Predictors to Students' Enrollment Pattern into Technology Education Programmes in Tertiary Institutions in Rivers State, Nigeria

Comment [PM1]: Technology Education is too broad Id suggest you narrow it down to metalwork technology as you have stated in your Introduction.

Abstract

This descriptive survey examined the factors influencing students' enrollment pattern into technology education programs in tertiary institutions in Rivers State. From a population of 522 students, 120 respondents were chosen at random using proportionate random sampling techniques. A 4-point rating scale questionnaire with a reliability index value of 0.820 that had been validated by two measurement and evaluation specialists was used to collect the data. Two additional research assistants who work for the institutions helped administer the instrument to the respondents. 113 of the 120 administered copies were deemed suitable and sufficient for the descriptive mean and standard deviation data analysis, while the remaining 7 were deemed useless. The study established a threshold of 2.50 for agreement or disagreement in response to research questions. To test the null hypotheses at significant levels of 0.05, an analysis of variance (ANOVA) was utilized. The findings demonstrated that factors such as parental influence, peer pressure, lack of career awareness, interests and personal preferences, and the social status of technology education programs all had a substantial impact on students' decision to enroll in the programs. It's recommended to reframe public opinions regarding the potential of technology programs through career awareness, advocacy initiatives, and public awareness campaigns.

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Comment [PM2]: If the population was 522. How did you get a sample of 120?? I am worried about the generalisation of results as 120 is not the true sample representation. Please look at Krejcie and Morgan (1970)

Comment [PM3]: Deemed not usable. Or find another word to replace useless.

Comment [PM4]: Overall this is a well articulated abstract.

Keywords: Students' Enrollment, Technology Education Programmes, Technical Skills

Comment [PM5]: Keywords should be between 4-8

In text and end of text referencing for Vancouver is shown as numbers. E.gAccording to [1], integrating technology in teaching and learning assist in several ways. The above assertion is echoed by [2] who asserts that ….

Reference List

1. **Almekhlafi AG, Almeqdadi FA. Teachers' perceptions of technology integration in the United Arab Emirates school classrooms. Journal of Educational Technology & Society. 2010 Jan 1;13(1):165-75.**
2. **Bauer J, Kenton J. Toward technology integration in the schools: Why it isn't happening. Journal of technology and teacher education. 2005 Oct;13(4):519-46.**

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1.Introduction

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Technology education programs aim to develop skilled craftsmen, technicians, and technologists in technical and vocational fields, which are crucial for economic development and individual prosperity (Chukwuedo&Omofonmwan, 2015). In fact, the workplace preparatory characteristic of technology education should be a driving force for national development (Amaechi &

Comment [PM7]: This journal follows a Vancouver referencing style (also known as a numbered style). Please change the referencing style to Vancouver as indicated by an example above:

Thomas, 2016).However, there is a lack of attention on harnessing the full potential of these programs, which have the mandate and capacity to produce the required and demand-driven industrial/technological manpower for Nigeria. Despite over 167 technical colleges nationwide, students' enrollment in various trades offered in Nigerian tertiary institutions, such as automobile, building, electrical/electronic, metalwork, and woodwork technology education programs, is still below capacity (Federal Republic of Nigeria, FRN 2013; Yusuff &Soyemi, 2012).This lack of attention has raised concerns among stakeholders about the implications for national manpower development and the need for more attention to this subsector of education (Suleiman, Adeniyi, Kamal, Oluwaseun, & Abiodun, 2022).

Enrolment patterns are crucial indicators of educational advancement, but infrastructural poverty can lead to degradation in both lecturers and students' performance (Onwumere, 2020). Global trends show significant growth in student enrollment, but in Nigeria, metalwork technology education has seen low enrollment patterns since its introduction (Bold, Filmer, Martin, Molina, Stacy, Rockmore, & Wane, 2017). Gender dominance syndrome and factors such as lack of career awareness, discrimination against graduates, government lukewarm attitude towards TVE, lack of candidate interest, inadequacies of facilities/infrastructural materials, and lack of career counselors contribute to this disparity. Factors such as career awareness, personal preference, students' interests, peer pressure, parental influence, and socio-economic status of the programs also predicts students' choice of vocational education-related fields of study (Ozioma, 2011; Ediagbona, Agbaji&Suberu, 2012; Ragojos, Singson & Hupa, 2016; Dokubo&Deebom, 2017).

Comment [PM8]: Write in full first and abbreviation in bracket then after you can apply the abbreviated version

Career awareness is a service that helps individuals makes informed decisions about their education, training, and careers (Oviawe, 2017). It involves helping individuals reflect on their aspirations, interests, competencies, personal attributes, qualifications, and abilities to match these with available opportunities. Career awareness is beneficial for technical education students, graduates, and individuals in several ways. It provides students with knowledge of the advantages and limitations of each occupation, helping them make informed choices. It also helps students understand the characteristics, functions, duties, and rewards of the occupations they choose, enabling them to make intelligent choices. It also helps students understand their abilities, skills, and qualifications required for their chosen occupation.

School staff and counselors can interpret and use information about students' characteristics, needs, and opportunities. Career awareness helps students understand themselves better, develop the ability to handle human relationships, secure knowledge of facilities used in their chosen field, and develop the habit of analyzing information before making decisions.Research shows that access to information influences students' college decisions, but many students, especially

those from disadvantaged schools, lack the necessary information to make informed decisions about post-secondary education in Nigeria (Olugbenga, 2021; Suleiman et al., 2022). In a similar study by Ragojos, Singson & Hupa (2016) career awareness is also found to influence students' choices of vocational education-related fields of study.

Interest and preference play a crucial role in students' decisions regarding their careers and higher education programs (Shepard, 2018). Interests refer to patterns of likes, dislikes, preferences, and indifference regarding career-relevant activities and occupations. Studies have shown that interest and academic preference significantly influence students' choices of vocational education related fields of study (Ragojos, Singson & Hupa, 2016; Wright, 2018). Peer pressure on students also influences their behavior in everyday life, as they are the second most close to students. In Malaysia, peer influence has a significant impact on students' decisions regarding Technical and Vocational Education and Training (TVET) in Malaysia (Awang, Sail, Alavi and Ismail, (2011) and Buang, Majid, Abdul Wahab, Mohd Tohid, Adrutdin, Yacob, &. Zahid,2016). However, skills training ~~are~~is generally not negatively attached to student education.

Parental influence is the worst, as many technical college occupations are perceived as ignoble and unbecoming by parents. In Nigeria, for example, parents may not want their children to pursue vocational tracks with high weighted mean, preferring academic tracks instead (Ragojos, Singson & Hupa, 2016). This disparity is noticeable in general enrollment into technology education programmes, especially in metalwork technology at both senior secondary school levels and tertiary institution levels. Rather, these parents prefer their children/wards to become medical doctors, accountants, lawyers, engineers, administrators and politicians (Igbenedion&Ogeage, 2012).

Social status also plays a role in students' perceptions of technology education-based programs like metalwork technology. Socio-economic factors have a poor influence on students not to choose technology education courses with low mean, suggesting that some students from poor families who cannot afford college enroll in vocational education to obtain income-generating job skills (Ragojos, Singson & Hupa, 2016; Shemsedin, 2022; and Suleiman et al., 2022). Empirical evidence is not exhaustive, but these authors did not focus on specific technology programs like metalwork technology. To achieve economic and technological development, it is

necessary to re-examine the factors affecting students' enrollment patterns in technology education programs, particularly in the context of metalwork technology in tertiary institutions.

2. ~~Problem of the Study~~ Statement of the Problem

The Federal Republic of Nigeria (FRN) has set a national policy on education, aiming to ensure equal opportunities for Nigerian students(FRN, 2013). However, the enrollment in metalwork technology education in tertiary institutions is declining. The records show that only 39 students enroll in metalwork technology, which is about 7.5% of the total number of 522 students in technology education in the three institutions under study. This low rate is significantly lower than other programs like electrical/electronic and building technology education.

The low enrollment rate is attributed to the public's misunderstanding of the rationale behind technology education, leading parents to view commercial and technical colleges as inferior to conventional secondary schools. Additionally, students seem to lack understanding of technology education, leading to contempt and aversion towards metalwork technology programs (Ozioma, 2011; Ayonmike, 2014; and Thomas &Ameachi, 2017).

~~The problem of this study is to~~ This study sought to identify the factors affecting students' enrollment pattern in metalwork technology education programs in technical institutions in ~~Rivers~~River's state. The study aims to identify the factors affecting the enrollment pattern in metalwork technology education programs and provide solutions to ensure the continued success of this important program.

3. Purpose of the Study

The purpose of this study is to investigate predictors to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state. Specifically, this study will seek to find out whether:

1. career awareness is a predictor tostudents enrollment pattern into technology education programin tertiary institutions in Rivers state.
2. students' interest and preference is a predictor to students enrollment pattern into technology education program in tertiary institutions in Rivers state.
3. peer pressure is a predictor tostudents enrollment pattern into technology education program in tertiary institutions in Rivers state.

Comment [PM9]: If this is what the study is focusing on, Id advise you to put it in your tittle because your tittle shows that you looking at a broder concept of technology education not the metal work technology

Comment [PM10]: Overall your Introduction is very sound and it shows the background quite clearly and it does show that the problem doesn't only exist in Nigeria but in other countries as well.

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Comment [PM11]: What records? We don't speculate we support with evidence.

Comment [PM12]: Compare apples with apples. In this case you compared colleges with secondary school of which are different levels of education all together. Since your study is about higher institutions id suggest you follow that route to avoid confusing the readers.

Comment [PM13]: Past tense will suffice since this study has already been conducted

Comment [PM14]: You might as well remove this to avoid duplication as this has already been mentioned in the previous sentence.

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Comment [PM15]: Maintain tenses. This should be in the past tense as well

4. parental influence is a predictor tostudents enrollment pattern into technology education programin tertiary institutions in Rivers state.

5. social status of technology education is a predictor tostudents enrollment pattern into technology education program in tertiary institutions in Rivers state.

Comment [PM16]: Avoid repetition. Remove this since it is covered under research question

Comment [PM17]: You could merge this section with the above section (purpose of the study) to achieve a flow

Research Questions

The following research questions were formulated to guide the study.

1. How is career awareness a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?
2. How is students' interest and preference a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?
3. How is peer pressure a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?
4. How is parental influence a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?
5. How is social status of technology education a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?

Hypotheses

The following hypotheses were postulated and tested at 0.05 significance level

1. There is no significant difference in the mean responses amongst students in three tertiary institutions on career awareness as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.
2. There is no significant difference in the mean responses amongst students in three tertiary institutions on students' interest and preference as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.
3. There is no significant difference in the mean responses amongst students in three tertiary institutions on peer pressure as apredictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.
4. There is no significant difference in the mean responses amongst students in three tertiary institutions on parental influence as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

5. There is no significant difference in the mean responses amongst students in three tertiary institutions on social status of technology education as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Methodology

The study used a descriptive survey design to analyze the enrollment of 522 students in technology education programs at three tertiary institutions in Rivers state. The sample consisted of 120 respondents, 20 from RSU, 30 from IAUE, and 70 from FCET. The questionnaire, "Factors Affecting Students Enrollment in Technology Education Survey (FASTES)," was developed and validated by experts from the Department of Educational Foundations at Niger Delta University. The instrument was validated using a representative sample of 30 respondents from vocational education areas in RSU, IAUE, and FCET. The Cronbach Alpha Coefficient Reliability Test was used to establish a reliability index value of 0.820. The researchers administered the instrument to respondents with the help of two research assistance. Out of 120 instruments, 7 were badly completed and not usable and 113 were found to be useful and good. The data analysis was conducted using a cut-off mean response score of 2.50, with mean response scores above or equal to 2.50 being agree and scores below 2.50 being disagree. ANOVA was used to test the null hypotheses at 0.05 significant levels.

Comment [PM18]: Your methodology is incomplete. Please do show that you have used a quantitative approach, sampling technique is not shown. Id suggest you break it into sub heading such as

4. Methodoloy
4.1 research design
4.2 Sampling Technique
4.3 Sample and populatuon
4.4 Data collection
4.5 Data analysis

Follow a structure like this

Comment [PM19]: Do explain what does a Cronbach Alpha of 0.820 mean.

Results

Students Enrollment Pattern in Technology Education Programme

Table1: Distribution of Students in five technology education programmes in tertiary institutions in Rivers state

Institutions	Year of Study	Automobile		Building		Elect/elect		Metalwork		Wood work		Total (F)
Sex		M	F	M	F	M	F	M	F	M	F	
1. FCET	100 level	15	0	8	2	43	2	7	0	3	0	80
	200 level	11	0	5	2	25	1	6	0	2	0	52
	300 level	14	2	7	1	40	2	8	0	4	0	78
	400 level	12	0	9	0	35	3	5	0	3	0	67
	Total (C)	**52**	**2**	**29**	**5**	**143**	**8**	**26**	**0**	**12**	**0**	**277** (15)
2. IAUE	100 level	12	0	18	3	31	2	7	0	2	0	75
	200 level	3	1	4	1	19	2	1	0	1	0	32
	300 level	4	0	7	0	15	4	2	0	0	0	28
	400 level	5	0	6	1	25	3	2	0	1	0	38
	Total (C)	**24**	**1**	**25**	**5**	**90**	**14**	**12**	**0**	**4**	**0**	**173** (16)
3. RSU	100 level	3	0	4	1	10	3	1	0	0	0	22
	200 level	1	0	1	0	5	0	0	0	0	0	7
	300 level	0	0	2	1	8	3	1	0	0	0	15
	400 level	5	0	4	1	13	3	1	0	1	0	28
	Total (C)	**9**	**0**	**11**	**3**	**36**	**9**	**3**	**0**	**1**	**0**	**72** (12)
Grand total		**85**	**3**	**64**	**12**	**269**	**28**	**39**	**0**	**17**	**0**	**522** (43)

Source: *Students' mark and attendance register 2022/2023 session (office of the Deans/Head of Department of Technical education)*

Table 1above~~:~~shows the students' enrolment pattern in the five technology education programmes in tertiary institutions in Rivers state. From the table the enrollment of students in metal work technology is 26, 12, & 3 for FCET, IAUE & RSU respectively. While the total number of students in metal work technology across the three institutions in 39 this figure represents about 7.5% of total number of students in technology education in the institutions under study.

Research question one

How is career awareness a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?

Table 2: Mean Responses on career awareness and students enrollment pattern in technology education in tertiary institutions

SN	CAREER AWARENESS	RSU		IAUE		FCET		Average		Decision
	Item statements	**M_1**	**SD_1**	**M_2**	**SD_2**	**M_3**	**SD_3**	**M_t**	**SD_t**	
1	Technology education was not clear to me during career guidance advocacy.	2.58	1.017	3.08	.845	2.93	.654	2.90	.779	Agree
2	I am not aware of potential careers and employment opportunities after completing technology education.	2.53	.964	2.81	.895	2.94	1.077	2.84	1.023	Agree
3	I think technology education will not guide me to develop my full career potential.	2.26	.562	2.65	1.093	2.62	1.210	2.57	1.101	Agree
	Grand mean	**2.45**	**.568**	**2.84**	**.801**	**2.82**	**.872**	**2.76**	**.819**	**Agree**

Source: field survey 2023

Keys to the tables: RSU: N1 = 19; IAUE: N2 =26; FCET: N3 = 68
M1, SD1 = Mean and standard deviation RSU; M2, SD2 = mean and standard deviation IAUE
M3, SD3 = Mean and standard deviation FCET;Mt , SDt = Grand mean and standard deviation

Results on ~~R~~research ~~Q~~question ~~O~~one in Table 2 showed that respondents in RSU had a lower mean response score of 2.45 whereas their counterparts' in FCET & IAUE had higher means response score of 2.82 and 2.84 respectively. However, the mean response scores ranged from 2.57 to 2.90 in the three items statements, while the grand mean response score of 2.76 which was above the cut-off mean response score of 2.50, showed that respondents agree with the item statements that career awareness was a factor affecting low ~~students~~students' enrollment into technology education in tertiary institutions in Rivers state. Also the respondents' standard

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Comment [PM20]: Please avoid Upper cases where unnecessary. Research Question and Tables should start in lower cases please fix that

deviation of 0.568, 0.801 and 0.872 were not very far apart. Likewise, the average standard deviation range of 0.779 to 1.101 was also not far apart, which showed homogeneity in their responses.

Research question Two

How is academic interest and preference a predictor to students' enrollment pattern into technology education programs in tertiary institutions in ~~Rivers~~River's state?

Table 3: Mean Responses on academic interest and preference and~~students~~student's enrollment pattern in technology in tertiary institutions

S/N	ACADEMIC INTEREST and PREFERENCE	RSU		IAUE		FCET		Average		Decision
	Item statements	M_1	**SD_1**	M_2	**SD_2**	M_3	**SD_3**	M_t	**SD_t**	
4	Technology education is less attractive to me.	3.00	.816	3.00	.400	2.84	.784	2.90	.719	Agree
5	My career choice is to be an academic professional.	2.79	.855	2.81	.634	2.82	1.092	2.81	.959	Agree
6	I am anxious to take skills assessment.	3.26	.806	2.88	.516	2.72	0.595	2.85	.644	Agree
7	I like to study other education programmes than technology education.	3.11	0994	3.04	1.038	3.10	0.577	3.09	0.774	Agree
8	I can perform better in other education courses than technology education courses.	3.32	.820	3.27	.724	3.37	0.621	3.34	0.676	Agree
9	I feel that I can be less prepared for higher learning in the technology education track.	2.47	.513	3.15	.834	2.84	1.002	2.85	0.918	Agree
	Grand mean	**2.99**	**0.498**	**3.02**	**0.482**	**2.94**	**.318**	**2.97**	**0.391**	**Agree**

Source: field survey 2023

The results on Research Question Two in Table 3 showed that the respondents had higher mean response scores of 2.94, 2.99 and 3.03 for RSU, IAUE and FCET respectively. The average mean means response scores ranging from 2.81 to 3.34 in items 4 to 9 were also above the cut-off mean response score of 2.50. In ~~addition~~addition, the grand mean response score of 2.97 was also above the cut-off mean response score of 2.50. ~~This~~This, therefore, means that the respondents agree with the item statements on academic interest and preference as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state. Also the standard deviation of the respondents of 0.318, 0.482 and 0.498 were close to each other. And the average standard deviation range of 0.644 to 0.959 was not far apart, which showed homogeneity in their responses.

Research Question Three

How is peer pressure a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?

Table 4: Mean Responses on peer pressure and students enrollment pattern in technology education in tertiary institutions

S/N	PEER PRESSURE	RSU		IAUE		FCET		Average		Decision
	Item statements	**M_1**	**SD_1**	**M_2**	**SD_2**	**M_3**	**SD_3**	**M_t**	**SD_t**	
10	My friends agreed to pursue other technology education courses.	2.42	1.071	3.00	0.57	2.69	0.7977	2.72	0.818	Agree
11	My social status with my friends will not go down if I enroll in technology programme.	1.89	.737	2.50	.812	2.32	1.165	2.29	1.041	Disagree
12	Most of my successful friends have pursued technology programme.	2.11	.737	2.92	.484	1.88	1.000	2.16	0.960	Disagree
	Grand mean	**2.14**	**.678**	**2.80**	**.433**	**2.29**	**.561**	**2.38**	**.600**	**Disagree**

Source: field survey 2023

The results on Research Question Three in Table 4 showed that the respondents from RSU and FCET had lower mean response scores of 2.14 and 2.29 respectively while respondents from IAUE had mean response score of 2.80 which was above the cut-off mean response score of 2.50. . However, they had average mean response score of 2.72 and 2.29 for in items 10 and 11; and 2.16 in item 12 with a grand mean response score of 2.38 which was lower than the cut-off mean response score of 2.50. This therefore, means that the respondents disagree with the item statements on peer pressure as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state. Also the respondents' standard deviation of 0.678, 0.433 and 0.561 were in close range. Also the average standard deviation range of 0.818 to 1.041 was not far apart, which showed homogeneity in their responses.

Research Question Four

How is parental influence a factor affecting low students enrollment in metalwork technology education in tertiary institutions in Rivers state?

Table 5: Mean Responses on parental influence and students enrollment pattern in technology education in tertiary institutions

SN	PARENTAL INFLUENCE	RSU		IAUE		FCET		Average		Decision
	Item statement	**M_1**	**SD_2**	**M_2**	**SD_2**	**M_3**	**SD_3**	**M_t**	**SD_t**	
13	My parentsdream is for me to pursue an academic programme other than technology education.	2.95	0.705	2.85	0.543	2.46	1.014	2.63	0.898	Agree
14	My parents did have regard of technology education	1.74	0.653	2.46	0.811	2.04	0.905	2.09	0.872	Disagree

	especially metalwork technology.									
15	My parents and some members of family circle have keen interest in technology programme.	2.32	0.820	2.88	0.864	2.29	1.066	2.43	1.008	Disagree
	Grand mean	**2.33**	**0.444**	**2.73**	**0.573**	**2.26**	**0.795**	**2.38**	**0.721**	**Disagree**

Source: field survey 2023

The results on Research Question Four in Table 5 showed that the respondents from RSU and FCET had lower mean response scores of 2.33 and 2.26 respectively while IAUE had a mean response score of 2.73 is wasabove the cut-off mean response score of 2.50. However, they had an ~~average mean response scores~~average mean response score of 2.63, 2.09 and 2.43 in items 13, 14 and 15 respectively and a grand mean response score of 2.38 which was lower than the cut-off mean of 2.50. This means that the respondents disagree with the item statements on parental influence as apredictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state. Also the respondents' standard deviation scores of 0.444, 0.573 and 0.795 are not far from the mean. With the average standard deviation range of 0.872 to 1.008 which was not far apart, showed homogeneity in their responses.

Comment [PM21]: Is and was cant be used in a same sentence

Research Question Five

How is social status of technology a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state?

Table 6: Mean Responses on social status of technology education andstudents enrollment pattern in technology in tertiary institutions

S/N	SOCIAL STATUS OF TECHNOLOGY EDUCATION	RSU		IAUE		FCET		Average		**Decision**
	Item statements	**M_1**	**SD_1**	**M_2**	**SD_2**	**M_3**	**SD_3**	**M_t**	**SD_t**	
16	I think technology education will not let me obtain income generating job skills.	2.05	1.026	2.69	1.123	2.47	.969	2.45	1.026	Disagree
17	My parents cannot afford the possible cost of setting up technology workshop on graduation.	2.32	1.003	2.65	.977	2.65	1.076	2.59	1.041	Agree
18	I think technology education will not help me improve my	2.26	.653	2.50	0.906	2.47	0.855	2.44	0.834	Disagree

	economic status.									
19	The society has low perception/regard of technology education graduates.	3.00	.745	2.85	0.881	3.25	0.436	3.12	0.637	Agree
20	The society has few establishments to cater internship in technology education.	2.95	.780	3.58	0.578	2.94	0.453	3.09	0.606	Agree
21	The society does not see the demand of technology education careers.	2.58	.902	2.96	1.148	2.81	1.040	2.81	1.042	Agree
	Grand mean	**2.52**	**.500**	**2.87**	**0.536**	**2.76**	**0.597**	**2.74**	**0.574**	**Agree**

Source: field survey 2023

The results on Research Question Five in Table 6 showed that the respondents from the three institutions had higher mean response scores of 2.52, 2.87 and 2.76 for RSU, IAUE & FCET respectively, with the average lower mean response scores of 2.45 in items 16 and 18 and higher mean response scores ranging from 2.59 to 3.12 in items 17, 19 to 21, and a grand mean response score of 2.74 which was above the cut-off mean response scores of 2.50. ~~This~~This, therefore, means that the respondents agree to the statements on social status of technology education a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state. ~~Also~~Also, the respondents' standard deviation of 0.500, 0.536 and 0.597 were not far apart. With the average standard deviation ranging from 0.606 to 1.042 which was clustered together, showed homogeneity in their responses.

Comment [PM22]: Justify this paragraph for better readability

Hypotheses testing

Ho1: There is no significant difference in the mean responses amongst three groups of students on career awareness as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Table 7: ANOVA comparison of mean responses of three groups of students on career awareness and students' enrollment pattern

Source of variance	Sum of squares	Df	Mean squared	F-cal	F-critical (p<.05)	Remark
Between Groups	2.255	2	1.127	1.702	3.09	**Not sig.**
Within Groups	72.874	110	.662			**Accepted**
Total	75.129	112				

Source: field survey 2023

Result in Table 7 showed that F-calculated value (1.702) is less than the critical table value (3.09)which is notsignificant at the level of probability. That is to say since the obtained F-ratio is smaller than critical F-value, so we conclude that the obtained F-ratio is not likely to occur by chance with a p<.05. Hence, we fail to reject the null hypothesis that there was no significant difference in the mean responses scores amongst the three groups of students on career awareness as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Ho2: There is no significant difference in the mean responses amongst three groups of students on academic interest and preference as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Table 8: ANOVA comparison of mean responses of three groups of students on students' interest and preference and students' enrollment pattern

Source of variance	Sum of squares	Df	Mean squared	F cal	F-critical (p<.05)	Remark
Between Groups	.119	2	.060	.383	3.09	**Not sig.**
Within Groups	17.079	110	.155			**Accepted**
Total	17.198	112				

Source: field survey 2023

Result in Table 8 showed that F-calculated value (.383) is less than the critical table value (3.09)which is notsignificant at the level of probability. That is to say since the obtained F-ratio is smaller than critical F-value, so we conclude that the obtained F-ratio is not likely to occur by chance with a p<.05. Hence, we fail to reject the null hypothesis that there was no significant difference in the mean responses scores amongst the three groups of students on students' interest and preference as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Comment [PM23]: P should be italicized and capitalised

Ho 3: There is no significant difference in the mean responses amongst three groups of students on peer pressure as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Table 9: ANOVA comparison of mean responses of three groups of students on peer pressure as and students' enrollment pattern

Source of variance	Sum of squares	Df	Mean squared	F cal	F-critical (p<.05)	Remark
Between Groups	6.283	2	3.142	10.122	3.09	**Sig.**
Within Groups	34.140	110	.310			**Rejected**
Total	40.423	112				

Source: field survey 2023

Results in Table 9 shows that F-calculated value (10.122) is greater than the critical table value (3.09)which is significant at the level of probability. That is to say since the obtained F-ratio is greater than critical F-value, so we conclude that the obtained F-ratio is likely to occur by chance

with a p<.05. Hence, we reject the null hypothesis that there was no significant difference in the mean response scores amongst the three groups of students on peer pressure as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Ho 4: There is no significant difference in the mean responses amongst three groups of students on parental influence as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Table 10: ANOVA comparison of mean responses of three groups of students on parental influence and students enrollment pattern

Source of variance	Sum of squares	Df	Mean squared	F cal	F-critical (p<.05)	Remark
Between Groups	4.143	2	2.071	4.210	3.09	**Sig.**
Within Groups	54.128	110	.492			**Rejected**
Total	58.271	112				

Source: field survey 2023

Results in Table 10 shows that F-calculated value (4.210) is greater than the critical table value (3.09)which is significant at the level of probability. That is to say since the obtained F-ratio is greater than critical F-value, so we conclude that the obtained F-ratio is likely to occur by chance with a p<.05. Hence, we reject the null hypothesis that there was no significant difference in the mean response scores amongst the three groups of students on parental influence as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Ho 5: There is no significant difference in the mean responses amongst three groups of students on social status of metalwork technology as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Table 11: ANOVA comparison of mean responses of three groups of students on social status of metalwork technology and students' enrollment pattern

Source of variance	Sum of squares	Df	Mean squared	F cal	F-critical (p<.05)	Remark
Between Groups	1.351	2	.675	2.084	3.09	**No Sig**
Within Groups	35.656	110	.324			**Accepted**
Total	37.007	112				

Source: field survey 2023

Results in Table 11 shows that F-calculated value (4.210) is greater than the critical table value (3.09)which is significant at the level of probability. That is to say since the obtained F-ratio is greater than critical F-value, so we conclude that the obtained F-ratio is likely to occur by chance with a p<.05. Hence, we reject the null hypothesis that there was no significant difference in the mean response scores amongst the three groups of students on social status of metal work technology as a predictor to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

Discussion of Findings

The study aimed to understand the predictors to students' enrollment pattern into technology education programs in tertiary institutions in Rivers state.

From the results in Tables 2 and 7, career awareness was found to be a significant factor, as it was not clear to students during career guidance advocacy about potential careers and employment opportunities after completing technology education. Students believed that technology education would not guide them to develop their full career potential. This finding was in line with Ragojos, Singson & Hupa (2016) who also found career awareness to be a factor having influencing effect on students' choices of vocational education related fields of study.

Students' interest and preference were also found to be factors affecting low students' enrollment into technology education. The results in tables 3 and 8 indicated that technology education was found to be less attractive to students, and they were anxious to take skills assessments. Students preferred to study other education programs rather than technology education, feeling less prepared for higher learning and performing better in other courses. This result was in agreement with Ragojos, Singson & Hupa (2016) and Wright (2018) who also found that preferences and interests were the main influencing factors in students' choice of courses in higher institutions.

Peer pressure was not a significant factor affecting low students' enrollment into technology education. The results in Tables 4 and 9 revealed that students were not influenced by friends or family members who pursued other technology education courses. Parents had a preference for their children/wards to become medical doctors, accountants, lawyers, administrators, engineers, and politicians, and students did not find their friends who pursued technology programs successful. This finding agrees with Awang et al. (2011) and Buang et al. (2016) who opined that peer influence had no significant impact on students' decision regarding TVET.

Parental influence was another factor affecting low students' enrollment in technology education. The results in Table 5 and 10 revealed that parents would prefer their children/wards to become medical doctors, accountants, lawyers, administrators, engineers, and politicians. This result confirmed the findings of Ragojos, Singson & Hupa (2016) and Igbenedion&Ogeage (2012). From the findings students attest that their parents did not have regard for technology education, especially metalwork technology education, and that some members of their family circle had no interest in the program.

Comment [PM24]: The findings are discussed very well and supported by relevant literature. The findings also does respond to all research questions posed above.

Please break your findings into different paragraphs

Comment [PM25]: You could remove this and shoot straight to discussions since you have mentioned this above.

Comment [PM26]: Lower case T for Tables. Please fix this. See highlighted below

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Social status was also found to be a factor affecting low students' enrollment in metalwork technology education. The results in table 5 and 10 revealed that socio-economic factors had poor influence for students not to choose technology education, but the social status of the program informed most decisions to enroll in the program. This result is in agreement with Ragojos, Singson & Hupa (2016) and Igbenedion&Ogeage (2012). From the findings students believed that technology education would help them obtain income-generating job skills, but they also believed that their parents could not afford the cost of setting up a metalwork technology workshop upon graduation. Their fear that society has low regard for technology education graduates and that society has few establishments to cater for internship in technology education was highly influencing their choices. In conclusion, the study found that society does not see the demand for technology education careers, and students are more likely to pursue other academic programs.

Conclusion

Technology education enrollment pattern in tertiary institutions is attributed to factors such as poor career awareness, academic interest, personal preferences, peer pressure, parental influence, and social status. The absence of proper awareness and public enlightenment campaigns is misleading the public about the potential of technology education.

Recommendations

~~The recommendations include:~~ Based on the findings above, this study recommends the follow:

1. Establishing career awareness and advocacy programs in tertiary institutions to provide students with quality information about the potential of technology education.
2. Educational institutions should make technology education attractive to students, inviting successful graduates to showcase their skills.
3. Public campaigns should promote the image of technology education, especially metalwork technology, to enhance parents' regard for the profession and society's perception of graduates.
4. Establishing technology-based businesses can cater to students' internship programs during their studies.

Please do include sections such as:

Acknowledgements

Competing Interests

AUTHORS' CONTRIBUTIONS

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Comment [PM27]: Please follow a Vancouver referencing style and include DOI where possible.

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