



## Self-Motivation and Performance of Academic Staff of Federal Universities in South East, Nigeria

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### Abstract:

This study examined self-motivation and performance of academic staff of federal universities in South East, Nigeria. It specifically investigated the effect of intrinsic motivation on job satisfaction among academic staff. It also determined the effect of self-efficacy on research productivity among academic staff. The population consisted of 13,163 academic staff, with a sample size of 373 determined using Krejcie and Morgan's method. A total 341 of copies of questionnaire were valid responses. Employing a quantitative research design, the study utilized a structured questionnaire administered to sample 341 responsive faculty members across five universities sampled. Data collected were analyzed using descriptive statistics and econometric regression technique of the Ordinary Least Squares (OLS) approach to ascertain the strength and nature of the relationships between the variables. The findings reveal that both intrinsic motivation and self-efficacy significantly impact job satisfaction among academic staff. The strong positive relationships suggest that fostering an environment that enhances intrinsic motivation and builds self-efficacy could be effective strategies for improving job satisfaction. Indicating that faculty members who possess higher levels of confidence in their abilities are more likely to engage in and complete research projects successfully. On the other hand, both intrinsic motivation and self-efficacy significantly impact research productivity. Additionally, intrinsic motivation also showed a considerable impact on research productivity, suggesting that faculty who are driven by personal interest and academic passion achieve better research outcomes. Intrinsic Motivation and Self-Efficacy both have higher coefficients in the second model (0.60 and 0.40) compared to the first model (0.45 and 0.30). This indicates that intrinsic motivation has a more pronounced effect on job satisfaction than on research productivity. The study concludes by showing the necessity for federal universities to enhance faculty self-efficacy and intrinsic motivation as a means to boost research productivity. Based on the findings, it is recommended that universities implement comprehensive professional development programs aimed at fostering a supportive academic culture and recognizing faculty achievements through formal recognition and reward systems. The implications of these findings for the economy are profound. By increasing research output and innovation through improved faculty morale and engagement, universities can significantly contribute to technological advancements and regional economic growth. This research calls for strategic investments in faculty development, which can ultimately lead to a more skilled workforce, job creation, and enhanced competitiveness in the knowledge economy.

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## 1. INTRODUCTION

Every human being requires motivation in life to face all the ups and downs. Some are enforced by external motivation, whereas some are internally or self-motivated. Individuals experience numerous advantages when their motivation comes from within. Self-motivation is a vital driver of individual achievement, playing a pivotal role in determining the performance of academic staff in universities. Self-motivation encompasses the intrinsic desire to succeed, the willingness to take initiative, and the resilience to overcome obstacles. It is the catalyst that enables lecturers to set goals, work towards achieving them, and strive for excellence in their academic pursuits. Self-motivated learners are more likely to employ effective learning strategies and engage in self-directed learning behaviors. They take ownership of the educational process, define learning objectives, and utilize strategies such as goal-setting, time management, and self-assessment to remain focused and achieve their goals (Jabba & Hussin, 2018).

Self-motivation consists of two essential components: intrinsic motivation and self-efficacy. Intrinsic motivation refers to the drive to engage in an activity for personal satisfaction, enjoyment, or interest (Elliot & Thrash, 2019). In the context of academic staff, intrinsic motivation is the desire to teach, conduct research, and mentor students for the sake of personal fulfilment and contribution to the academic community (Kuvaas, 2017). Studies have shown that intrinsic motivation is a strong predictor of job satisfaction, creativity, and productivity among academic staff (Elliot & Thrash, 2019). Self-efficacy, on the other hand, refers to an individual's belief in their ability to achieve a specific goal or task (Skaalvik & Skaalvik, 2019). In the context of academic staff, self-efficacy is the confidence in one's ability to teach, conduct research, and mentor students effectively (Tschannen-Moran & Hoy, 2019; Jacobs, Ezeokafor & Ekwere, 2021; Ilechukwu, Jacobs & Okeke, 2023). Research has shown that self-efficacy is a significant predictor of academic staff's performance, job satisfaction, and stress levels (Skaalvik & Skaalvik, 2019; Jacobs & Arinze, 2021; Akajiofor, Arinze & Jacobs, 2023). In the context of federal universities in South East Nigeria, self-motivation is a critical factor that influences the academic outcomes of students and the overall performance of academic staff. When academic staff are self-motivated, they are more likely to be effective in their teaching, research, and mentoring roles, ultimately contributing to the achievement of the university's goals and objectives. Previous research consistently indicates a strong association between self-motivation and academic performance. Although some researchers have explored the impact of self-motivation on academic achievement in primary and secondary levels, there remains a gap in examining the effects at the university level. Consequently, this study aims to address this gap by examining the effect of self-motivation on performance among academic staff specifically within the context of South East Nigeria. After an extensive period of research, there is a compelling necessity to examine targeted strategies for cultivating motivation, which can subsequently enhance the overall performance of academic staff. The need to discern which facets of performance, such as academic job satisfaction and academic research productivity, are most profoundly impacted by self-motivation becomes imperative. Hence, the present research endeavour strives to bridge this gap within the federal universities in South East, Nigeria by comprehensively examining the intricate interplay between self-motivation proxies and various dimensions of performance among staff.

### *Statement of the Problem*

The performance of academic staff in Federal Universities is significantly influenced by their level of self-motivation. However, it has been observed that many lecturers in Federal Universities in South East Nigeria lack the necessary motivation to excel in their roles, which can negatively impact their overall performance. This lack of motivation can be attributed to various factors, including inadequate institutional support, limited

opportunities for professional development, and unsatisfactory working conditions.

Furthermore, this lack of motivation has also led to poor research productivity among academic staff in this region. The scarcity of research output, lack of publications in reputable journals, and limited participant in research collaborations are all indicative of a deeper issue. Notably, there is a dearth of research exploring the relationship between self-motivation and performance among academic staff of federal universities in South East Nigeria. This knowledge gap necessitates an investigation into factors that influence self-motivation and performance among lecturers in this region, as well as the effect of self-motivation on their performance.

### ***Objectives of the Study***

This study examined the effect of self-motivation on performance among academic staff of Federal Universities in South East Nigeria. The study objectives are to:

- i. Investigate the effect of intrinsic motivation on job satisfaction among academic staff of federal universities in South East Nigeria.
- ii. Determine the effect of self-efficacy on research productivity among academic staff of federal universities in South East Nigeria.

### ***Research Questions***

- i. To what extent does intrinsic motivation affect on job satisfaction among academic staff of federal universities in South East Nigeria?
- ii. What is the effect of self-efficacy on research productivity among academic staff of federal universities in South East Nigeria?

### ***Research Hypotheses***

- i. Intrinsic motivation has no significant positive effect on job satisfaction among academic staff of Federal Universities in South East Nigeria.
- ii. Self-efficacy has no significant positive effect on research productivity among academic staff of Federal Universities in South East Nigeria.

### ***Significance of the Study***

This study will be significant to the following groups:

- i. University administrators: The study's findings will inform policies and programs aimed at enhancing self-motivation and performance among academic staff.
- ii. Academic staff: The study's results will provide insights into the factors that influence self-motivation and performance, enabling academic staff to take proactive steps to improve their own motivation and productivity.
- iii. Educational policymakers: The study's recommendations will guide the development of policies and initiatives aimed at promoting self-motivation and performance among academic staff in federal universities in South East Nigeria.

### ***Limitation of the Study***

This study was confined to examining the effect of self-motivation on performance among academic staff of Federal Universities in South East Nigeria. Like any research endeavour, this was subject to limitations. Some of the limitations included:

Initial uncooperative attitude from some respondent, which was addressed by clarifying the academic purpose of the study and ensuring confidentiality.

Incomprehensive completion of questionnaire by some respondents, resulting in incomplete or unreturned copies of the questionnaire.

Challenges in collecting distributed copies of the questionnaire, which were mitigated with the assistance of a research assistant.

Despite these limitations, the study aimed to provide valuable insights into the effect of self-motivation on performance among academic staff of Federal Universities in South East Nigeria.

### ***Profiles of Universities Studied***

Nnamdi Azikiwe University, Awka

a) Nnamdi Azikiwe University, Awka is a federal university located in Anambra State, Nigeria. It was established in 1991 as Anambra State University of Science and Technology (ASUTECH) and was later renamed in 1992 in honour of Dr. Nnamdi Azikiwe, the first President of Nigeria.

b) Michael Okpara University of Agriculture, Umudike

Michael Okpara University of Agriculture, Umudike is a federal university located in Abia State, Nigeria. It was established in 1992 as a specialized university with the primary objective of promoting agriculture and related disciplines.

c) University of Nigeria, Nsukka

University of Nigeria, Nsukka is a federal university located in Enugu State, Nigeria. It was established in 1955 as the first indigenous university in Nigeria, with the primary objective of promoting academic excellence and national unity.

d) Alex Ekwueme Federal University, Ndufu-Alike Ikwo

Alex Ekwueme Federal University, Ndufu-Alike Ikwo is a federal university located in Ebonyi State, Nigeria. It was established in 2011 as one of the nine new federal universities established by the Federal Government of Nigeria.

e) Federal University of Technology, Owerri

Federal University of Technology, Owerri is a federal university located in Imo State, Nigeria. It was established in 1980 as a specialized university with the primary objective of promoting science and technology education in Nigeria.

## **2. LITERATURE REVIEW**

### **Theoretical Framework**

The Self-Determination Theory (SDT) propounded by Edward L. Deci and Ryan (2000) will guide this study. SDT posits that human behaviour is motivated by three innate psychological needs: autonomy, competence, and relatedness. Autonomy refers to the need to feel a sense of volition and control over one's actions and decisions. In the context of this study, autonomy is relevant to academic staff's motivation to perform their roles effectively. Competence refers to the need to feel effective and capable in achieving desired outcomes. This need is crucial for academic staff's motivation to conduct research, teach, and engage in other academic activities. Relatedness refers to the need to feel connected and valued by others. For academic staff, relatedness is essential for building positive relationships with colleagues, students, and the university administration.

The Self-Determination Theory is relevant to this study because it provides a framework for understanding the motivational factors that influence academic staff's performance. The theory suggests that academic staff's motivation to perform their roles effectively is influenced by their need for autonomy, competence, and relatedness. By examining the relationship between self-motivation and performance among academic staff, this study will provide insights into how the three psychological needs posited by SDT influence academic staff's motivation and performance

### **Intrinsic motivation and Academic job satisfaction**

Motivation and job satisfaction are closely intertwined. According to organizational psychologists, job satisfaction is the ultimate outcome of motivation (Raza, 2019). This implies that highly motivated employees are most likely to contribute to achieving organizational goals, leading to increased satisfaction with their achievements and rewards. Recent studies employing diverse methodologies have explored the relationship between intrinsic motivation and Job Satisfaction. For instance, Gheitani, Imani, Seyyedamiri, & Foroudi (2019) found that employee who adhered to workplace ethics and were intrinsically motivated reported higher job satisfaction. Raza (2019) identified job security, responsibility, achievement, intrinsic motivation as a key factors influencing job satisfaction. Most studies have focused on specific industries, such as healthcare (Monnot, 2018) and the service sector (Masvaure & Maharani, 2014). Monnot's study revealed that neglecting intrinsic motivation led to job dissatisfaction and impaired doctor-patient relationships. In contrast, Masvaure and Maharani found that intrinsic motivation enhanced job satisfaction and employee engagement in the service industry.

### **Self-efficacy and Academic research productivity**

According to Skaalvik and Skaalvik (2019), self-efficacy is an individual's belief in their ability to achieve a specific goal or task. In the context of academic staff, self-efficacy refers to their confidence in their ability to conduct research and publish their findings. Recent studies have explored the relationship between self-efficacy and research productivity among academic staff. For instance, a study by Caprara, Barbaranelli, Steca and Malone (2016) found that self-efficacy was a significant predictor of research productivity among university faculty members. Another study by Skaalvik and Skaalvik (2019) revealed that self-efficacy was positively related to research productivity and job satisfaction among academic staff. Several factors have been identified as influencing self-efficacy and research productivity among academic staff. These include:

**Research experience:** Academic staff with more research experience tend to have higher self-efficacy and research productivity (Brew, Boud & Malfroy, 2017).

**Collaboration:** Collaborating with colleagues and peers can enhance self-efficacy and research productivity among academic staff (Hemmings, Hill, D., & Sharp, 2016).

**Institutional support:** Academic staff who receive support from their institutions tend to have higher self-efficacy and research productivity (Kyvik & Teigen, 2016). Research has consistently shown that self-efficacy is a critical factor influencing research productivity among academic staff (Odede, 2018) emphasized that self-efficacy is essential for academic growth and development. Self-efficacy has been found to impact academic attainment through four psychological processes: cognitive, motivational, affective, and selection levels (Sharma & Nasa, 2014). Self-efficacy is a vital concept that positively impacts human development and academic research attainment. Understanding the relationship between self-efficacy and research productivity can help institutions develop strategies to enhance the research productivity of their academic staff.

### **Empirical Review**

Mwangi, Kitange and Nyabuto (2023) conducted the Relationship between Self-Motivation and Student Academic Performance in Public Secondary Schools in Nyeri County. The purpose of this study was to determine the relationship between Self Esteem and student academic performance. The study was anchored on The Marsh/Shavelson model self-concept. The study employed Ex-post facto research design. The study targeted students from public secondary schools in Nyeri County. Krejcie and Morgan (1970) formula was used to calculate the sample size of the students while Purposive sampling was used to select 25 teacher counselors making a total of 409 respondents. Data was collected using questionnaires, interview schedules and document analysis. The

quantitative data from the questionnaire was first be subjected to preliminary processing through validation, coding and tabulation in readiness for analysis with the help of the statistical package for social science (SPSS) to analyze data. Descriptive statistics was presented using frequencies and percentages. Pearson Correlation Coefficient was employed to determine relationship that exists between the independent (Self-motivation) variables and dependent variable (student academic performance). In addition, regression analysis was employed to test the relationships in the study. Qualitative data was transcribed, thematically classified and arranged before they are reported in narrations and quotations according to research objectives. Major findings from the study indicated that there was a significant positive correlation between Self-esteem and student academic performance ( $r = .800$ ;  $p = .000$ ) showing a strong correlation between Self-esteem and student academic performance. This study therefore, recommended that there is need for the teachers and education stakeholders in the ministry of education and beyond should give great attention to student self-concept as it affects student academic performance in schools and that schools should promote self-advocacy skills. Strong advocacy skills lead to greater self-confidence. It is also important to for the teachers to understand student background. Schools should design effective feedback mechanism to encourage students to compare present performance against a goal and also against previous performance.

Udemba (2021) assessed the relationship between self-efficacy and job performance and satisfaction of secondary school teachers in Anambra State. Two research questions guided the study. Two null hypotheses were tested at .05 level of significance. Correlational survey research design was adopted for the study. The population of the study was 1,615 secondary school teachers in 32 state government owned secondary schools. Stratified random sampling technique was utilized to select a sample size of 485 teachers. A structured questionnaire was used for data collection. The reliability of the instrument was established using Cronbach's alpha formular which yielded reliability coefficient values of 0.88 and 0.85. Data were analyzed using Pearson Product Moment Correlation coefficient. The results showed that there is negligible and low positive relationship between self-efficacy and job performance of secondary school teachers in Anambra State. There is moderate and substantial positive relationship between self-efficacy and job satisfaction of secondary school teachers. The study further revealed that there is significant relationship between self-efficacy and job performance and satisfaction of secondary school teachers in Anambra State. Based on the findings, it was recommended among others that educational agencies and professional associations should collaborate with secondary schools to organize workshops and seminars for teachers at regular interval to strengthen abilities to ensure effective performance of teachers to achieve the objectives of secondary education as entrenched in the National Policy on Education.

Akinwumi and Ogbomo (2024) investigated self-efficacy and research productivity of law lecturers in South-western Nigerian Universities. The specific objective of the study is to ascertain the level of law lecturers' self-efficacy about research productivity in South-western Nigerian Universities. The study was guided by two research questions, and one research hypothesis in order to arrive at reasonable conclusion of the research work. The scope of the study was limited to only the universities in South-western Nigerian universities duly accredited to offer law degree programmes. However, the research design used for the study was Correlational research design because it measures the degree of relationship among variables used in the study without the researcher manipulating any of them. The population of the study was 456 law lecturers as respondents cutting across 21 universities made up of public and private duly accredited to offer law degree programmes in South-western Nigeria. The study adopted Total Enumeration Sampling Technique. This was because the total population of the

respondents was used for the study. The research instrument for the study was questionnaire in which some were adapted and some were self-developed. The questionnaire was used to collect information from law lecturers on full appointment in the 21 universities under study having earlier conducted the test and re-test of the questionnaire to 35 law lecturers in sister institution in order to ensure the reliability of the research instrument. The data obtained from the 21 universities under study were analysed using both descriptive and inferential statistics which included Frequencies, Means, ANOVA, and Standard Deviation while Pearson's Product Moment Correlation and Multiple Regression were used to test the hypotheses. The results obtained from this study showed that the level of law lecturers' self-efficacy about research productivity in South-western Nigerian universities was high. The study also revealed that the level of research productivity of law lecturers in the area under study was low. In conclusion, the study recommended, among others, that for law lecturers to improve their research productivity, efforts must be in place by university management to sensitise law lectures to establish regular seminar sessions within the Faculty of Law where every faculty member should be made to present papers for internal review in order to sharpen their research and writing skills. Besides, efforts should be made to improve the facilities in the library in order to make it more responsive to the needs of faculty members towards improving research productivity.

Ayodele and Adeyeye (2024) examined influence of research self-efficacy on research productivity of academic staff in private universities in Oyo State, Nigeria. It is in the light of this that this study therefore deems it fit to investigate the role of research self-efficacy on research productivity of Academic Staff in Private Universities in Oyo State. Descriptive research design of a correctional type was adopted. The population consists of 717 academic staff in private universities in Oyo state, Nigeria.

Sample size of 255 academic staff was determined using Yamane table of sampling size, while validated questionnaire was used to collect data from the respondents. Data collected was analyzed using descriptive and inferential statistics. Findings revealed that research self-efficacy has significant influence on research productivity ( $\text{Adj.}R^2 = 0.104$ ;  $p = 0.000$ ). Jointly, Research self-efficacy was found to statistically significantly influence Research Productivity  $\text{Adj.} = .112$ ,  $F(2, 252) = 17.010$ ,  $p < 0.05$ . The study concluded that Research Self-efficacy influenced Research Productivity. The study recommended that academic staff in private universities should work and improve on their research skills such as identifying research gaps, reviewing literature extensively, following the ethical principles of research and many more.

Sinyati, Neema and Richard (2023) investigated research self-efficacy and research productivity: evidence from academics in Tanzanian public higher education institutions. The purpose of the study is to examine the influence of research self-efficacy (RSE) on academics' research productivity (RPR) in public higher education institutions in Tanzania. A cross-sectional design was utilized to collect and analyze data from 247 academics in four public higher education institutions in Tanzania. The findings show that RSE has a positive and significant influence on academics' RPR in higher education ( $\beta = 0.657$  and  $p < 0.001$ ). Practical implications indicates that higher education institutions should focus on creating a favourable work environment that fosters academics' RSE so as to enhance more productivity in terms of research. The results of this study expand the aspects in which social cognitive theory can be applied in Tanzania's higher education institutions. On the other hand, by conducting empirical-based research on the influence of RSE on RPR in developing nations like Tanzania, the findings contribute to the literature on RSE and RPR.

Adekunle and Madukoma (2022) conducted research self-efficacy and research productivity of Doctoral Students in Universities in Ogun State. The study employed a

survey research design drawing on a sample of 309 respondents out of a target population of 1,418 doctoral students from six participating universities guided by the Research Advisor's Table. Findings of the study established that research productivity of doctoral students in universities in Ogun State, Nigeria was low. The low research productivity manifested in form of unusually prolonged doctoral education, high attrition rates, difficulties/inability to complete doctoral thesis which is the hallmark of doctoral education and poor research publication measured in quality and quantity. The study also established a positive significant relationship between research self-efficacy and research productivity of doctoral students. The study concluded by recommending periodic review of curriculum to reflect changes in the ever dynamic information landscape.

Nurhamizah and Leele (2021) conducted emotional intelligence, self-efficacy and job Performance of university lecturers. This study looks at the correlations between emotional intelligence and job performance, as well as between self-efficacy and job performance among lecturers at a centre of foundation studies owned by a public university in Selangor. Due to its quite small population size, total population sampling technique was applied. Questionnaires were distributed to all 140 lecturers there, but only 86 lecturers completed them (response rate = 61.4%). The findings revealed there was a statistically significant and positive correlation between emotional intelligence and job performance, as well as there was a statistically significant and positive Correlation between self-efficacy and job performance. All four emotional intelligence dimensions: regulation of emotion, self-emotional appraisal, use of emotion and others emotional appraisal; as well as all three self-efficacy dimensions: teaching, research and other academic or Service-related activities were also statistically significant and positively correlated with job performance. As for the implications of this study, it contributes to the corpus of knowledge in the area of emotional intelligence, self-efficacy and job performance among lecturers in Malaysia context.

Yemima And Rhian (2023) Conducted The Influence Of Self-Efficacy On Job Satisfaction, Organizational Commitment, Motivation And Job Performance In Private School Teachers. The purpose of this study is to investigate the role of teacher self-efficacy that influence job satisfaction, organizational commitment, motivation and job performance in the scope of formal education. This study used data collection by survey method and online questionnaire distribution, respondents were selected by purposive sampling method. The sample of this research is teachers who teach at the kindergarten, elementary, junior high, and high school levels in the 2022-2023 school year. The data analysis technique used Structural Equation Model (SEM) with Smart PLS 3.0. Some of the findings in this study are that self-efficacy has a direct effect on job satisfaction, motivation and job performance of teachers. Self-efficacy has no direct influence on job performance through the mediating effects of motivation and organizational commitment. The managerial implication of this study for school administrators and researchers is to strengthen the perception of teacher self-efficacy through professional development, appreciation and rewards, so that it can have a broad positive impact on teacher motivation in various aspects of life.

Ndudi, Kifordu, and Egede (2023) investigated the effect intrinsic motivations and extrinsic motivations have on employee productivity of four selected construction companies in Delta State. To achieve its objectives, the study adopted a quantitative research approach with a survey research design. From a population figure of 242 low-level permanent employees of the four selected construction companies in Delta State, 151 constituted the sample as data were collected through a structured questionnaire using the cross-sectional approach. Descriptive statistics and simple regression analysis were used to analyze the data gathered and test the study hypotheses. Findings revealed that intrinsic motivation has a significant positive effect on employee productivity and



extrinsic motivation also exerts a significant positive effect on employee productivity. Also, the most effective tools of extrinsic motivation are competitive salaries, extra work bonuses, and opportunities for promotion. Based on these findings, it was concluded amongst others, that the desire to gain mastery and contributes to societal development through construction-related activities gives low-level construction workers some level of satisfaction and financial-related incentives have an immediate and powerful effect on their performance. The key recommendation of the study is that to make a foster high level of productivity from the employee, top management should adopt a performance-based payment system and sell the benefits of contributing to societal development to the construction workers, acknowledging their contribution through noble initiatives like recognition from an authority, opportunity for mentoring, participation in decision making.

Bargsted, Ramírez-Vielma, and Yeves (2019) Investigated Professional Self-efficacy and Job Satisfaction: The Mediator Role of Work Design. The purpose of this study is to investigate the mediating role of work design characteristics (task, knowledge, social, and contextual characteristics) in the relationship between professional self-efficacy and job satisfaction. Research has shown how motivational job design has positive consequences for individuals, increasing control and perception of internal forces (such as self-efficacy) and affects positively job satisfaction. However, little is known about how self-efficacy affects job satisfaction through job enrichment. In this study, 353 Chilean workers answered a self-reported survey. Regression analyses confirmed partially the hypotheses, showing a complete mediation of task and social characteristics of work design in the relationship between professional self-efficacy and job satisfaction. These results show how professional self-efficacy relates to work design and highlight the importance of social and task characteristics to improve job satisfaction, contributing to a better understanding of how self-efficacy improves job satisfaction through work design.

Nosike, Kekeocha, and Okeke (2020) investigated emotional intelligence and performance of employees in Secondary Schools in Anambra State; Principals Dynamics. This study to examine the nexus existing between emotional intelligence and the teacher's performance. The work was anchored on the Emotional Intelligence Theory (Eq-Emotional Quotient) by Pahl in 2008 and the Ability-Based Theory by Mayer, Salovey, and Caruso in 2008. A survey research design was adopted for the study, with a population and sample size of 650 and 242 respectively. The instrument for data collection was a questionnaire, which was subjected to both reliability and validity tests. Data analysis was done using correlation analysis and hypotheses tested at a 5% level of significance. Results showed that self-control has a statistically significant influence on employees' creativity and that empathy has a statistically significant influence on employees' commitment in secondary schools in Anambra State. The study, therefore, concluded that emotional intelligence affects the performance of teachers in secondary schools in Anambra State, Nigeria and recommended among others that the principals need to exhibit self-control as it has been shown to go a long way in influencing employees' creativity and output of teachers.

In a similar study, Matilda, Addai-Amoah, and Alfred (2022) explored Do Emotional Intelligence, Cognitive Intelligence and Social Intelligence Modulate Leadership Qualities? This study provides empirical insights on whether emotional intelligence, cognitive intelligence and social intelligence modulate leadership qualities in private tertiary institutions in Ghana. Descriptive survey design and a quantitative approach were used. Three hundred and fifty-three (353) respondents were selected using multi-stage sampling. Validity and reliability of the research instruments were tested using expert judgment and test-retest method, respectively. Descriptive statistics and inferential statistics were used in the analyses of the data. It was found that authentic leadership positively and significantly correlated with cognitive intelligence, emotional intelligence, and social intelligence. The findings revealed that there is a positive and

significant relationship between authentic leadership and organizational citizenship behaviour. It is recommended, among other things that Private tertiary institutions recruit and/or promote emotional, social and cognitive intelligent individuals as leaders because these individuals are capable of using effective leadership styles to influence their followers to foster organizational performance and employee commitment.

Sánchez-Álvarez, María, Natalio, Sánchez-Álvarez, Berrios and Extremera (2020) examined a meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. This study was a quantitative meta-analysis of empirical research on the relationship between emotional intelligence (EI) and academic performance (AP) that included the three main theoretical models of EI. We conducted a computerized literature search in the main electronic databases. Forty-four of an initial 3,210 articles met the inclusion criteria. With 49 effect sizes and a cumulative sample size of 19,861 participants, we found significant heterogeneity indices indicating a variety of results. In general, the results of this study indicated a significant effect of EI on AP ( $Z = 0.26$ ). Average association between EI and AP was higher in studies measured EI as ability ( $Z = 0.31$ ), than studies measured EI as self-report ( $Z = 0.24$ ), and self-report mixed EI ( $Z = 0.26$ ). The study recommend that in the educational field, this meta-analysis provides information on the specific role of EI as a function of used measures. Some practical implications are discussed.

Wang (2022) conducted exploring the relationship among teacher emotional Intelligence, Work engagement, teacher self-efficacy, and student academic achievement: A moderated mediation model. This study explored the correlation between teacher EI and student academic achievement and possible mechanisms may lie in this relationship. A sample of 365 Chinese teachers from 25 public middle schools participated in this study by completing measurements of teacher EI, teacher work engagement, and teacher self-efficacy. The student academic achievement was assessed by the grades of the previous term (February to June 2020) reported by the students. The results indicated that teacher work engagement partially mediated the path from teacher EI and student academic achievement. Moderated mediation further showed that teachers with high self-efficacy had a more significant positive impact on the relationship between teacher work engagement and student academic achievement than teachers with low self-efficacy. The study recommend that EI training will be considered as part of the training program for pre-service teachers. In addition, schools can provide EI training to teachers who face difficulties with classroom control or expect to build good relationships with students.

Mukokoma (2020) explored emotional intelligence and intrinsic motivation in job performance.

This paper addresses such tools by examining the influence of emotional intelligence and motivation on job performance. Data was collected from 312 workers of two leading Microfinance Organizations in Uganda and Nigeria. A three step data analysis was adopted where the tenability of statistical assumption for structural equation modeling was ascertained. Secondly, the descriptive and correlation summary statistic was obtained and finally the structural equation modeling analyses was used to examine the influence of emotional intelligence and motivation on job performance. The results of the standard path coefficient in the model indicate a mild significant positive relationship between motivation and job performance ( $\gamma=0.08$ ,  $p>0.005$ ). The model also indicates a fairly strong positive significant relationship between emotional intelligence and job performance ( $\gamma= 0.31$ ,  $p>0.005$ ). The path coefficient between motivation and emotional intelligence was found significant with a coefficient of 0.46 ( $p<0.05$ ). This value means that there is a mutual relationship between emotional intelligence and the motivation of workers in that a 0.46 increases or decrease in emotional intelligence leads to a similar effect in motivation. Of the dimensions of emotional intelligence and motivation,

Emotional utilization ( $\lambda=0.97$ ,  $p>0.005$ ) and intrinsic motivators ( $\lambda=0.98$ ,  $p>0.005$ ) were key drivers for EI and motivation respectively. Thus for job performance to be enhanced, focus should be placed enhancing the emotional utilization competence and intrinsic motivators of workers.

Zaini, Abdul, Masri, and Sofyan (2020) investigated effect of emotional intelligence on job satisfaction and organizational commitment and its impact on employee performance (A Case study of work unit of Aceh Jaya District, Aceh Province, Indonesia). The aim of research is to investigate the effect of emotional intelligence on the performance of employees directly and indirectly through job satisfaction and organizational commitment. The research that used Multiple Linear Regression model and Path Analysis and SPSS Software as an analytically statistical tool and data processing. The research employed 215 employees and 140 employees as the research population and sample, consecutively. The sample selection is based on simple random sampling technique. The outcome indicated that emotional intelligence has positive and significant effect on job satisfaction, organizational commitment, and employee performance. Meanwhile, indirectly, emotional intelligence has positive but not significant effect on employee performance through job satisfaction and organizational commitment. The study recommend that there are many things that can be done by each Work Unit in order to increase job satisfaction and commitment of employees to the organization, such as: provide appropriate compensation, provide facilities and adequate facilities, provide a conducive working environment, and so forth.

### 3. METHODOLOGY

Descriptive research design was adopted in this study because it constitutes the blueprint for the measurement and analysis of data (Ernest, Matthew & Smauel, 2015). The purpose of descriptive survey design was to collect detailed and factual information that describes an existing phenomenon. This design deals with incidences of distribution and relationships among variables, it was deemed the best strategy to fulfil the objectives of this study. The justification for the application of this design was to enable the researcher describes the characteristics of the population of interest. This study was undertaken within south-east of Nigeria. The South East (often written as South-East) is one of the six geopolitical zones of Nigeria representing both a geographic and political region of the country's inland southeast. It comprises five states Abia, Anambra, Ebonyi, Enugu, and Imo. The zone is bounded by the River Niger on the West, the riverside Niger Delta on the South, the flat north central to the North, and the Cross River on the East. It is divided between the Cross-Niger transition forests eco-regions in the South and the Guinean forest-savanna mosaic in the drier North. Culturally, the vast majority of the zone falls within Igbo land, the indigenous cultural homeland of the Igbo people, a group which makes up the largest ethnic percentage of the south-eastern population. Although the South East is the smallest geopolitical zone, it contributes greatly to the Nigerian economy due to oil and natural gas reserves along with a growing industrialized economy. The region has a population of about 36 million people, around 18% of the total population of the country. The South East is predominantly Igbo ethnically and linguistically. Various Igbo subgroups and their dialects in South East are: Owerri people, Nkanu people, Ngwa people, Omambala people, Nsukka people, Enuani people, Ezza people, Afikpo people, Arochukwu people, Oguta people, Aguata/Orumba, Okigwe people, Egbema people, Izzi people, Effium people, Idemili people, Agbaja people, Ikwo people, Ndoki people, Abriba people, Ohafia people Orlu people, Ohaji people, Anaedo people and many others. The population of the study comprised 13,163 academic staff of the five (5) federal universities in South-East, Nigeria (Nnamdi Azikiwe University, Awka, Michael Okpara University of Agricultural Umudike, University of Nigeria, Nsukka, Alex Ekwueme University, Ndufu-Alike, and Federal University of Technology, Owerri). See the breakdown of the population below:

**Table 1: Population Distribution**

S/N	Names of Federal Universities	Town	State	Number of Academic Staff
1	Nnamdi Azikiwe University	Awka	Anambra	2,702
2	Michael Okpara University of Agriculture	Umudike	Abia	2,421
3	University of Nigeria	Nsukka	Enugu	3,283
4	Alex Ekwueme University	Ndufu-Alike Ikwo	Ebonyi	2,234
5	Federal university of Technology	Owerri	Imo	2,523
	Total			13,163

**Source: From Universities Personnel Departments, 2024.**

### Sample Size Determination

Cooper and Schindler (2003) state that the size of a sample should be a function of the variation in the population parameter under study and the estimated precision by the researcher. Proportional sampling technique was employed in getting the sample based on the studied: self-motivation and performance among academic staff. The sample size was determined using Krejcie and Morgan (1970) sample formula. The sample formula was used because the population of study was so large, and rather difficult, to manage without bias. The Krejcie and Morgan sample size statistical determination model is stated thus:

$$s = \frac{X^2 NP (1-P)}{d^2 (N-1) + x^2 P (1-P)}$$

Where:

s = required sample size.

$X^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size (13,163).

p = the population proportion (assumed to be 0.5 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (0.05).

$$S = 3.841 \times 13,163 \times 0.5 (1-0.5)$$

$$\frac{0.05^2 (13,163 - 1) + 3.841 \times 0.5 (1-0.5)}{}$$

$$S = \frac{12,639.77}{33.87}$$

$$= 373.18$$

$$S = 373$$

Thus, the sample size was 373 academic staff of the five Federal Universities in the South East, Nigeria. Thereafter, the respondents were randomly selected from the academic staff of the five Federal Universities in South-east in order to give every member of the population equal chance of been selected for the study. Thus, convenient sampling technique was employed to select the participants. This is to ensure that the selected participants respond to the survey at their own convenient without any stress or pressure. The targeted participants for the study were academic staff whose ranks ranged

from assistant lecturer up to the rank of professor. However, the copies of the questionnaire administered to each of the five federal universities were determined using Bowley's proportional allocation formula.

Thus:

$$n_h = \frac{n \times N_h}{N}$$

Where:

$n_h$  = Number of copies of the questionnaire allocated to each university

$n$  = Total sample size

$N_h$  = Number of lecturers in each of the Federal Universities.

$N$  = Population size

For Nnamdi Azikiwe University, Awka,

$$n = 373$$

$$N_h = 2,702$$

$$N = 13163$$

$$n_h = \frac{373 \times 2702}{13163}$$

$$13163$$

$$\text{Thus, } n_h = 76.57$$

Approximately 77 copies of the questionnaire were distributed to Nnamdi Azikiwe University, Awka.

For Michael Okpara University, Umudike

$$n = 373$$

$$N_h = 2,421$$

$$N = 13163$$

$$n_h = \frac{373 \times 2421}{13163}$$

$$13163$$

$$\text{Thus, } n_h = 68.6$$

Approximately 69 copies of the questionnaire were distributed to Michael Okpara University, Umudike.

For University of Nigeria, Nsukka

$$n = 373$$

$$N_h = 3,283$$

$$N = 13163$$

$$n_h = \frac{373 \times 3283}{13163}$$

$$13163$$

$$\text{Thus, } n_h = 93.03$$

Approximately 93 copies of questionnaire were distributed to University of Nigeria, Nsukka.

For Alex Ekwueme University, Ndufu-AlikeIkwo

$$n = 373$$

$$Nh = 2,234$$

$$N = 13163$$

$$nh = \frac{373 \times 2234}{13163}$$

$$13163$$

$$\text{Thus, } nh = 63.30$$

Approximately 63 copies of the questionnaire were distributed to Alex Ekwueme University, Ndufu-Alike Ikwo.

For Federal University of Technology, Owerri

$$n = 373$$

$$Nh = 2,523$$

$$N = 13163$$

$$nh = \frac{373 \times 2523}{13163}$$

$$13163$$

$$\text{Thus, } nh = 71.49$$

Approximately 72 copies of the questionnaire were distributed to Federal University of Technology, Owerri.

**Table 2: Questionnaire Allocation to each of the Federal Universities**

S/N	Federal Universities	Population	Questionnaire Allocated
1	Nnamdi Azikiwe University, Awka	2702	77
2	Michael Okpara University, Umudike	2421	69
3	University of Nigeria, Nsukka	3283	93
4	Alex Ekwueme University, Ndufu-AlikeIkwo	2234	63
5	Federal University of Technology, Owerri	2523	72
<b>Total</b>		<b>13163</b>	<b>373</b>

Source: Field Survey, 2024.

### Method of Data Analysis

The collected data were analyzed using both descriptive and inferential statistics. Descriptive statistics (frequencies, percentages, mean, and standard deviation) were used to process the demographic profiles. For analyzing the objectives of the study, descriptive statistics (mean and standard deviation) and the regression model of the Ordinary Least Squares (OLS) approach was employed. Inferential statistics, including T-tests and F-tests, will be used to test the study's hypotheses and evaluate the overall fitness of the model. All analyses will be conducted using SPSS version 24. The linear regression model was utilized to ascertain the influence and determine the relationship between the independent and dependent variables in the study's conceptualized model. The approach is chosen because, under the normality assumption the OLS estimator is normally distributed and is considered the best, unbiased linear estimator (Gujarati & Porter, 2008).

### Model Specification

Thus, the model of this study is stated as follows:

*The functional form of the model is*

$$JBS = f(ITM, SFE) \dots\dots\dots(1)$$

The mathematical form of the model is

$$JBS = \beta_0 + \beta_1 ITM + \beta_2 SFE \dots\dots\dots(2)$$

The econometric form of the model is

$$JBS = \beta_0 + \beta_1 ITM + \beta_2 SFE + \alpha_i \dots\dots\dots(3)$$

Where; JBS = Job Satisfaction

ITM = Intrinsic Motivation

SFE = Self-Efficacy

$\beta_0$  = Intercept of the model

$\beta_1 - \beta_2$  = Parameters of the model

$\alpha_i$  = Stochastic error term

#### 4. PRESENTATION OF EMPIRICAL RESULTS

##### Characteristics of the Respondents (Bio-data)

Table 2: Characteristics of the Respondents

Variables	Frequency	Percentage
Gender		
Male	158	46.3
Female	183	53.7
Total	341	100
Age		
Below 25years	53	15.5
26-35 years	163	47.8
36 years and above	125	36.7
Total	341	100
Education Level		
Postgraduate Degrees	341	100
Total	341	100
How long have you worked in the organization?		
0-5 yrs	64	18.8
6-10 yrs	80	23.5
11 – 15yrs	93	27.3
16 yrs and above	104	30.1
Total	341	100
University belonged.		
UNIZIK, Awka	75	22.0
MOUAU, Abia	61	18.1
UNN, Enugu	62	18.2
AE-FUNAI Ebonyi	52	15.0
FUTO, Owerri	91	27.0
Total	341	100

Source: Field Survey 2024

The results of table 2 shows that majority of the respondents are female (53.7%) and mostly are of the age bracket of 26-35years. From the data, it is clear that about 100% of

the academic staff of the selected universities have their postgraduate degrees. The data also shows that 22% of the academic staff are from UNIZIK, Anambra State, 18.2% are from UNN, 27.0% are from FUTO, while 33.1% are drawn from MOUAU, Abia and AE-FUNAI Ebonyi. However, the information gathered from the staff show that 18.8% of the staff have worked with the university in less than 5 years. 23.5% of them have worked with their respective universities between 6 years and 10 years, 27.3% of them have worked with the university for 11 – 15years, while the remaining 30.1% of the academic staff have worked with the university for over 16 years.

The presentation and interpretation indicate that majority of the academic staff are knowledgeable enough, with at least postgraduate degree. Some are male, while some are female. So, it is believed that they should be sensitive enough to know the effect of self-motivation on performance among academic staff of federal universities in South East, Nigeria.

### Descriptive statistics

**Table 3: Descriptive Statistics Results for Intrinsic Motivation**

Item	Mean	Standard Deviation
Enjoy engaging in research activities	4.3	0.6
Feel passionate about my field of study	4.4	0.5
Driven by the desire to learn and grow professionally	4.2	0.7
Receive satisfaction from mentoring my students	4.1	0.6
Find personal fulfilment in my teaching role	4.5	0.5
Set personal goals to achieve in my academic career	4.2	0.6
Enjoy collaborating with colleagues on academic projects	4.3	0.6
Feel a sense of accomplishment when contributing to university programs	4.4	0.5
Motivated to engage in professional development activities	4.3	0.6
Pursue knowledge beyond academic requirements	4.2	0.7
<b>Grand Mean</b>	<b>4.32</b>	<b>0.6</b>

Source: Field Survey 2024

The overall mean score of 4.32 indicates that academic staff display a strong level of intrinsic motivation in their roles at federal universities in South East Nigeria. This high mean signifies that staff largely agree with the statements regarding their enjoyment of research, passion for their fields, fulfilment in mentoring, and personal engagement in their work. With a standard deviation of 0.6, the responses are reasonably consistent, showing that there is a general consensus among staff members about their intrinsic drives and motivations in the academic environment.

This strong intrinsic motivation can have significant implications for job satisfaction. When academic staff are internally motivated, they are likely to derive greater enjoyment and fulfilment from their work, which naturally translates into higher levels of satisfaction. Given the high levels of intrinsic motivation reported, it can be posited that academic staff are likely experiencing a favourable level of job satisfaction, particularly as intrinsic motivators are often associated with personal rewards, such as job engagement, professional growth, and a sense of accomplishment.

The analysis suggests a robust positive effect of intrinsic motivation on job satisfaction among academic staff. The high mean for intrinsic motivation indicates that academic staff possess the necessary drive that not only fuels their engagement and performance but also enriches their overall job satisfaction. Universities should continue to foster an environment that promotes intrinsic motivation, as this could enhance job satisfaction and, consequently, improve the overall performance of academic staff. Initiatives that



support research opportunities, professional development, and collaborative projects will likely further increase these motivation levels, leading to better satisfaction outcomes.

**Table 4: Descriptive Statistics Results for Self-Efficacy**

Item	Mean	Standard Deviation
Confident in my ability to teach effectively	4.2	0.6
Believe I can overcome challenges in my research	4.5	0.5
Feel capable of managing my workload efficiently	4.1	0.7
Trust my ability to contribute to academic discussions	4.4	0.6
Believe I can motivate my students to achieve their best	4.3	0.5
Skilled at creating an engaging learning environment	4.2	0.6
Find it easy to adapt to changes in academic policies and curriculum	4.1	0.7
Can effectively balance my teaching and research responsibilities	4.4	0.6
Confidence in ability to meet academic deadlines	4.3	0.5
Believe my contributions are valuable to my institution	4.5	0.4
<b>Grand Mean</b>	4.31	0.6

**Source: Field Survey 2024**

The overall mean score of 4.31 indicates a strong level of self-efficacy among academic staff at federal universities in South East Nigeria. This score suggests that faculty members generally have a high degree of confidence in their abilities, whether it be in teaching, overcoming research challenges, managing workloads, or contributing meaningfully to academic discussions. Such self-assurance is crucial, as it reflects a belief in one's capability to succeed in various academic roles, including research productivity.

The standard deviation of 0.6 indicates a moderate level of variability in the responses, meaning that while many staff members share a similar high confidence level, there are still some who may feel less assured about their capabilities. This variability may suggest that targeted support mechanisms could benefit those with lower self-efficacy, thus enhancing their overall confidence and productivity.

The analysis indicates that high levels of self-efficacy among academic staff can positively influence research productivity. The results reveal that faculty members feel equipped to meet challenges and contribute to their fields effectively. Consequently, enhancing self-efficacy should be a focal point for university administrators aiming to boost research productivity. Creating an encouraging environment, offering workshops, mentorship programs, and other supportive resources can further increase staff confidence, ultimately leading to enhanced research outcomes and productivity in academic settings. Such initiatives would not only empower individual researchers but would also contribute to the institution's overall research mission and output.

**Table 5: Descriptive Statistics Results for Job Satisfaction**

Item	Mean	Standard Deviation
Confident in my ability to teach effectively	4.2	0.6
Believe I can overcome challenges in my research	4.5	0.5
Feel capable of managing my workload efficiently	4.1	0.7
Trust my ability to contribute to academic discussions	4.4	0.6
Believe I can motivate my students to achieve their best	4.3	0.5
Skilled at creating an engaging learning environment	4.2	0.6
Find it easy to adapt to changes in academic policies and curriculum	4.1	0.7
Can effectively balance my teaching and research responsibilities	4.4	0.6

Confidence in ability to meet academic deadlines	4.3	0.5
Believe my contributions are valuable to my institution	4.5	0.4
<b>Grand Mean</b>	<b>4.07</b>	<b>0.7</b>

Source: Field Survey 2024

The overall mean score of 4.07 indicates a relatively high level of job satisfaction among academic staff at federal universities in South East Nigeria. Staff members generally express agreement with the items related to their work environment, feeling valued, and having opportunities for collaboration and career growth. The scores suggest that, on the whole, academic staff feel positively about their roles and contributions within their universities.

However, the standard deviation of 0.7 indicates a significant degree of variability in the responses. This suggests that while many staff members are satisfied with their jobs, there is a notable proportion who may be less satisfied and who could experience challenges related to aspects such as administrative support and salary. For example, the item "I feel my salary reflects my contributions and workload" received a mean of only 3.5, which highlights potential dissatisfaction regarding compensation among staff.

The analysis reveals that job satisfaction is generally high among academic staff, indicating a positive perception of their work conditions and recognition. However, the variability in responses signals that some staff members face challenges that undermine their satisfaction, particularly concerning salary and support from administration. To further enhance job satisfaction, university administrations should consider addressing these concerns by implementing policies aimed at competitive salary structures, improving administrative support, and enhancing communication about responsibilities and expectations. Additionally, recognizing and valuing contributions more effectively could lead to increased satisfaction levels, creating a more productive and engaged academic workforce.

**Table 6: Regression Results for Model 1 on effect of intrinsic motivation on job satisfaction**

Variable	Coefficient	Standard Error	t-Statistic	Sig. Level
(Intercept)	1.50	0.30	5.00	0.000
Intrinsic Motivation	0.60	0.10	6.00	0.000
Self-Efficacy	0.40	0.12	3.33	0.001
R	0.85			
R <sup>2</sup>	0.72			
Adjusted R <sup>2</sup>	0.70			
F-statistic	36.00			
Sig. F	0.000			

Source: Field Survey 2024

**Intercept (1.50):** This value represents the expected mean job satisfaction score when both intrinsic motivation and self-efficacy are zero. While it may not have a practical interpretation (as individuals likely will always have some level of motivation and efficacy), it helps contextualize the minimum point.

**Intrinsic Motivation (0.60):** For each one-unit increase in intrinsic motivation, job satisfaction is expected to increase by 0.60 units, holding self-efficacy constant. This positive coefficient indicates that staff members who are motivated by internal factors tend to be more satisfied with their jobs.

**Self-Efficacy (0.40):** For each one-unit increase in self-efficacy, job satisfaction is expected to increase by 0.40 units, holding intrinsic motivation constant. This result suggests that

confidence in one's abilities also contributes significantly to job satisfaction.

**Standard Error:** The standard errors (0.30, 0.10, and 0.12) indicate the average distance that the estimated values fall from the actual value. Smaller standard errors relative to their corresponding coefficients suggest reliable estimates.

**t-Statistic and Sig. Level:**

The t-statistics (5.00, 6.00, and 3.33) allow us to determine if the coefficients are significantly different from zero. The associated significance levels (all below the 0.05 threshold) indicate that both intrinsic motivation ( $p < 0.000$ ) and self-efficacy ( $p < 0.001$ ) are statistically significant predictors of job satisfaction.

**Model Fit Statistics:**

**R (0.85):** This indicates a strong positive correlation between the independent variables (intrinsic motivation and self-efficacy) and the dependent variable (job satisfaction).

**R<sup>2</sup> (0.72):** This suggests that 72% of the variance in job satisfaction can be explained by intrinsic motivation and self-efficacy combined. This indicates a strong model fit.

**Adjusted R<sup>2</sup> (0.70):** This adjusted value accounts for the number of predictors in the model and indicates that the model still explains a significant amount of the variance when adjusting for the number of independent variables.

**F-statistic (36.00):** This high value indicates that the regression model is statistically significant overall.

**Sig. F (0.000):** The significance of the F-statistic shows that the overall regression model is statistically significant, meaning that at least one predictor (either intrinsic motivation or self-efficacy) significantly predicts job satisfaction.

The regression analysis highlights that both intrinsic motivation and self-efficacy significantly impact job satisfaction among academic staff. The strong positive relationships suggest that fostering an environment that enhances intrinsic motivation and builds self-efficacy could be effective strategies for improving job satisfaction. Academic institutions in South East Nigeria could implement training programs, mentorship, and motivational workshops to help enhance these factors, which in turn may result in a more satisfied and productive academic staff.

**Table 7: Regression Results for Model 2 on effect of self-efficacy on research productivity**

Variable	Coefficient	Standard Error	t-Statistic	Sig. Level
(Intercept)	1.50	0.25	6.00	0.000
Intrinsic Motivation	0.45	0.10	4.50	0.001
Self-Efficacy	0.30	0.12	2.50	0.015
R	0.78			
R <sup>2</sup>	0.61			
Adjusted R <sup>2</sup>	0.58			
F-statistic	21.56			
Sig. F	0.0001			

Source: Field Survey 2024

The constant (intercept) value is 1.50, suggesting that when both intrinsic motivation and self-efficacy are zero, the research productivity would be 1.50 on the dependent measure used.

The coefficient for intrinsic motivation is 0.45. This implies that for every one-unit increase in intrinsic motivation, research productivity increases by 0.45 units, holding self-efficacy constant. The significance level ( $p = 0.001$ ) indicates a strong statistical relationship between intrinsic motivation and research productivity, suggesting that intrinsic motivation is a significant predictor of research performance.

The coefficient for self-efficacy is 0.30. This suggests that for every one-unit increase in self-efficacy, research productivity increases by 0.30 units, holding intrinsic motivation constant. With a significance level of 0.015, self-efficacy also has a statistically significant positive effect on research productivity.

The standard errors (0.25 for the constant, 0.10 for intrinsic motivation, and 0.12 for self-efficacy) indicate the accuracy of the coefficient estimates. Lower standard errors suggest more precise estimates of the coefficients.

The t-statistics (6.00 for the constant, 4.50 for intrinsic motivation, and 2.50 for self-efficacy) provide a measure of how many standard errors the coefficient is away from zero. Larger absolute values (greater than 2) generally indicate that the variable is a significant predictor in the model.

The significance levels for all predictors are below 0.05, indicating that both intrinsic motivation and self-efficacy are statistically significant predictors of research productivity at a 95% confidence level.

The R value (0.78) indicates a strong correlation between the predictors (intrinsic motivation and self-efficacy) and the dependent variable (research productivity).

The  $R^2$  value (0.61) indicates that 61% of the variance in research productivity can be explained by intrinsic motivation and self-efficacy. This suggests a significant explanatory power of the model.

The Adjusted  $R^2$  (0.58) adjusts for the number of predictors in the model and also indicates that 58% of the variance in research productivity is explained when accounting for the model complexity.

The F-statistic (21.56) indicates that the overall model is statistically significant, meaning that the combination of intrinsic motivation and self-efficacy significantly predicts research productivity.

The Sig. F value of 0.0001 ( $p < 0.001$ ) shows that there is a high level of confidence in the model, indicating that at least one of the predictors (intrinsic motivation or self-efficacy) reliably predicts research productivity.

### **Comparing Interpretation of Results both findings**

Intrinsic Motivation and Self-Efficacy both have higher coefficients in the second model (0.60 and 0.40) compared to the first model (0.45 and 0.30). This indicates that intrinsic motivation has a more pronounced effect on job satisfaction than on research productivity. The intercept remains consistent (1.50) in both models, although the standard error is slightly higher (0.30) in the job satisfaction model.

The standard errors indicate the reliability of the coefficient estimates. The second model has a slightly higher standard error for the intercept compared to the first model. This suggests that estimates for the job satisfaction model may be less precise regarding the intercept compared to the research productivity model.

The t-statistics confirm the significance of all predictors in both models. The second model shows more substantial t-statistics for both intrinsic motivation and self-efficacy, indicating that these factors are strong and significant predictors of job satisfaction. The significance levels further support the findings; all coefficients are statistically significant

(< 0.05) in both models, emphasizing the importance of intrinsic motivation and self-efficacy.

The R and R<sup>2</sup> values are higher in the second model (R = 0.85, R<sup>2</sup> = 0.72) compared to the first model (R = 0.78, R<sup>2</sup> = 0.61). This indicates a stronger overall fit for the predictors concerning job satisfaction. The adjusted R<sup>2</sup> is also slightly higher in the second model (0.70 vs. 0.58), showing that the job satisfaction model accounts for more variability in the dependent variable after adjusting for predictors. The F-statistic is notably higher in the second model (36.00 vs. 21.56), suggesting a more statistically significant overall regression for predicting job satisfaction as compared to research productivity, with very low significance levels in both cases.

Both regression analyses reveal that intrinsic motivation and self-efficacy significantly influence their respective outcomes - research productivity and job satisfaction among academic staff in South East Nigeria. However, the second model suggests that these factors have a more substantial impact on job satisfaction than on research productivity, as evidenced by higher coefficients and better model fit statistics.

## 5. CONCLUSION AND RECOMMENDATIONS

The analysis undertaken to explore the relationship between intrinsic motivation, self-efficacy, and two key outcomes - research productivity and job satisfaction - reveals important insights. Firstly, intrinsic motivation is shown to positively influence research productivity, with a one-unit increase in intrinsic motivation correlating to a 0.45 unit rise in research output ( $p < 0.001$ ). Additionally, intrinsic motivation significantly enhances job satisfaction, as evidenced by a 0.60 unit increase in job satisfaction for each unit increase in intrinsic motivation ( $p < 0.000$ ). In terms of self-efficacy, the findings show that it similarly impacts research productivity, with a coefficient of 0.30 ( $p < 0.015$ ), suggesting that faculty members with higher confidence in their abilities produce more substantial research outputs. Furthermore, self-efficacy positively affects job satisfaction, leading to a 0.40 unit increase with each unit rise in self-belief ( $p < 0.001$ ). Regression analysis indicates that intrinsic motivation and self-efficacy explain a greater proportion of variance in job satisfaction (R<sup>2</sup> = 0.72) than in research productivity (R<sup>2</sup> = 0.61), underscoring the importance of these factors in enhancing academic outcomes.

In conclusion, both intrinsic motivation and self-efficacy are pivotal in influencing the performance and satisfaction of academic staff at federal universities in South East Nigeria. The analysis reveals that while intrinsic motivation has a more pronounced effect on job satisfaction compared to research productivity, self-efficacy positively affects both outcomes. These findings highlight the necessity for universities to implement targeted strategies aimed at enhancing intrinsic motivation and building self-efficacy. By fostering a supportive environment that promotes these intrinsic drivers, universities can cultivate a more engaged academic workforce, leading to improved educational and research results.

It is recommended that universities develop comprehensive professional development programs tailored to enhance self-efficacy and intrinsic motivation among academic staff. Such initiatives could include workshops, mentorship schemes, and training sessions aimed at equipping faculty with critical research skills and creating a supportive academic community. Additionally, establishing a formal recognition and reward system to acknowledge both research achievements and teaching excellence can significantly boost intrinsic motivation. By providing awards, promotions, and public recognition for outstanding contributions, universities can reinforce the value of academic efforts, encourage faculty engagement, and ultimately enhance both job satisfaction and research productivity.

### Implications of the Study to the Economy

The implications of this study for the economy are significant, as improved research productivity and job satisfaction among academic staff in federal universities can lead to enhanced innovation and knowledge generation, which are critical drivers of economic growth. By fostering an academic environment that promotes intrinsic motivation and self-efficacy, universities can produce a more skilled and engaged workforce capable of addressing societal challenges and contributing to technological advancements. Moreover, higher levels of research output can attract funding, partnerships, and commercialization opportunities, creating a ripple effect that stimulates local economies, enhances job creation, and promotes overall economic development. Thus, investing in the professional well-being of academic staff not only benefits educational institutions but also contributes to the broader economic landscape.

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