for the overall learning environment and student outcomes, which are directly linked to academic staff productivity. A lower student-teacher ratio allows for more interactive and engaging teaching methods, which can lead to better student performance and higher satisfaction levels. This can positively enhance the productivity of academic staff, as they are more likely to feel fulfilled and motivated in their roles when their students perform well (Ogundipe & Salami, 2024). However, the impact of student-teacher ratio on productivity is not only a matter of numbers but also of the quality of interaction between students and teachers. Institutions need to consider how to optimise these interactions by providing adequate resources, support, and professional development opportunities for academic staff. As noted by Adebayo and Obioha (2023), even in cases where the student-teacher ratio cannot be reduced, measures such as improving classroom management techniques, integrating technology in teaching, and enhancing administrative support can help mitigate the negative effects on productivity.

Administrative services play a pivotal role in shaping the work environment and productivity of academic staff in tertiary institutions. Effective administration supports academic activities by ensuring that academic staff have access to the resources, information, and support they need to perform their duties effectively. According to Balogun and Alabi (2022), the efficiency of

administrative services is directly proportional to the productivity of academic staff, as it influences their ability to focus on teaching, research, and community engagement without being bogged down by bureaucratic obstacles. The effect of administrative services on academic staff productivity can be seen in various aspects of academic life, including workload management, resource allocation, and professional development. When administrative services are efficient and responsive, academic staff can more easily navigate the complexities of academic work, from scheduling classes to accessing research funding. This, in turn, allows them to focus more on their core responsibilities and less on administrative tasks, which enhances their productivity. Bello and Akinwale (2023) highlighted how streamlined administrative processes can reduce the time and effort academic staff spend on non-academic tasks, thereby boosting their productivity.

Moreover, the quality of administrative services can affect the morale and job satisfaction of academic staff, which are important determinants of productivity. Poor administrative support can lead to frustration, delays in critical processes, and a sense of disempowerment among academic staff, all of which can negatively impact their productivity (Osuji & Nwankwo, 2020). Conversely, when administrative services are supportive and efficient, academic staff are more likely to feel valued and motivated, leading to higher levels of productivity (Omolara, 2020). Nwankwo and Okoro (2023) enlightened that academic staff in institutions with effective administrative support reported higher levels of job satisfaction and productivity. In addition to internal administrative services, the interaction between academic staff and external administrative bodies, such as accrediting agencies and funding organizations, also plays a role in productivity. Efficient communication and collaboration with these external bodies can facilitate the smooth operation of academic activities, from curriculum development to research dissemination. On the other hand, bureaucratic red tape and inefficient processes can create significant barriers to academic productivity (Obasi & Ugochukwu, 2024).

Role Overload Theory contributed significantly to knowledge by enhancing the understanding of work-life balance, particularly in organizational settings. It has been used to explore issues like employee burnout, productivity, and stress management, particularly in professions with high workloads such as academia, healthcare, and corporate environments. Despite its strengths, the theory has limitations, such as failing to account for the role of individual differences in coping mechanisms and personal resilience. While the theory emphasizes role quantity, it does not address the quality or complexity of roles, presenting a gap for future research. Thus, the researchers evaluated the effects of workload on academic staff productivity in tertiary institutions in Rivers State.

**Statement of the Problem**

The motivation for researching the effect of workload on academic staff productivity in tertiary institutions in Rivers State stems from the growing concerns about the deteriorating quality of education in Rivers State. Academic staff are often overburdened with excessive teaching hours, administrative duties, and the need to engage in research activities. This increased workload results in stress, burnout, and reduced job satisfaction, which negatively impacts their productivity. As a result, teaching quality declines, research output decreases, and students' academic performance suffers. This study sought to evaluate the effects of workload on academic staff productivity to proffer ameliorative measures.

**Purpose of the Study**

This study aimed to evaluate the effects of workload on academic staff productivity in tertiary institutions in Rivers State. The specific objectives of the study are to:

1. assess the effects of instructional hours on academic staff productivity in tertiary institutions in Rivers State;
2. evaluate the effects of student-teacher ratio on academic staff productivity in tertiary institutions in Rivers State; and
3. determine the effects of administrative services on academic staff productivity in tertiary institutions in Rivers State.

**Research Questions**

The following research questions were answered in the study.

1. What is the effect of instructional hours on academic staff productivity in tertiary institutions in Rivers State?
2. What is the effect of student-teacher ratio on academic staff productivity in tertiary institutions in Rivers State?
3. What is the effect of administrative services on academic staff productivity in tertiary institutions in Rivers State?

**Hypotheses**

The following null hypotheses were tested at 0.05 significance level to guide the study.

1. There is no significant effect of instructional hours on academic staff productivity in tertiary institutions in Rivers State.
2. There is no significant effect of the student-teacher ratio on academic staff productivity in tertiary institutions in Rivers State.
3. There is no significant effect of administrative services on academic staff productivity in tertiary institutions in Rivers State.

**Role Overload Theory**

Role Overload Theory was introduced by Kahn *et al.,* (1964) to explain the psychological strain and stress that individuals experience when they are assigned more roles or tasks than they can effectively manage within a given time frame. The theory suggests that when people face too many demands in their professional or personal lives, they experience cognitive overload, leading to decreased efficiency, stress, and a reduction in overall well-being. The primary assumption of the theory is that individuals have limited cognitive, emotional, and physical resources, and when these resources are stretched too thin due to excessive roles or expectations, it results in performance inefficiency and burnout. The theory has contributed significantly to knowledge by enhancing the understanding of work-life balance, particularly in organizational settings. It has been used to explore issues like employee burnout, productivity, and stress management, particularly in professions with high workloads such as academia, healthcare, and corporate environments. Despite its strengths, the theory has limitations, such as failing to account for the role of individual differences in coping mechanisms and personal resilience. While the theory emphasizes role quantity, it does not address the quality or complexity of roles, presenting a gap for future research.

**Methodology**

This study adopted the descriptive survey design. The descriptive survey design is a research design that involves gathering, tabulating, describing, analysing and interpreting data on the evaluation of workload distribution on academic staff productivity in tertiary institutions. The population of the study consisted of 3,154 academic staff from the three Universities in Rivers State. The sample size for this study was 355 respondents. The sample was determined using the

Taro Yamane formula from the total population for the study. Stratified random sampling was used to stratify academic staff to select 200 academic staff from Uniport, 100 academic staff from RSU and 55 academic staff from IAUE. The instrument for data collection was a self-constructed questionnaire titled: "Evaluation of the Effect of Workload on Academic Staff Productivity Questionnaire (EEWASPQ) which was patterned on a four-point modified Likert-type rating scale of Very High Extent (VHE) 4-points, High Extent (HE) 3-points, Low Extent (LE) 2-points and Very Low Extent (VLE) 1-point. The experts in Test and Measurement in the Department of Educational Foundations, Rivers State University determined the face and content validity of the instrument. Cronbach Alpha was used to establish a reliability index of 0.86. The three hundred and fifty-five (355) copies of the EEWASPQ questionnaire were administered on the selected academic staff of the three (3) Universities in Rivers State. Thereafter, 330 copies of the questionnaire were retrieved on the spot. Mean and standard deviation were used to answer the research questions, while One-way Analysis of Variance (ANOVA) was used to test hypotheses at a 0.05 significance level. The research questions were answered based on the following criteria:

Very High Extent (VHE) = 3.50 - 4.00
High Extent (HE) = 2.50 - 3.49
Low Extent (LE) = 1.50 - 2.49
Very Low Extent (VLE) = 1.00 - 1.49

## Results and Discussion

**Research Question 1:** To what extent do instructional hours affect academic staff productivity in tertiary institutions in Rivers State?

**Table 1: Descriptive Statistics on the Effects of Instructional Hours on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| S/No | Item Statements | UNIPORT $N_1 = 185$ | | RSU $N_2 = 93$ | | IAUE $N_3 = 52$ | | Average Mean | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | SD | $\bar{x}_2$ | SD | $\bar{x}_3$ | SD | $\frac{\bar{x}_1+\bar{x}_2+\bar{x}_3}{3}$ | |
| 1 | Excessive instructional hours can lead to burnout, reducing academic staff productivity. | 3.34 | 0.64 | 3.31 | 0.67 | 3.23 | 0.67 | 3.29 | HE |
| 2 | More instructional hours limit the time available for class preparation, affecting teaching quality. | 3.19 | 0.59 | 3.11 | 0.64 | 3.15 | 0.61 | 3.15 | HE |
| 3 | High instructional hours can reduce the time available for research, impacting publication rates. | 3.24 | 0.62 | 3.15 | 0.69 | 3.17 | 0.64 | 3.19 | HE |
| 4 | Appropriate instructional hours contribute to job satisfaction, enhancing productivity. | 3.39 | 0.62 | 3.29 | 0.63 | 3.35 | 0.63 | 3.34 | HE |
| 5 | A well-balanced instructional schedule allows for more engaging and effective teaching. | 3.36 | 0.62 | 3.25 | 0.64 | 3.30 | 0.62 | 3.30 | HE |
| | **Grand Mean** | **3.30** | | **3.22** | | **3.24** | | **3.25** | **HE** |

**Decision: Instructional hours affect academic staff productivity in tertiary institutions in Rivers State to a high extent ($2.50 \leq \bar{x} \leq 3.49$).**

Table 1 presents the information that the academic staff of UNIPORT, RSU, and IAUE have grand means of 3.30, 3.22, and 3.24 respectively on their rating of the extent to which instructional hours affect academic staff productivity in tertiary institutions in Rivers State. The computed standard deviations for the responses of staff of the three Universities in Rivers State are low indicating a close cluster of the scores about the means which lie between 2.50 – 3.49. Therefore, instructional hours affect academic staff productivity in tertiary institutions in Rivers State to a high extent.

**Research Question 2:** To what extent does student-teacher ratio affect academic staff productivity in tertiary institutions in Rivers State?

**Table 2: Descriptive Statistics on the Effects of Student-Teacher Ratio on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| S/No | Item Statements | UNIPORT $N_1 = 185$ | | RSU $N_2 = 93$ | | IAUE $N_3 = 52$ | | Mean Sets | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | SD | $\bar{x}_2$ | SD | $\bar{x}_3$ | SD | $\frac{\bar{x}_1+\bar{x}_2+\bar{x}_3}{3}$ | |
| 6 | A lower student-teacher ratio improves classroom management, enhancing teaching effectiveness. | 3.39 | 0.62 | 3.33 | 0.67 | 3.33 | 0.64 | 3.35 | HE |
| 7 | Smaller ratios allow for more personalised student attention, improving educational outcomes. | 3.45 | 0.63 | 3.39 | 0.69 | 3.39 | 0.63 | 3.41 | HE |
| 8 | Higher student-teacher ratios increase the grading and assessment workload, reducing productivity. | 3.28 | 0.59 | 3.21 | 0.57 | 3.21 | 0.60 | 3.22 | HE |
| 9 | Larger class sizes can elevate stress levels, and negatively impact staff productivity. | 3.37 | 0.63 | 3.27 | 0.63 | 3.33 | 0.62 | 3.32 | HE |
| 10 | Lower ratios often lead to higher student engagement, resulting to a more fulfilling teaching experience. | 3.59 | 0.67 | 3.14 | 0.45 | 3.56 | 0.67 | 3.43 | HE |
| | **Average Mean** | **3.42** | | **3.27** | | **3.36** | | **3.35** | **HE** |

**Decision: Teacher-student ratio affects academic staff productivity in tertiary institutions in Rivers State to a high extent ($2.50 \leq \bar{x} \leq 3.49$).**

Table 2 displays that the academic staff of UNIPORT, RSU, and IAUE have grand means of 3.42, 3.27, and 3.36 respectively on their rating of the extent to which teacher-student ratio affects academic staff productivity in tertiary institutions in Rivers State. The computed standard deviations for the responses of staff of the three Universities in Rivers State are low indicating a close cluster of the scores about the means which lie between 2.50 – 3.49. Therefore, the teacher-student ratio affects academic staff productivity in tertiary institutions in Rivers State to a high extent.

**Research Question 3:** What are the effects of administrative services on academic staff productivity in tertiary institutions in Rivers State?

**Table 3: Descriptive Statistics on the Effects of Administrative Services on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| S/No | Item Statements | UNIPORT $N_1 = 185$ | | RSU $N_2 = 93$ | | IAUE $N_3 = 52$ | | Mean Sets | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | SD | $\bar{x}_2$ | SD | $\bar{x}_3$ | SD | $\frac{\bar{x}_1+\bar{x}_2+\bar{x}_3}{3}$ | |
| 11 | Efficient administrative services provide necessary support, allowing academic staff to focus on teaching and research. | 3.31 | 0.61 | 3.26 | 0.59 | 3.26 | 0.61 | 3.28 | HE |
| 12 | Effective administration enhances better time management and staff productivity. | 3.46 | 0.65 | 3.23 | 0.59 | 3.42 | 0.65 | 3.37 | HE |
| 13 | Proper administrative services ensure timely access to resources, improving work efficiency. | 3.49 | 0.68 | 3.23 | 0.65 | 3.44 | 0.68 | 3.39 | HE |
| 14 | Clear administrative policies facilitate smooth academic operations, boosting productivity. | 3.54 | 0.61 | 3.17 | 0.52 | 3.51 | 0.61 | 3.41 | HE |
| 15 | Efficient communication channels reduce misunderstandings and lead to better staff performance. | 3.45 | 0.62 | 3.30 | 0.55 | 3.39 | 0.62 | 3.39 | HE |
| | **Average Mean** | **3.45** | | **3.24** | | **3.40** | | **3.37** | **HE** |

**Decision: Administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent ($2.50 \leq \bar{x} \leq 3.49$).**

The information in Table 3 reveals that the academic staff of UNIPORT, RSU, and IAUE have grand means of 3.45, 3.24, and 3.40 respectively on their rating of the extent to which administrative services affect academic staff productivity in tertiary institutions in Rivers State. The computed standard deviations for the responses of staff of the three Universities in Rivers State are low indicating a close cluster of the scores about the means which lie between 2.50 – 3.49. Therefore, administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent.

## Hypotheses Testing

**Hypothesis 1**: There is no significant effect of instructional hours on academic staff productivity in tertiary institutions in Rivers State.

**Table 4: One-way Analysis of Variance (ANOVA) on the Effects of Instructional Hours on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 6.300 | 3 | 2.100 | 3.865 | .001 |
| Within Groups | 177.097 | 326 | .543 | | |
| Total | 183.397 | 329 | | | |

**Decision:** $F = 3.865$; $p = 0.001 < \alpha = 0.05$: $H_0$ is rejected

Table 4 indicates the sum of squares of 6.300, with 3 degrees of freedom, and a mean square of 2.100 for between groups. Within groups has a sum of squares of 177.097, degrees of freedom of 326, and a mean square of 0.543, while the total has 183.397 as a sum of squares and 329 degrees of freedom. The computed F is 3.865 which is statistically significant at .05 (p-value = 0.001 < α = 0.05). Thus, the null hypothesis that "there is no significant effect of instructional hours on academic staff productivity in tertiary institutions in Rivers State is rejected: F = 3.865, p = 0.001 < α = 0.05. In other words, there is a significant effect of instructional hours on academic staff productivity in tertiary institutions in Rivers State. This implies that the academic staff of UNIPORT, RSU, and IAUE agree that instructional hours affect academic staff productivity in tertiary institutions in Rivers State to a high extent.

**Hypothesis 2:** There is no significant effect of student-teacher ratio on academic staff productivity in tertiary institutions in Rivers State.

**Table 5: One-way Analysis of Variance (ANOVA) on the Effects of Student-Teacher Ratio on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 5.422 | 3 | 1.807 | 3.311 | .002 |
| Within Groups | 177.975 | 326 | .546 | | |
| Total | 183.397 | 329 | | | |

**Decision:** F = 3.311; p = 0.002 < α = 0.05: $H_0$ is rejected

Table 5 indicates the sum of squares of 5.422, with 3 degrees of freedom, and a mean square of 1.807 for between groups. Within groups has a sum of squares of 177.097, degrees of freedom of 326, and a mean square of 0.543, while the total has 183.397 as a sum of squares and 329 degrees of freedom. The computed F is 3.311 which is statistically significant at .05 (p-value = 0.002 < α = 0.05). Thus, the null hypothesis that "there is no significant effect of teacher-student ratio on academic staff productivity in tertiary institutions in Rivers State" is rejected: F = 3.311, p = 0.002 < α = 0.05. In other words, there is a significant effect of teacher-student ratio on academic staff productivity in tertiary institutions in Rivers State. This implies that the academic staff of UNIPORT, RSU, and IAUE agree that the teacher-student ratio affects academic staff productivity in tertiary institutions in Rivers State to a high extent.

**Hypothesis 3:** There is no significant effect of administrative services on academic staff productivity in tertiary institutions in Rivers State.

**Table 6: One-way Analysis of Variance (ANOVA) on the Effects of Administrative Services on Academic Staff Productivity in Tertiary Institutions in Rivers State**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 7.462 | 3 | 2.487 | 4.609 | .004 |
| Within Groups | 175.935 | 326 | .540 | | |
| Total | 183.397 | 329 | | | |

**Decision:** F = 4.609; p = 0.004 < α = 0.05: $H_0$ is rejected

Table 6 indicates a sum of squares of 183.397, with 3 degrees of freedom, and a mean square of 2.487 for between groups. Within groups has a sum of squares of 175.935, degrees of freedom of 326, and a mean square of 0.540, while the total has 183.397 as a sum of squares and 329 degrees of freedom. The computed F is 4.609 which is statistically significant at .05 (p-value = 0.004 < α

= 0.05). Thus the null hypothesis that "there is no significant effect of administrative services on academic staff productivity in tertiary institutions in Rivers State is rejected: $F(4.609) = 5.509$, $p = 0.004 < \alpha = 0.05$. In other words, there is a significant effect of administrative services on academic staff productivity in tertiary institutions in Rivers State. This implies that the academic staff of UNIPORT, RSU, and IAUE agree that administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent.

## Results and Discussion

### Effects of Instructional Hours on Academic Staff Productivity in Tertiary Institutions

Findings from research question one revealed that instructional hours affect academic staff productivity in tertiary institutions in Rivers State to a high extent. In corroboration, the study of **Ogunbadejo and Adewunmi (2023)** in line with the present study revealed that there is a significant negative effect of extended instructional hours on productivity and excessive teaching hours led to burnout, decreased research output, and overall dissatisfaction among academic staff.

### Effects of Student-Teacher Ratio on Academic Staff Productivity in Tertiary Institutions

Findings from research question two stated that teacher-student ratio affects academic staff productivity in tertiary institutions in Rivers State to a high extent. Similarly, **Chukwu and Eze (2022)** study in line with the present study showed there is a significant positive effect of lower student-teacher ratios on staff productivity and academic staff in institutions with smaller class sizes reported higher levels of job satisfaction, increased time for research, and better student engagement.

### Effects of Administrative Services on Academic Staff Productivity in Tertiary Institutions

Findings from research question three concluded that administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent. Consequently, the study of **Ike and Okeke (2023)** regarding the present study indicated no significant effect of administrative services on staff productivity. The study found that while effective administrative support is crucial for the smooth functioning of institutions, it did not directly correlate with increased productivity among academic staff.

## Conclusion

Based on the findings, the study concluded that instructional hours, teacher-student ratio and administrative services affect academic staff productivity in tertiary institutions in Rivers State to a high extent. Collectively, these factors underscore the importance of a balanced workload, adequate student-teacher ratios, and supportive administrative systems for academic staff productivity.

## Recommendations

1. Tertiary institutions should consider adjusting instructional hours to align with optimal productivity periods for academic staff. Research suggests that balancing teaching hours with time allocated for research and other academic responsibilities can enhance overall productivity and job satisfaction among staff.
2. Tertiary institutions should aim to maintain an optimal student-teacher ratio that supports effective teaching and personalized attention. A lower ratio can lead to increased productivity, as academic staff are able to manage their workload more efficiently and provide quality education.

3. Tertiary institutions should work towards streamlining administrative processes to reduce the administrative burden on academic staff. Implementing efficient systems for tasks such as grading, reporting, and course management can free up more time for academic staff to focus on teaching and research.

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