

IMPACT OF ASUU-FEDERAL GOVERNMENT OF NIGERIA (FGN) DISPUTES ON TEACHING AND RESEARCH ON THE OUTPUT OF PUBLIC UNIVERSITIES IN NORTH-EAST, NIGERIA

Abstract

The study investigated the impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) disputes on teaching and research on the output of public universities in North-East Nigeria. Three objectives, three research questions and three null hypotheses guided the study. Ex-post facto-survey research design was used for this study. The population of the study is 5,434 academic staff. The sample size for the study comprised 372 academic staff. Two self-structured instruments titled "Impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) Disputes Questionnaire (IASUUFQNDQ)" with 10-items and "Output of Public Universities Questionnaire (OPUQ)" with 15-items were used for data collection. Inferential statistics of simple linear and multiple regression analysis were used in testing the null hypotheses. The study revealed that Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on University teaching and research have positive significant impact on the output of Federal universities in North Eastern Nigeria, $F(2, 371) = 68.528, p < 0.05$. It was recommended among others that; the Federal Government should work with ASUU to improve teaching conditions by providing adequate teaching resources, infrastructure, and support services. Regular reviews and updates to teaching policies should be carried out to ensure that the needs of both students and staff are met. The Federal Government should increase funding and support for research activities in universities, creating incentives for faculty and students to engage in research. Establishing a dedicated research grant program and improving access to research facilities will foster a more vibrant research environment.

Keywords: ASUU-FGN Disputes, Teaching in Federal Universities, Research Productivity, University Outputs, and Higher Education in Nigeria.

Introduction

Throughout the years, universities have held significant positions in the developed world. They typically take the lead in addressing various social, economic, and political issues, particularly as research efforts are directed towards fostering human development and tackling critical problems. To improve the provision, acquisition, utilization, and assessment of quality education, various forums and organizations have advocated for all possible approaches to enhance both the quality and quantity of learning both within and outside school settings. "In the realm of higher education, the Academic Staff Union of Universities (ASUU) is one of the numerous unions dedicated to ensuring educational quality" (Yawe, Ijov & Okwori, 2019). "Globally, academic staff are acknowledged as the individuals primarily tasked with teaching, conducting research, and engaging in public

service”(Abiodun-Oyebanjo, 2010). “University worldwide is regarded as the citadel of learning, the fountain of intellectual development while the role of universities in human capital development, research and technological innovation cannot be under evaluated” (Yusuf, 2020).

The objectives of university education are vital for creating a productive society. It is fundamental in generating a skilled and capable workforce that is essential for national progress, particularly in the era of globalization and the transition towards economies driven by knowledge. Around the globe, investing in university education is a key aspect of national development initiatives. Nigerian universities are vital for fostering economic growth. They equip students with the knowledge and skills necessary to become the future labor force of the country. Additionally, these institutions contribute to research and innovation, both of which are critical for economic advancement. Trade unions are significant in promoting consistent progress in the availability of educational facilities and infrastructure in Nigerian universities. The Academic Staff Union of Universities (ASUU), which is the most powerful of the unions, was founded in the 1970s and continues to be a strong labor union in Nigerian higher education.

“The results produced by universities represent the ultimate outcomes of their educational processes, including factors such as the number of graduates ready for employment, received accolades, and research publications generated over years of education, research, and community engagement” (Ozurumba & Amasuomo, 2015). Staff participation in workshops significantly enhances their development through the outputs of research, teaching, and community involvement. Participating in workshops influences staff performance, serving as a marker for promotions, growth, and progress within the university framework. Ozurumba and Amasuomo's research revealed that in-service training provided to academic personnel enhances their productivity, evident in research, teaching, and community service. Likewise, staff who are given the chance to attend conferences and workshops often see improvements in their output, significantly aiding their professional advancement. Today, nations rely more on the knowledge, ideas, and skills generated through university research.

Tertiary education in Nigeria has faced significant challenges due to industrial actions taken by both academic staff (ASUU) and non-teaching personnel. Consequently, students are often placed in deplorable circumstances, which disrupt academic programs, lead to unwarranted extensions of their study duration, impair students' focus on their studies, and negatively affect the relationships between lecturers and students, among other issues.

Abiodun-Oyebanji (2015) highlighted that several factors, including insufficient funding, encroachments on university autonomy, and poor working conditions, contribute to the conflicts between ASUU and the Federal Government of Nigeria (FGN), particularly within federal universities in the country.

A dispute is characterized as an argument or disagreement among individuals or groups. As noted by Chand (2016), the term generally refers to a conflict or disagreement over certain issues among the involved parties. Specifically, a dispute can describe an official disagreement, such as that between workers and employers (ASUU vs. FGN). “It also pertains to workers’ refusal to perform their duties as a form of protest against inadequate services or unfavorable working conditions” (Edinyang& Ubi, 2013). Amadi and Precious (2015) mention that a dispute is a component of industrial conflict that ASUU utilizes to voice their concerns to their employer (FGN), particularly regarding issues such as university independence, funding, the increase in the number of universities, teaching, research, community service, revitalization, and working conditions. It involves a collective and organized suspension or halt of work by employees to compel employers to accept their demands. “Disputes are recognized as the intervals during which employees, due to disagreements with their employers, choose to stop or withdraw their services” (Ohiwerei & Onimawo, 2016). Ohiwerei and Onimawo further identify key issues that could lead to disputes, including “university autonomy, insufficient funding, the proliferation of universities while current ones are poorly managed, inadequate teaching conditions, and insufficient research and publication funding” (Ohiwerei & Onimawo, 2016). The study focused on ASUU-FGN dispute on the output of federal universities in North East, Nigeria. Teaching is intrinsically linked to learning, which involves students actively acquiring knowledge.

Teaching is the practice implemented by a lecturer aimed at transmitting skills (knowledge, know-how, and interpersonal skills) to a learner, a student, or any other audience in the context of university educational system. “Teaching can be defined as engagement with learners to enable their understanding and application of knowledge, concepts and processes. It includes design, content selection, delivery, assessment and reflection” (Isa & Ezekiel, 2022). “The gross under-funding of tertiary education sector in the country has been rendering the university system incapacitated in areas of teaching” (ASUU, 2022). ASUU add that money is absolutely the input of any education system. It provides the essential purchasing power with which school administrators acquire its human and physical inputs for effective teaching and learning. According to ASUU, the university system has not enjoyed

the financial resources necessary to maintain educational quality in the midst of significant enrollment explosion. No university can carry out its teaching function effectively without adequate financial resources at its disposal. The issues of funding and facilities is a major cause of friction between ASUU and the government in almost all instances. “This is because members of the union at different periods have found it difficult to teach in an environment without the expected amenities or with poor facilities” (Ekpo, 2014). “Over the years, ASUU has embarked on several strikes to press home their demand towards improving the quality of teaching in the university system” (Isa & Ezekiel, 2022). “The process of economic development centres on the ability to understand, adapt, and harness the forces that shape industries, markets, and societies” (Currie-Alder, 2015). Research, as the systematic exploration of these forces, equips developing economies with the necessary insights and tools needed to navigate developmental challenges, seize opportunities, and foster growth and development” (Fan, 2018). Universities in Nigeria promote academics to senior positions based on research rather than teaching performance.

“Research is the creative and systematic work undertaken to increase the stock of knowledge” (Okpe, Simisaye & Otuza, 2013). According to these authors, academic research is a systematic painstaking investigation of a topic or in a field of study often employing techniques of hypotheses and experimentation, undertaken by a person intent on revealing new facts, theories or principles or determining skills and identification of research problems. “Research is the process of gathering of data, information and facts for the advancement of knowledge” (Chanchal, 2013). “Through research and its results, universities are expected to contribute to the improvement of the quality of life and to social technological change” (Nurul & Idris, 2020). In 2019, a novel virus known as “Corona Virus or Covid -19” exposed Africa and especially Nigeria to how decayed the university educational system is. While the rest of the world especially Europe and America were researching on how to develop vaccine to curb the virus, Nigeria on the other hand concentrated on how to lock the populace in their houses which would have been easily done like the rest of the world if before the pandemic we had had a good futuristic and functional education geared towards production and quality university education. “If university system were to be well equipped and funded, if our teachers were well trained, if we had the latest technology in our universities, our attention would have been more focused on developing the vaccine than looking for how best to distribute food and other palliatives to the populace because of government inability to revitalize the Nigerian university system” (Nurul & Idris, 2020). Regional networking according to the authors can be thought of as an institutional survival or strengthening strategy

for universities. Higher education provides education, conduct research and plays an active role in the development of the economic, social and cultural environment. Within the individual institution, the challenge is to link the teaching, research and community service roles by internal mechanisms (funding, staff development, incentives and rewards, communications, etc.) that make these activities more responsive to regional needs.

Academic Staff Union of Universities (ASUU) aims at assisting the stake holders in achieving high profiles in education and in developing and promoting sustainable management of university education by providing high quality services. In addition, the union also supports the struggle for the improvement of the social, economic professional situation of the members, safeguard their interests and work for their success. In Nigeria, trade union such as ASUU, had usually embarked on various actions over agitations for improvement of their welfare, teaching and research facilities and university autonomy. “One of the major problems confronting lecturers in Nigeria is the issue of low productivity” (Isa & Ezekiel, 2022).

This has been attributed to declining research infrastructure (such as computers), delays in the implementation of promotion and entitlements, workload and dated curriculum. The abysmal state of teaching and learning infrastructure in Nigerian Universities is a consequence of the financial imbroglio in the nation’s ivory tower, due to government refusal to accord the university its pride of place in terms of funding, and the high level of corruption in the management of universities’ resources. Nigerian universities have been grossly underfunded and the consequence of this has manifested in the deficiency of teaching and learning infrastructural facilities development in the universities. “ASUU has struggled to force the government to properly fund the universities, but these funds are poorly managed, embezzled and stolen” (Ijov, 2018).

The persistent ASUU strikes in Nigeria have disrupted school academic, left academic activities of universities disjointed, and distracted the normal learning process. Disruption in academic program resulting from strike led to closure of universities for a period of time thereby affecting the academic activity of universities. Instability in school calendar through strike elongate study period (years) and hamper academic activities. This is evident by the quality of graduates produced by these institutions. The quality of education in Nigerian Universities had degenerated to the extent that, many graduates cannot defend their certificates. About 95 percent of them are not employable. It was observed that graduates from Nigerian universities are faced with problem of unemployment upon graduation. “The

present crops of graduates do not meet the need of the current realities in workplace, and this calls for an urgent attention from all concerned to address the trend” (ASUU, 2020).

This problem has been of concern to stakeholders in the university system. Moreover, some graduates that are turned out from these universities can hardly write memo or communicate effectively and meaningfully. Regrettably, the Federal Government has often failed to carry out the Memorandum of Understanding (MoU) it previously signed, particularly those related to providing sufficient funding for the enhancement of Nigerian universities in areas such as teaching, research, and community development. This neglect has frequently resulted in strike actions, which have interrupted the operations of public universities for many years.

For over thirty years (since 1990), the Academic Staff Union of Universities (ASUU) and the Federal Government of Nigeria (FGN) have been involved in lengthy industrial disputes regarding various critical matters for the union, particularly inadequate salaries and working conditions, insufficient funding, lack of infrastructure, absence of autonomy, and restrictions on academic freedom. “According to the union, these problems are hindering the standards of teaching, research, scholarship, and innovation” (Severus, 2015). Nigerian universities have periodically faced interruptions in their academic schedules due to conflicts between the federal government and ASUU, state government and ASUU, or university management and ASUU. These disputes stem from ASUU's aim to ensure quality education in public universities and improve the welfare of its members. These conflicts are at times between labour Unions in the Universities and government on one hand, or the Union and Universities management on the other.

In a similar vein, these conflicts have severely impacted the efficient operation of universities by causing a loss of crucial hours for administration, teaching, and learning, which have been squandered due to these disagreements. The disputes involve overly politicized negotiations concerning university autonomy and academic freedom, uneven salary structures for academic versus non-academic staff, university funding, student union governance, and monetization policies, along with the renegotiation of the 2009 agreement and, more recently in 2022, the inclusion of university personnel in the Integrated Personnel and Payroll Information System (IPPIS), among other issues. Nevertheless, there are inconsistencies and contradictions in the execution of policies related to the payment of backlogs for the 25% and 35% salary increases and wage awards. Additionally, there are

issues with the failure to remit third-party deductions to the relevant organizations, such as pension funds and the federal housing insurance scheme.

In the North East geopolitical zone, ongoing strikes by the Academic Staff Union of Universities (ASUU) due to unaddressed issues from university management and owners are severely disrupting the academic calendar and compromising academic performance, leading to a trend of mediocrity and educational decline. “In the region, it is rare for an entire academic year to pass without conflicts among students and staff resulting in lost study time, postponed graduations for students, and financial losses for students, parents, and the nation overall” (Yawe et al., 2019). It is clear that education is crucial for any nation's survival and should be regarded as an issue that transcends politics or divisive debates. The frequent strikes by ASUU in the North East geopolitical zone have been noted by researchers to have both positive and negative effects on faculty and students in public universities. Given these observations, it is evident that ASUU strikes are significant enough to require a thorough investigation into the impact of disputes between ASUU and the Federal Government of Nigeria (FGN) on teaching, research, and overall performance of Federal Universities in North East Nigeria.

Purpose of the Study

This study investigated the impact of ASUU-Federal Government of Nigeria (FGN) disputes on teaching and research on the output of public universities in North-East Nigeria. Specifically, the study sought to;

1. Access how ASUU-FGN disputes affect teaching outcomes in Federal Universities in North-East Nigeria.
2. Investigate how ASUU-FGN disputes influence research productivity in Federal Universities in North-East Nigeria.
3. Evaluate the overall academic and research performance of Federal Universities in North-East Nigeria.

Research Questions

The following research questions were raised to guide the study;

1. How have ASUU-FGN disputes impacted teaching quality in Federal Universities in North-East Nigeria?
2. To what extent have ASUU-FGN disputes disrupted research activities in Federal Universities in North-East Nigeria?
3. What is the current state of academic and research performance of Federal Universities in North-East Nigeria?

Hypotheses

The following null hypotheses were formulated to guide study and were tested at 0.05 Alpha level of significance:

1. Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of university teaching does not significantly impact on the output of Federal universities in North Eastern Nigeria.
2. Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research does not significantly impact on the output of Federal universities in North Eastern Nigeria.
3. Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) disputes (of teaching and research) does not significantly impact on the output of Federal universities in North Eastern Nigeria.

Methodology

This study employed ex-post facto-survey research design. Ex post facto design was considered a quasi-experimental type of study, which means that participants are not randomly assigned, but rather grouped together based upon specific characteristics or traits they share. The area of study is North East Nigeria. The population of the study is 5,434 academic staff in seven Federal Universities in North-East Nigeria namely; Modibbo Adama University, Yola, Adamawa State, Abubakar Tafawa Balewa University, Bauchi State, University of Maiduguri, Borno State, Federal University Kashere, Gombe State, Federal University Wukari, Taraba State, Federal University, Gashua, Yobe State, Nigerian Army University, Biu, Borno State. The sample size for the study comprised 372 Academic staff as respondents. This size was determined using Taro Yamane Sample size formulae. Multistage sampling method was used to select the sample at different stages.

Firstly, purposive sampling was used to select all Federal Universities from all the six States that constitute North-Eastern Nigeria which are; Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe States. Secondly, Proportionate Stratified random sampling technique was adopted in selecting the number of academic staff from each Federal and State University in this order: Modibbo Adama University, Yola, Adamawa State (53), Abubakar Tafawa Balewa University, Bauchi State (59), University of Maiduguri, Borno State, (127), Federal University Kashere, Gombe State (60), Federal University Wukari, Taraba State, (40), Federal University, Gashua, Yobe State, (21), Nigerian Army University, Biu (12) respectively. This was done to ensure that, relative proportion of the respondents in the

Universities involved in the study were exactly its relative contribution in the sample. At the last stage, simple random sampling was used to select the 372 Academic staff from the six Federal universities under study. The choice of simple random sampling technique was to ensure that all the 5,434 Academic staff have equal chance of being included in the final sample of the study

Two self-structured questionnaires were used for data collection. A structured questionnaire titled “Impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) Disputes Questionnaire (IASUUFGNDQ)” with 10-items and “Output of Public Universities Questionnaire (OPUQ) with 15-items developed by the researcher were used to elicit information from the target respondents. Three experts from Educational Management Unit of the Department of Physical Sciences Education, Faculty of Education, Modibbo Adama University, Yola. Cronbach Alpha statistic was employed to compute the internal consistency of the items of the instruments. An overall reliability estimates of 0.86 was obtained for (IASUUFGNDQ). An overall reliability estimate of 0.84 was obtained for (OPUQ).

Descriptive statistics of Mean and Standard Deviation was used to answer the research questions. Real limit of numbers was used. Therefore, the mean indicates the typical value, while the Standard Deviation reveals the average variation of values from the mean. When considered together, these statistical measures provide a clear mental representation of the sample. Simple Linear and Multiple Regression Analysis were used to test null the hypotheses at 0.05 level of significance. The Simple Linear and Multiple Regression Analysis were used since the hypotheses is based on predictive modelling of two groups of respondents that responded to the items and the sample was more than 30 respondents. The responses of the respondents were compared to see if significant differences exist between means of the two groups on impact of ASUU-FGN disputes on output of Federal Universities in North-East Nigeria. The decision rule for the null hypotheses was that; if F-Ratio is less than 0.05 the null hypotheses is rejected, if not we do not rejected the null hypotheses.

Results

Research Question 1

How have ASUU-FGN disputes impacted teaching quality in Federal Universities in North-East Nigeria?

Table 1: Mean and Standard Deviation on how ASUU-FGN disputes have impacted teaching quality in Federal Universities in North-East Nigeria

S/N	ITEM (n = 372)	Mean	S. D	Remark
1	University's ability to design her learning program enhances management of universities	3.66	0.48	HL
2	ASUUs' ability to design school level policy improves the management of public universities	3.80	0.40	HL
3	University's ability to recruit teachers based on competence enhances student's academic performance	3.84	0.36	HL
4	ASUUs' ability to determine teachers' work hour hinders effective management of public universities	3.64	0.48	HL
5	University's ability to determine their own content of course(s) ensures smooth instructional delivery	3.64	0.48	HL
	Grand Mean	3.72	0.44	HL

The results in Table 1 reveals the level of dispute regarding university teaching, with a grand mean score of 3.72 and a standard deviation of 0.44. The highest mean score (3.84) is for "University's ability to recruit teachers based on competence," emphasizing the critical role of teacher quality in academic performance. Other key items include ASUU's ability to design school-level policy (mean = 3.80, S.D = 0.40) and the university's ability to design its learning program (mean = 3.66, S.D = 0.48). These findings suggest that disputes over teaching practices and policies are central to the overall management and effectiveness of universities.

Research Question 2

To what extent have ASUU-FGN disputes disrupted research activities in Federal Universities in North-East Nigeria?

Table 2: Mean and Standard Deviation of the extent to which ASUU-FGN disputes have disrupted research activities in Federal Universities in North-East Nigeria

S/N	ITEM (n = 372)	Mean	S. D	Remark
6	Commercialization of Research Results by ASUU through strike enhance university management	3.70	0.46	HL
7	ASUUs' ability to ensure government sponsor peer reviewed journal articles of lecturers enhance management	3.77	0.42	HL
8	ASUUs' ability to ensure government sponsor Non-refereed scientific articles of lecturers facilitates their promotions	3.72	0.45	HL
9	ASUUs' ability to ensure government sponsor conference proceedings of lecturers enhance management	3.72	0.45	HL
10	ASUUs' ability to ensure sponsor book(s) of lecturers positively impacts on university management	3.62	0.49	HL
	Grand Mean	3.70	0.45	HL

Table 2 presents the mean and standard deviation of the level of dispute between ASUU and FGN regarding university research. The grand mean score is 3.70 with a standard deviation of 0.45, indicating a high level of concern. The item "ASUU's ability to ensure government sponsor peer-reviewed journal articles of lecturers enhance management" has the highest mean score (3.77) and a standard deviation of 0.42, highlighting the critical role of government support in academic publishing. Other items such as sponsoring non-refereed scientific articles and conference proceedings also have high mean scores (3.72 each), suggesting that comprehensive support for various research outputs is seen as vital for effective university management.

Research Question 3

What is the current state of academic and research performance of Federal Universities in North-East Nigeria?

Table 3 Mean and Standard Deviation of the current state of academic and research performance of Federal Universities in North-East Nigeria

S/N	ITEM (n = 372)	Mean	S. D	Remark
1	Trained graduates with sufficiently developed skills in their programme of study	3.66	0.48	HL
2	Transfer of knowledge and learning in alignment with industrial need to make graduates more viable	3.56	0.50	HL
3	Effective guidance and counselling services	3.76	0.43	HL
4	Essential skills development for students that is sufficient to ensure positive career prospects	3.85	0.35	HL
5	Global research collaboration across borders that ensures linkages with key international partners	3.56	0.50	HL
6	Widespread global visibility due to recency of research output	3.79	0.41	HL
7	Regular university curriculum reviews to ensure skills mismatch needed for community development	3.77	0.42	HL
8	Produce graduates who are fulcrum for national development	3.61	0.49	HL
9	Raise social awareness of community members on the danger of social vices	3.86	0.35	HL
10	Advise students to do community service in order to get work-related knowledge/skills	3.76	0.44	HL
11	Priority-setting to preferentially support internationally competitive or niche fields	3.49	0.50	HL
12	Set performance indicators to benchmark against international standards by shaping priorities	3.76	0.43	HL
13	Establishment of research clusters/centres capable of winning external funding	3.39	0.49	ML
14	Facilitate research innovations across all Higher Education Institutions (HEIs)	3.56	0.67	HL
15	Supporting Higher Education Institutions (HEIs) objectives for diverse institutional mission	3.75	0.45	HL
	Grand Mean	3.68	0.46	HL

Table 3 presents the current state of academic and research performance of Federal Universities in North-East Nigeria, with a grand mean score of 3.68 and a standard deviation of 0.46. The highest mean score (3.86) is for "Raise social awareness of community members on the danger of social vices," indicating a strong focus on community engagement and social responsibility. Other significant items include developing essential skills for positive career prospects (mean = 3.85, S.D = 0.35) and ensuring global visibility through recent research output (mean = 3.79, S.D = 0.41). These findings reflect the multifaceted roles of universities in education, research, and community service, highlighting their impact on both local and global scales.

Hypothesis Testing

H₀₁: Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching does not significantly impact on the output of Federal universities in North Eastern Nigeria.

Table 4a: Results of ANOVA from Regression Analysis of Impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) Dispute of Teaching on the Output of Federal Universities in North Eastern Nigeria

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.500	1	30.500	426.274	.000 ^b
	Residual	26.473	370	.072		
	Total	56.973	371			

a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

b. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching

The result of analysis in Table 4a provides a summary of ANOVA-based linear regression analysis, which was employed to investigate whether Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching has a significant impact on the output of Federal universities in North Eastern Nigeria. The results reveal that Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching has a significant impact on the output of Federal universities in North Eastern Nigeria, $F(1, 371) = 426.274$, $p < 0.05$. Since the p-value (0.000) is lower than the predefined significance level of 0.05, we can reject the null hypothesis.

Table 4b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732 ^a	.535	.534	.26749

a. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching

Table 4b shows a model summary that demonstrates how the independent variable accounts for the variance in the dependent variable. The results reveal that 4.8% of the variation in the

output of public Universities could be attributed to the Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute over teaching. The r-value of 0.732 reveals that there is a moderate relationship between Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching and the output of Public Universities.

Table 4c: Coefficient of Beta

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.625	.150		4.171	.000
	Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching	.845	.041	.732	20.646	.000

a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

The result in Table 4c indicates the Beta coefficient of the regression analysis of Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching and the output of public Universities. The result shows a beta coefficient of 0.732, $t = 20.646$, $p < 0.05$. This indicates that Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching has a significant impact on the output of public Universities.

H₀₂: Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research does not significantly impact on the output of Federal universities in North Eastern Nigeria.

Table 5a: Results of ANOVA from Regression Analysis of Impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) Dispute of Research on the Output of Federal Universities in North Eastern Nigeria

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.445	1	7.445	55.619	.000 ^b
	Residual	49.528	370	.134		
	Total	56.973	371			

a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

b. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research

Table 5a presents the ANOVA results for the regression analysis assessing the impact of the ASUU-FGN dispute of research on the output of federal universities. The regression model is significant, with $F(1, 370) = 55.619$ and $p < .05$, indicating that the dispute significantly impacts university output.

Table 5b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.361 ^a	.131	.128	.36587

a. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research

Table 5b shows an R value of .361, an R² of .131 and an R² adjusted of .128 meaning that approximately 12.8% of the variance in university output is explained by the dispute of research.

Table 5c: Coefficient of Beta

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.348	.183		12.845	.000
	Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research	.371	.050	.361	7.458	.000

a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

Table 5c indicates that the standardized coefficient (Beta) for the dispute of research is .361, and the t-value is 7.458 with a p-value of $< .05$. The unstandardized coefficient (B) is .371, suggesting that for each unit increase in the dispute of research, the output of public universities increases by .371 units. Therefore, H_{02} is rejected as the dispute of research significantly impacts university output.

H_{03} : Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) disputes on teaching and research do not significantly impact on the output of Federal universities in North Eastern Nigeria.

Table 6a: Results of ANOVA from Regression Analysis of Impact of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) Disputes teaching and research on the Output of Federal Universities in North Eastern Nigeria

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.277	2	4.285	68.528	.000 ^b
	Residual	22.696	369	.063		
	Total	56.973	371			

a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

b. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching, Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research

The result of analysis in Table 6a provides a summary of ANOVA-based linear regression analysis, which was employed to investigate whether Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) disputes have significant impact on the output of Federal universities in North Eastern Nigeria. The results reveal that Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) disputes on teaching and research have significant impact on the output of Federal universities in North Eastern Nigeria, $F(2, 371) = 68.528, p < 0.05$. Since the p-value (0.000) is lower than the predefined significance level of 0.05, we can reject the null hypothesis.

Table 6b: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.776 ^a	.602	.593	.25005

a. Predictors: (Constant), Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching, Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research

Table 6b is a model summary that provides the R, R Square, and Adjusted R Square values. The Adjusted R Square value (.593) suggests that the model can explain about 59.3% of the variability in the output of public Universities. The R-value of 0.776 indicates that there is a strong relationship among Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) disputing research, teaching and proliferation, and the output of public Universities.

Table 6c: Coefficient of Beta

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2.190	.496		4.417	.000
	Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching	.699	.043	.606	16.109	.000

Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research	.153	.041	.150	3.697	.000
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a. Dependent Variable: OUTPUT OF PUBLIC UNIVERSITIES

The analysis in Table 6c shows the coefficients of multiple regression analysis. The regression analysis presented reveals how each variable included in the model contributed in predicting the output of public Universities. Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute over teaching has a beta coefficient of 0.606 (60.6%) at $t = 16.109$, p – value of 0.000. additionally, Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research has a beta value of .150 (15%) of the variance in the output of universities at $t = 3.697$, p – value of 0.000.

It can be concluded that Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of teaching make the strongest unique contribution to explaining the output of public universities, when the variance explained by all other variables in the model are controlled for since it has the largest beta coefficient of .606. The Betavalue for Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of research were slightly lower (.150) respectively, indicating that they made less of a unique contribution in predicting output of public universities.

Findings of the Study

The following findings emanated from the study.

1. The result of the study further reveals that there is high level of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of university teaching with a mean of 3.72 and standard deviation of 0.44. The results reveal that Academic Staff Union of Universities (ASUU)-Federal Government of Nigeria (FGN) dispute on teaching has a significant impact on the output of Federal universities in North Eastern Nigeria, $F(1, 371) = 426.274$, $p < 0.05$.
2. The study's findings further indicate that there is high level of Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) dispute of university research as indicated by the mean of 3.70 and a standard deviation of 0.45. The finding also reveals that the ASUU-FGN dispute over research has significant impact on the output of federal universities, with $F(1, 370) = 55.619$ and $p < .05$.

3. The results of the study further reveals that Academic Staff Union of Universities' (ASUU)-Federal Government of Nigeria (FGN) disputes on teaching and research have significant impact on the output of Federal universities in North Eastern Nigeria, $F(2, 371) = 68.528, p < 0.05$.

Discussion

The results reveal that ASUU-FGN disputes on teaching conditions have a significant impact on the output of federal universities. The significant impact of the ASUU-FGN dispute on teaching is evident in the frequent disruptions to academic activities caused by strikes and other industrial actions. Teaching is a core function of universities, and disputes in this area can lead to frequent strikes and disruptions in the academic calendar. These disruptions affect the continuity of education, leading to prolonged academic sessions and delays in students' graduation timelines, ultimately affecting the universities' output. The study's finding agrees with the research by Alexander and Audu (2022) who highlight that these disruptions lead to a loss of instructional time, making it difficult for both students and lecturers to complete the academic curriculum. This disruption affects students' learning experiences and outcomes, as they face compressed academic schedules and a lack of continuity in their education. Amie-Ogan, Wey-Amaewhule, and Brown (2022), who found that ongoing disputes create an unstable teaching environment, reducing the effectiveness of academic programs and demoralizing both staff and students, also support this finding. The frequent interruptions also affect the ability of universities to attract and retain talented educators, further impacting the quality of education.

The impact of ASUU-FGN disputes on research activities in federal universities is also significant. Research is a critical component of higher education that drives innovation and development. Disputes and strikes disrupt research projects, leading to delays in findings, publications, and advancements. This interruption not only affects the academic reputation of the universities but also hampers their contribution to national development and global knowledge. The ASUU-FGN dispute over research funding and support significantly influences the research output of Federal universities. The finding aligns with the study by Musibau and Abel (2022). The researchers argue that funding cuts and administrative disputes hinder research activities by limiting access to necessary resources, reducing funding for research projects, and decreasing opportunities for academic collaboration. This results in

fewer publications, reduced innovation, and a decline in the universities' research profiles. Aduma and Njoku (2022) support this finding, noting that unresolved disputes over research funding lead to decreased research productivity and limit the ability of universities to contribute to national development through innovation and knowledge creation. The lack of support for research activities hampers the ability of universities to address critical societal issues and advance scientific and technological progress.

Conclusion

Based on the findings of the study, it can be concluded that the disputes between the Academic Staff Union of Universities (ASUU) and the Federal Government of Nigeria (FGN) have had a profound and multifaceted impact on the output of Federal universities in North Eastern Nigeria, especially in areas of teaching and research. The significant effects of these disputes on various aspects of university operations, including teaching conditions and research underscore the urgent need for effective resolution strategies. Addressing these issues is critical to restoring stability and enhancing the quality of education and research at these institutions.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. The Federal Government should work with ASUU to improve teaching conditions by providing adequate teaching resources, infrastructure, and support services. Regular reviews and updates to teaching policies should be carried out to ensure that the needs of both students and staff are met.
2. The Federal Government should increase funding and support for research activities in universities, creating incentives for faculty and students to engage in research. Establishing a dedicated research grant program and improving access to research facilities will foster a more vibrant research environment.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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