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Perceived Causes of Students Failure in Mathematics and English Language Among Tertiary Students in Katsina State

Ibrahim Magaji Dauda[1], Abubakar Usman[2] and Muhammad Hassan Muhammad[3]

[1]Department of General Studies College of Liberal Studies Hassan Usman Katsina Polytechnic, P.M.B 2052, Katsina, Katsina State, Nigeria.
[2&3]Department of Mathematics and Statistics, College of Science and Technology, Hassan Usman Katsina Polytechnic, P.M.B 2052, Katsina, Katsina State, Nigeria.
E-mail Address: imdm2009@gmail.com

ABSTRACT

This research investigates the perceived causes of failure in Mathematics and English Language among tertiary students in Katsina State, Nigeria, and explores demographic differences, students' attitudes towards seeking help, satisfaction with academic support services, and willingness to participate in improvement programs. A total of 250 questionnaires were administered, yielding a recovery rate of 94.3%. Findings reveal that insufficient study time is the primary reason cited for failure in Mathematics, while limited vocabulary is identified as the main challenge in English Language. External factors, such as family issues and work commitments, are perceived to significantly influence academic performance. Most students express moderate to very high confidence in seeking help and willingness to participate in improvement programs. The majority are satisfied with academic support services, emphasizing the importance of incorporating technology in academic improvement initiatives. Gender differences are observed in the perceived causes of failure, suggesting the need for gender-sensitive interventions. These findings underscore the importance of addressing diverse challenges faced by students and tailoring support services to meet their specific needs, ultimately enhancing academic success in Mathematics and English Language.

Keywords: Perceived causes, Students, Mathematics, English Language.

1.0 Introduction

Education is a cornerstone of societal development, and the success of students in key subjects such as Mathematics and English Language is pivotal to their academic journey. Katsina State, like many regions, grapples with challenges affecting the performance of tertiary students in these fundamental subjects. Recognizing the significance of Mathematics and English Language proficiency in shaping well-rounded graduates, it becomes imperative to investigate the perceived causes of student failure in these subjects among tertiary students in Katsina State. Katsina State, situated in northwestern Nigeria, is home to diverse tertiary institutions that play a crucial role in shaping the intellectual landscape of the region. However, despite the potential for academic excellence, students often encounter difficulties in Mathematics and English Language. These challenges not only impact individual academic achievements but also have broader implications for the educational system and the future workforce. English remains the cornerstone of education in Nigeria, serving as the primary medium of instruction from upper primary through secondary to tertiary levels. It is the conduit through which all other subjects in the curriculum are conveyed. However, the acquisition of English as a second language poses challenges for many students, particularly in non-English-speaking countries like Nigeria. Proficiency in English involves a student's mastery of both spoken and written skills, enabling effective communication. In senior secondary schools across Nigeria, English is a compulsory subject, a colonial legacy inherited from the British. It holds a pivotal role in various spheres of the country's development, influencing almost every aspect of societal progress (Olutola, Iliyas & Abdusalam, 2017). English proficiency, as defined by Blagojevich, Ruiz, and Dunn (2004), encompasses the learner's ability to use the language accurately and fluently for effective communication in academic fields such as social studies, language, and art. Students proficient in English have a competitive edge in securing employment, as employers often favor graduates with fluency in the language. Despite the importance of English, evidence suggests challenges in achieving high academic performance in the language among senior secondary school students in Nigeria. Factors contributing to this difficulty include a shortage of qualified English teachers, lack of instructional materials, and an unsupportive learning environment (Chibuzor, 2015). Home background, issues with equivocation, elocution, transliteration, and expression also contribute to poor performance (Tenibaje, 2015). Research by Udu (2017) revealed that students and teachers perceive certain topics in the English language curriculum as particularly challenging. Difficulties in topics such as poor reading and study skills, lack of motivation, and ineffective teaching methods were identified. Internationally, mathematics holds a position of paramount importance within the global school curriculum, particularly in its intricate connection with other subjects, notably science and technology (Federal Republic of Nigeria, 2013). Spanning both primary and secondary education levels, mathematics is universally acknowledged as one of the most challenging subjects, evoking a sense of difficulty and anxiety among students (Saad et al., 2014). This perception stems from the inherent nature of

mathematics, contributing to a widespread aversion to the subject. Within the Nigerian educational system, a pressing issue is the substantial failure of students in public examinations, particularly at the secondary level. This ongoing challenge raises concerns among stakeholders, prompting reflections on why the educational system consistently falls short of societal expectations and aspirations (Saad et al., 2014). Analyzing West African Examination Council (WAEC) results from 2009 to 2014 reveals a decline in students' performance in core subjects, including mathematics. While there was a slight increase in 2011 and 2012, subsequent years witnessed a regression, highlighting the urgency to address this persistent issue (Saad et al., 2014). Attributing students' failure in mathematics to factors such as teaching methods, attitudes, and the unavailability of learning materials has been a common observation (Karue & Amukowa, 2013; Tshabalala & Ncube, 2013). The recurring poor performance in core subjects, as emphasized by the National Mathematical Centre in 2009, complicates the development of secondary education in Nigeria. Stakeholders, including parents and guardians, have voiced concerns about the performance of secondary school students, particularly in mathematics (Adepoju, 2011). Additionally, scholars have identified factors such as classroom overpopulation, inadequate instructional content, and the absence of quality textbooks as contributors to poor academic outcomes (Adepoju, 2011). Beyond the financial investment loss and the questioning of secondary education quality, the widespread failure in mathematics is linked to two overarching factors: heredity and environmental elements. These environmental aspects encompass student-related, home-related, teacher-related, and school-related factors (Amazigbo, 2010).

1.1 The Crucial Role of Mathematics in Education and the Persistent Challenge of Poor Performance

Mathematics is widely recognized as a pivotal element for the economic prosperity of societies and a key driver of scientific and technological advancements (Lipnevich et al., 2011; Enu, Agyman, & Nkum, 2015). Its significance extends beyond its inherent complexity, playing an integral role in various disciplines such as engineering, sciences, social sciences, and the arts (Patena & Dinglasan, 2013; Phonapichat et al., 2014). The multidimensional impact of mathematics in science, technology, and business underscores its crucial position in educational curricula. In Tanzania, mathematics is mandated as a core subject at both primary and secondary levels, reflecting its importance in shaping students' knowledge and skills for the evolving technological landscape (Ngussa and Mbuti, 2017). Despite its integral role, mathematics is consistently perceived as the most challenging subject globally, with Tanzania experiencing a similar trend (Mabula, 2015). The decline in students' performance, as evidenced by National Examinations Council of Tanzania (NECTA) results, raises concerns about the education system's ability to produce graduates equipped with essential skills for a technologically advancing society. To address this issue, research has identified various factors influencing students' performance in mathematics, particularly related to students, teachers, and schools (Kupari and Nissinen, 2013; Yang, 2013; Tshabalala and Ncube, 2016). Among these factors, attitude emerges as a key determinant affecting performance positively or negatively (Mohamed & Waheed, 2011; Mata et al., 2012; Ngussa & Mbuti, 2017). Attitude, defined as a learned tendency to respond positively or negatively, is recognized as a fundamental factor impacting effective learning and academic outcomes (Sarmah & Puri, 2014). Various studies have established a significant correlation between students' attitudes toward mathematics and their performance (Mensah and Kurancie, 2013).

1.2 Challenges Undermining English Language Proficiency in Nigerian Secondary Schools

English language serves as the primary means of communication within our secondary and higher education institutions, as well as being the official language of our country. Consequently, proficiency in English is crucial for secondary school students to navigate their academic endeavors successfully. The English language encompasses four fundamental skills: listening, speaking, reading, and writing. It not only serves as the medium of instruction in our schools but is also a mandatory subject that must be passed at all levels of education in Nigeria (Danladi, 2013). Despite its significance, a concerning trend has emerged – the declining performance of students in English language during public examinations, which has been identified as a major contributor to the overall deterioration of academic standards in Nigeria. Oluwole (2008) highlighted that students who face challenges comprehending the content and concepts of various subjects taught in the target language, English, may experience difficulties in their course of study. This struggle could be attributed to weaknesses in English language proficiency, negatively impacting their overall academic performance.

1.3 Causes of poor performance in English language

The emphasis on using the mother tongue in primary education, as outlined in the Nigerian education policy, has a lasting impact on English language proficiency. The shortage of qualified English language teachers is a significant contributor to poor performance. Some schools resort to assigning teachers from other subjects to teach English, leading to subpar oral and written expression skills. Adedokun (2011) notes that poorly trained or untrained English teachers contribute to the dismal performance of students in English language examinations. The lack of proper infrastructure, including overcrowded classrooms and the absence of language laboratories, hampers effective learning. Roger (1981) emphasizes that instructional materials play a crucial role in the learning process, but many students in public schools face challenges such as sitting on the floor or under trees, hindering their access to quality education. A reluctance among English language teachers to embrace innovative teaching methods contributes to poor performance. Many educators persist in traditional, content-oriented teaching styles, neglecting modern instructional resources like audio and video tapes, computers, and language laboratories. Some students harbor a negative attitude towards learning English, considering it foreign or irrelevant. Mohammed (2002) observes that this attitude makes it challenging for teachers to engage students effectively in mastering the essential language skills of listening, speaking, reading, and writing.

1.4 The Crucial Role of Mathematical Competence in Education and Society:

The significance of mathematical competence among learners at all educational levels cannot be overstated, as it serves as a fundamental tool for the advancement of various science-based disciplines such as astronomy, graphics, technology, analytical reasoning, and industry. Recognizing its pivotal role in contemporary society, mathematics is rightfully positioned as a compulsory and leading core subject in secondary school curricula worldwide. Mathematics is not merely a subject confined to classrooms; its educational values encompass intellectual, aesthetic, social, vocational, and interdisciplinary aspects. Ampadu (2012) emphasizes the need to leverage traditional methods, educational innovations, and technological advancements to fully realize these values and instructional objectives. In the global context, the recognition of mathematics as a mandatory subject is evident in educational policies, such as Nigeria's National Policy of Education (Federal Republic of Nigeria, 2013), which mandates the teaching of mathematics at primary and secondary levels.

1.5 Research Questions

The research is based on the following questions

i. What are the Perceived Causes of failure in Mathematics and English Language?

ii. How does Student Engagement in Mathematics and English Language courses and correlate with their academic performance?

iii. What are the evidence-based recommendations for educational stakeholders to enhance the learning experience and academic success of students in Mathematics and English Language?

1.6 Objectives of the Study

The aim of this research is to investigates the causes of students' failure in mathematics and English language in higher learning with a view to provide solution through the following objectives

i. To identify and analyze the perceived causes attributed by tertiary students in Katsina State for their failures in Mathematics and English Language.

ii. To examine the correlation between the perceived causes identified and the actual academic performance of students in Mathematics and English Language, exploring how these factors may impact grades

iii. To propose evidence-based strategies and recommendations aimed at addressing the perceived causes of failure in Mathematics and English Language among tertiary students in Katsina State, with the goal of enhancing academic performance.

2. RESEARCH METHOD

2.1 The Research population

The study population included tertiary level students in Universities, Polytechnics and Colleges of Education in Various part of Katsina State. As quantitative approach is adopted to collect the relevant data of study, a number of 250 survey questionnaires have been administered among the respondents in four higher institution which are: Hassan Usman Katsina Polytechnic, Umaru Musa Yaradua University Katsina, Federal college of education Katsina and Isah Kaita college of education Dutsinma.

2.2 Statistical Analysis

Replies from the questionnaire were analyzed using the Descriptive statistics of frequency counts and percentages were used in analyzing demographic variables and research questions while the Pearson correlation coefficient was used to compare the relationship between the Mathematics and English language and academic performance of tertiary institution students.

3. Result and Discussion

The personal data of the students recruited for the research was analysed, which includes, Gender, Age and Academic level of the respondent.

Gender of the students	**Frequency**	**Percentage**	**Mean**	**Standard deviation**
Male	149	59.6%	1.60	0.491
Female	101	40.4%		
Total	250	100%		

Age of the students				
Under 20	49	19.6%	2.04	0.741
20-25	158	63.2%		
26-30	28	11.2%		
31-Above	15	6.0%		
Total	250	100%		
Academic level				
NCE/ND	79	31.6%	2.12	1.257
Undergraduate	144	58.4%		
Postgraduate	27	10.0%		
Total	250	100.0%		

Table 1 Demographic profile of the respondents

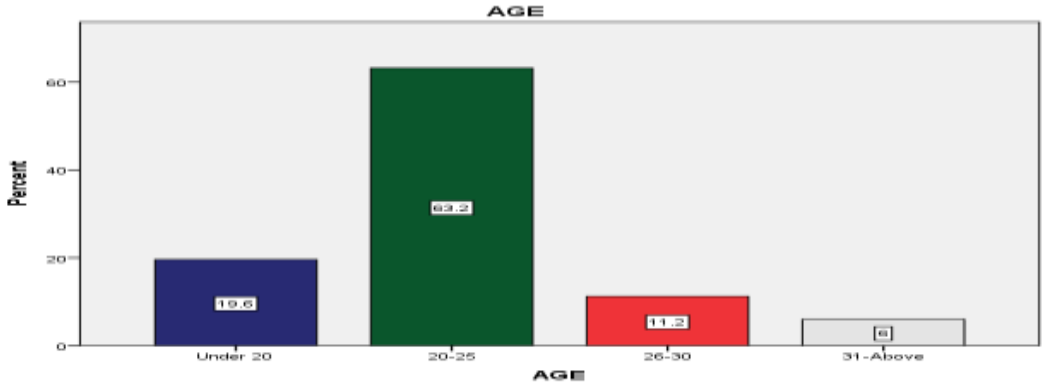

Figure 1. Barchart representing the Age of the students

The demographic breakdown reveals from table 1 consists of 149 male students (59.6%) and 101 female students (40.4%). This distribution indicates a slightly higher representation of male students in the sample compared to female students. Moving on to age distribution, as also shown in figure 4.1 the majority of respondents fall within the age range of 20 to 25 years, comprising 63.2% of the sample. This suggests that the study predominantly captures the perspectives of young adults in the tertiary education system. Additionally, a notable portion of respondents, 19.6%, are under the age of 20, while smaller proportions represent older age groups, with 11.2% aged 26 to 30 and 6% aged 31 and above. Regarding academic level, the majority of respondents are enrolled at the undergraduate level (58.4%), followed by NCE/ND students (31.6%), with a smaller portion representing postgraduate students (10%). This distribution suggests that the study includes perspectives from students across different educational stages, providing a diverse range of insights into the perceived causes of failure in Mathematics and English Language among tertiary students in Katsina State. Overall, the demographic breakdown reflects a diverse sample in terms of gender, age, and academic level, enhancing the comprehensiveness of the study's findings.

The respond of the students from the questionnaire are discuss in the tables below.

What do you believe are the primary reasons for perceived failure in Mathematics?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Lack of understanding	25	10.0	10.0	10.0
	Poor teaching quality	53	21.2	21.2	31.2
	Insurficient study time	103	41.2	41.2	72.4
	Personal distraction	69	27.6	27.6	100.0
	Total	250	100.0	100.0	

Table 2. Primary reasons for perceived failure in Mathematics

Table 2. reveals that among the perceived reasons for failure in Mathematics, insufficient study time is the most commonly cited factor, with 103 respondents (41.2%) attributing their struggles in the subject to this issue. This suggests that a significant portion of students believe that their performance in Mathematics is hindered by not dedicating enough time to studying the material. Additionally, personal distraction is identified as a notable factor, with 69 respondents (27.6%) acknowledging distractions as a contributing factor to their perceived failure in Mathematics. This highlights the impact of external factors such as personal distractions on students' academic performance in the subject. These findings have important implications for educators and policymakers in addressing the challenges students face in Mathematics. Firstly, there is a clear need to emphasize the importance of effective time management and study habits among students. Educators can provide guidance and resources to help students better manage their study time and prioritize their academic responsibilities.

what do you believe are the primary reasons for perceived failure in English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Difficulty in language comprehension	20	8.0	8.0	8.0
	Ineffective teaching method	57	22.8	22.8	30.8
	Limited vocabulary	88	35.2	35.2	66.0
	Lackof motication	85	34.0	34.0	100.0
	Total	250	100.0	100.0	

Table 3. primary reasons for perceived failure in English Language

In the analysis of perceived failure in English Language, limited vocabulary emerges as the most prominent reason, as shown in table 3, with 88 respondents (35.2%) attributing their struggles to this factor. This highlights the significance of vocabulary development in mastering the English language, as a limited vocabulary can impede comprehension and expression in various contexts. Furthermore, ineffective teaching methods are identified by 57 respondents (22.8%) as a primary reason for perceived failure in English Language. This suggests that the teaching approaches employed may not adequately cater to the diverse learning styles and needs of students, thus hindering their language acquisition and proficiency. These findings underscore the importance of addressing key areas such as vocabulary enhancement and pedagogical strategies in English Language instruction. Educators should focus on implementing innovative and student-centered teaching methods that engage learners and foster active participation. Additionally, efforts should be directed towards providing resources and support to help students expand their vocabulary and improve language comprehension skills. This could involve incorporating activities such as word games, reading comprehension exercises, and vocabulary-building workshops into the curriculum. By addressing these primary reasons for perceived failure in English Language, educational institutions can better equip students with the necessary skills and competencies to succeed in language learning and communication.

To what extent do you think external factors (e.g., family issues, work commitments) contribute to perceived failure in Mathematics and English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all	4	1.6	1.6	1.6
	Slightly	7	2.8	2.8	4.4
	Moderately	53	21.2	21.2	25.6
	Very much	176	70.4	70.4	96.0
	Extremely	10	4.0	4.0	100.0
	Total	250	100.0	100.0	

Table 4. Contributing factor to perceived failure in Mathematics and English Language

Majority of respondents perceive external factors, such as family issues and work commitments, to significantly contribute to their perceived failure in Mathematics and English Language. Specifically, 176 respondents (70.4%) indicate that these external factors contribute "very much" to their struggles in these subjects. This high percentage suggests that students perceive external challenges as substantial barriers to their academic success in Mathematics and English Language. Additionally, 53 respondents (21.2%) consider these external factors to contribute to their academic struggles "moderately," indicating a significant but somewhat lesser impact compared to the majority who view them as very influential. It's evident that addressing external challenges such as family issues and work commitments is essential for promoting student success in Mathematics and English Language. Educational

institutions should implement initiatives that provide support and resources to help students navigate these external challenges effectively. This could include offering flexible scheduling options, counseling services, and assistance programs tailored to address specific external barriers faced by students.

How confident are student in seeking help or guidance when facing challenges in Mathematics and English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not confident at all	30	12.0	12.0	12.0
	Slightly confident	45	18.0	18.0	30.0
	Moderately confident	150	60.0	60.0	90.0
	Very confident	21	8.4	8.4	98.4
	Extremely confident	4	1.6	1.6	100.0
	Total	250	100.0	100.0	

Table 5. Rate of students confident in seeking guidance when facing challenges

Students' confidence levels in seeking help or guidance when facing challenges in Mathematics and English Language. A significant proportion of respondents, 150 (60%), express being "moderately confident" in seeking assistance for academic difficulties in these subjects. This suggests that a majority of students feel reasonably assured in their ability to seek help when needed, indicating a positive attitude towards seeking support for their academic challenges. Additionally, 45 respondents (18%) report being "slightly confident," indicating a moderate level of confidence in seeking assistance, while 21 respondents (8.4%) express being "very confident," and 4 respondents (1.6%) indicate being "extremely confident." These findings highlight the importance of fostering a supportive and encouraging environment within educational institutions to promote students' confidence in seeking help when facing academic challenges. Educators and support staff can play a crucial role in building students' confidence by providing accessible resources, offering guidance and encouragement, and creating a non-judgmental atmosphere where students feel comfortable seeking assistance.

How would you rate your overall academic performance in Mathematics in the last academic year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	4	1.6	1.6	1.6
	Below average	80	32.0	32.0	33.6
	Average	150	60.0	60.0	93.6
	Above average	11	4.4	4.4	98.0
	Excellent	5	2.0	2.0	100.0
	Total	250	100.0	100.0	

Table 6. Academic performance in Mathematics in the previous academic session

Students' self-assessment of their overall academic performance in Mathematics during the 2022/2023 academic year. The majority of respondents, 150 (60%), rate their performance as "average." This suggests that a significant proportion of students perceive their performance in Mathematics to be at a satisfactory level, neither exceptionally high nor low. Additionally, 80 respondents (32%) rate their performance as "below average," indicating that a notable portion of students feel that their performance in Mathematics fell short of their expectations or standards. Furthermore, a smaller proportion of respondents rate their performance as "poor" (1.6%), "above average" (4.4%), or "excellent" (2%), indicating varying degrees of academic achievement among students in Mathematics.These findings underscore the importance of providing support and resources to students who perceive their performance in Mathematics as below average or poor.

Similarly, how would you rate your overall academic performance in English Language in the last academic year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	2	.8	.8	.8
	Below average	8	3.2	3.2	4.0
	Average	160	64.0	64.0	68.0

	Above average	63	25.2	25.2	93.2
	Excellent	17	6.8	6.8	100.0
	Total	250	100.0	100.0	

Table 7. Academic performance in English Language in the previous academic session

Students' self-assessment of their overall academic performance in English Language during the 2022/2023 academic year from table 7 show that the majority of respondents, 160 (64%), rate their performance as "average." This suggests that a significant proportion of students perceive their performance in English Language to be at a satisfactory level, neither exceptionally high nor low. Additionally, 63 respondents (25.2%) rate their performance as "above average," indicating that a notable portion of students feel that their performance in English Language exceeded their expectations or standards. Furthermore, 17 respondents (6.8%) rate their performance as "excellent," indicating a smaller but significant proportion of students achieved exceptional results in English Language. These findings highlight the need for continued support and resources to maintain and enhance students' performance in English Language. Educational institutions can implement strategies such as language workshops, peer-assisted learning programs, and language enhancement courses to support students in achieving their academic goals in English Language.

To what extent do you believe your perceived causes of failure have influenced your actual academic performance in Mathematics and English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not influential at all	2	.8	.8	.8
	Slightly influential	73	29.2	29.2	30.0
	Moderately influential	157	62.8	62.8	92.8
	Very influential	11	4.4	4.4	97.2
	Extremely influential	7	2.8	2.8	100.0
	Total	250	100.0	100.0	

Table 8 How failure have influenced actual academic performance in Mathematics and English Language

Perceived influence of identified causes of failure on students' actual academic performance in Mathematics and English Language as identified in table 8 shows significant proportion of respondents, 157 (62.8%), believe that the perceived causes of failure are "moderately influential" on their academic performance in these subjects. This suggests that students perceive a moderate level of impact from the identified causes on their actual performance, indicating that external factors and personal challenges do play a role in shaping academic outcomes. Additionally, 73 respondents (29.2%) indicate that these perceived causes are "slightly influential," suggesting that while the impact may be present, it is not as pronounced as those who perceive it as moderately influential.

How satisfied are you with the academic support services (e.g., tutoring, study groups) provided for Mathematics and English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very dissatisfied	5	2.0	2.0	2.0
	Dissatisfied	15	6.0	6.0	8.0
	Neutral	80	32.0	32.0	40.0
	Satisfied	120	48.0	48.0	88.0
	Very satisfied	30	12.0	12.0	100.0
	Total	250	100.0	100.0	

Table 9. Satisfaction of the academic support services provided for Mathematics and English Language

Students' satisfaction levels with the academic support services provided for Mathematics and English Language. The majority of respondents, 120 (48%), indicate being "satisfied" with the support services offered. This suggests that a significant proportion of students find the available academic support services to be effective in assisting them with their learning needs in Mathematics and English Language. Additionally, 80 respondents (32%) report feeling "neutral" towards the academic support services, indicating a lack of strong sentiment either positively or negatively. However, it's worth noting that a smaller proportion of respondents express dissatisfaction, with 15 (6%) indicating being "dissatisfied" and 5 (2%) reporting being "very dissatisfied"

with the support services provided. These findings highlight the importance of continuously evaluating and enhancing the quality of academic support services offered to students in Mathematics and English Language. Educational institutions should gather feedback from students to identify areas for improvement and implement strategies to address any shortcomings in the support services.

What specific strategies do you think could be effective in improving your performance in Mathematics?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Increase study time	71	28.4	28.4	28.4
	Improve teaching method	154	61.6	61.6	90.0
	Personalise tutorial	20	8.0	8.0	98.0
	Use of educational apps	5	2.0	2.0	100.0
	Total	250	100.0	100.0	

Table 10. Specified strategies effective in improving performance in Mathematics

Specific strategies that students believe could be effective in improving their performance in Mathematics as indicated in table 10 The most commonly cited strategy is to "improve teaching method," with 154 respondents (61.6%) identifying this as a key area for enhancement. This suggests that students perceive the quality of teaching as a critical factor influencing their performance in Mathematics and advocate for instructional approaches that are more effective and engaging. Additionally, 71 respondents (28.4%) suggest that increasing study time could be an effective strategy for improving their performance. This highlights the importance of dedicating sufficient time and effort to studying mathematical concepts and reinforces the notion that academic success in Mathematics requires consistent and focused study habits. These findings underscore the importance of enhancing teaching methods and providing additional support to students in Mathematics. Educational institutions should invest in professional development opportunities for teachers to help them incorporate innovative and student-centered instructional strategies into their teaching practices.

what specific strategies do you think could be effective in improving your performance in English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Vocabulary building exercise	62	24.8	24.8	24.8
	Interactive learning platform	163	65.2	65.2	90.0
	Language workshop	5	2.0	2.0	92.0
	Peer assisted learning	20	8.0	8.0	100.0
	Total	250	100.0	100.0	

Table 11. Specified strategies effective in improving performance in English language

Strategies suggested by students to improve their performance in English Language as shown in table 11 most prevalent strategy identified is the utilization of "interactive learning platforms," with 65.2% of respondents indicating its potential effectiveness. This underscores the importance of incorporating technology into language learning processes, as interactive platforms offer engaging and immersive experiences that facilitate skill development and language acquisition. Additionally, 24.8% of respondents recognize the value of "vocabulary building exercises," emphasizing the significance of expanding one's linguistic repertoire to enhance proficiency in English Language. Vocabulary enrichment exercises provide students with opportunities to broaden their word knowledge and improve their language comprehension and expression skills. Moreover, the inclusion of "language workshops" and "peer-assisted learning" as suggested strategies further emphasizes the importance of collaborative and experiential learning approaches in improving English Language proficiency. While these strategies may have lower frequencies, they still hold significance in offering students additional avenues for language enhancement. Language workshops provide focused instruction and practice in specific language areas, while peer-assisted learning fosters collaborative learning environments where students can support and learn from one another.

How willing are you to actively participate in academic improvement programs focused on Mathematics and English Language?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not willing at all	1	.4	.4	.4
	Slightly willing	2	.8	.8	1.2

	Moderately willing	27	10.8	10.8	12.0
	Very willing	191	76.4	76.4	88.4
	Extremely willing	29	11.6	11.6	100.0
	Total	250	100.0	100.0	

Table 12. willingness to participate in academic improvement programs focused on Mathematics and English Language

Students' willingness to actively participate in academic improvement programs focused on Mathematics and English Language. A significant majority of respondents, 191 (76.4%), express being "very willing" to participate in such programs. This indicates a strong desire among students to engage in activities and initiatives aimed at enhancing their academic performance and proficiency in Mathematics and English Language. Additionally, 29 respondents (11.6%) indicate being "extremely willing," further emphasizing the high level of motivation and eagerness among students to take part in these improvement programs. This strong willingness to participate suggests that students recognize the value and benefits of academic improvement initiatives and are actively seeking opportunities to enhance their skills and knowledge in these subjects. Moreover, while smaller proportions of respondents indicate being "moderately willing" (10.8%), "slightly willing" (0.8%), or "not willing at all" (0.4%), it's important to acknowledge that the majority of students exhibit a positive attitude towards engaging in academic improvement programs. This highlights the potential effectiveness of such programs in supporting student learning and achievement in Mathematics and English Language

Rate the importance of incorporating technology (e.g., educational apps, online resources) in academic improvement initiatives for Mathematics and English Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not important at all	3	1.2	1.2	1.2
	Slightly important	9	3.6	3.6	4.8
	Moderately important	21	8.4	8.4	13.2
	Very important	188	75.2	75.2	88.4
	Extremely important	29	11.6	11.6	100.0
	Total	250	100.0	100.0	

Table 13 Importance of incorporating technology in academic improvement initiatives

The perceived importance of incorporating technology, such as educational apps and online resources, in academic improvement initiatives for Mathematics and English Language. Results from table 13 shows significantly that majority of respondents, 188 (75.2%), rate the importance of technology as "very important." This indicates a strong recognition among students of the value and benefits that technology can bring to academic improvement efforts, particularly in enhancing learning experiences and facilitating skill development in Mathematics and English Language. Additionally, 29 respondents (11.6%) emphasize the utmost importance of technology by rating it as "extremely important," further underscoring the significant role that technological tools can play in supporting student learning and achievement. Furthermore, while smaller proportions of respondents rate the importance of technology as "moderately important" (8.4%), "slightly important" (3.6%), or "not important at all" (1.2%), it's evident that the vast majority acknowledge the pivotal role that technology plays in academic improvement initiatives.

Oneway Anova

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	Sum of Squares	df	Mean Square	F	Sig.
Between Groups (Male & Female)	1.176	1	1.176	6.683	.010
Within Groups (Male & Female)	43.641	248	.176		
Total	44.817	249			

Table 14 Oneway Anova table in perceived causes of failure between male and female students.

The table 14 indicates a significant difference in perceived causes of failure between male and female students. The different "Between Groups" analysis shows that there is a statistically significant difference in the mean scores of perceived causes of failure in Mathematics and English Language between

male and female students, as evidenced by a relatively high F-value of 6.683 and a p-value of 0.010. This suggests that gender plays a role in how students perceive the causes of failure in these subjects. Specifically, male and female students may attribute failure to different factors or may have different perceptions of the importance of various factors contributing to failure in Mathematics and English Language. The implications of this finding for the research are significant. Understanding the gender differences in perceived causes of failure can inform the development of targeted interventions and support services tailored to the specific needs of male and female students. Educational institutions can use this information to design more effective strategies for addressing the challenges faced by students in Mathematics and English Language based on their gender-specific perceptions. For example, if female students perceive a lack of understanding as a primary cause of failure in Mathematics, interventions could focus on providing additional support and resources to enhance comprehension and mastery of mathematical concepts among female students.

4. Conclusion

The research underscores the multifaceted nature of academic struggles among tertiary students in Mathematics and English Language, influenced by a combination of personal, pedagogical and external factors. The findings emphasize the importance of tailored interventions and support services to address the diverse needs and challenges faced by students. Educators and policymakers should prioritize efforts to enhance teaching methods, provide resources for vocabulary development and create supportive learning environments conducive to student success. Additionally, leveraging technology and considering gender-specific perceptions in intervention strategies are essential for promoting inclusive and effective educational practices. By addressing these underlying factors and promoting a culture of support and engagement, educational institutions can empower students to overcome academic challenges and achieve success in Mathematics and English Language.

5. Recommendation

By implementing these recommendations by Katsina state government on educational institutions in Katsina State can develop comprehensive strategies to address the perceived causes of students' failure in Mathematics and English Language, ultimately fostering a more supportive and effective learning environment.

- ✓ Conduct a thorough review of the Mathematics and English Language curricula in tertiary institutions in Katsina State.
- ✓ Implement professional development programs for educators focused on innovative and effective teaching methodologies in Mathematics and English Language.
- ✓ Strengthen student support services, including tutoring, counseling and mentorship programs. Provide additional assistance to students facing challenges in Mathematics and English Language.
- ✓ Explore the integration of technology in teaching Mathematics and English Language. Develop and implement technology-based tools and resources to enhance engagement and understanding.
- ✓ Implement early intervention strategies to identify students at risk of failure. Provide targeted support and resources to address foundational gaps before they escalate.

6. Contributing to knowledge

A workforce with strong foundational skills in Mathematics and English Language enhances the global competitiveness of Katsina State. The research contributes to producing a skilled and knowledgeable workforce that can effectively compete in a dynamic and interconnected world.

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