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The Influence of Teachers' Experiences, Participation in Extra Learning and Access to Classroom Resources on their Mathematics Affinity

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Abstract

Aim: This study explored how teachers' experiences, participation in extra learning, and access to classroom resources affect their mathematics affinity among public Junior High School teachers in the Fourth Congressional District of Quezon Province.

Methodology: Utilizing a model testing design integrated with descriptive correlational elements, the study analyzed a hypothesized causal model. Data were gathered via an online survey, with subsequent statistical analyses—including descriptive statistics and correlation analysis—used to assess relationships between variables.

Results: The analysis revealed significant positive correlations between teachers' characteristics and their mathematics affinity. Specifically, teachers' experiences, engagement in extra learning opportunities, and access to classroom resources were all found to positively impact their affinity for mathematics. This highlighted the importance of robust professional development programs and equitable resource distribution in enhancing the quality of mathematics education and teacher effectiveness.

Conclusion: Teachers' experiences, engagement in professional development, and access to resources significantly influenced their mathematics affinity, which in turn positively affected student learning outcomes. The study rejects the hypothesis that teachers' characteristics do not significantly impact their mathematics affinity, underscoring the need for targeted support and development initiatives to further enhance teaching practices and student achievement in mathematics.

Keywords: mathematics affinity, teachers' experiences, classroom resources, model testing design, descriptive correlational design, professional development

INTRODUCTION

The effective teaching of mathematics in public Junior High Schools is a multifaceted challenge influenced by teacher characteristics, resource availability, and professional development opportunities. Research in the Philippines, such as Aquino (2018), highlights the challenges and opportunities faced by public school teachers, with a particular focus on the factors shaping instructional strategies in mathematics. Abenojar (2024) and Reyes (2019) emphasize the critical role of professional development, especially in resource-limited rural areas, in enhancing teaching practices. The availability of teaching resources significantly impacts educational quality, as Cruz (2020) notes that access to adequate resources improves instructional quality in public schools. Garcia (2021) finds a positive correlation between teacher experience and student performance, a conclusion supported by Villanueva (2023), who examines effective pedagogical strategies across various regions, including the Bicol area.

Teacher characteristics, such as their affinity for mathematics and educational attainment, also play crucial roles in shaping teaching approaches. Tan (2019) explores this relationship in Quezon Province, revealing that these characteristics can significantly influence teaching efficacy. Dela Cruz (2019) highlights the benefits of extra-curricular activities in enhancing mathematics learning, suggesting that participation in these activities positively impacts both teachers and students. In terms of technological integration, Hernandez (2023) examines its impact on teaching efficacy

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and engagement in Metro Manila's public Junior High Schools, emphasizing the role of technology in improving instruction.

International perspectives further enrich this understanding. Smith and Brown (2020) and Nguyen and Thomas (2019) highlight the importance of professional development in fostering effective teaching strategies, while Johnson and Lee (2022) discuss how teacher experience enhances teaching efficacy. The availability of classroom resources, discussed by Kumar and Yadav (2021), Taylor and Miller (2020), and Martinez and Rivera (2023), consistently emerges as a crucial factor for effective mathematics teaching. Morris and Rakes (2019) examine the influence of teacher beliefs and practices on student outcomes, while Wang and Chen (2021) explore the impact of extra learning opportunities like after-school programs. Finally, Lee and Yang (2019) emphasize the importance of continuous learning and experience in improving mathematics education, advocating for ongoing professional development to enhance teaching practices.

Objectives

This study aimed to examine the factors influencing the utilization of effective teaching strategies in mathematics among the public Junior High School teachers in the Quezon Province.

Specifically, this sought answers to the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Subject Taught;
 - 1.2 Town;
 - 1.3 School;
 - 1.4 Sex;
 - 1.5 Educational Attainment ;
 - 1.6 Age;
 - 1.7 Years in Teaching Mathematics; and
 - 1.8 Number of Handled Subjects?
2. How do teachers perceive their characteristics as to:
 - 2.1 Experience;
 - 2.2 Participation in Extra Learning; and
 - 2.3 Access to Classroom Resources?
3. What is the level of Mathematics Affinity of the teachers?
4. Do teachers' characteristics significantly influence their Mathematics Affinity?

Hypothesis

There is no significant influence of teachers' characteristics (experience, participation in extra learning, access to classroom resources) on their Mathematics Affinity.

METHODS

Research Design

This study used a model testing design to examine how teachers' experiences, extra learning participation, and classroom resource access influence their mathematics affinity, incorporating both predictive and descriptive correlational approaches to provide insights for mathematics education in public Junior High Schools in the Fourth Congressional District of Quezon Province.

Population and Sampling

The study randomly sampled 98 public Junior High School teachers from various school sizes in the 4th congressional district of Quezon Province for the 2023–2024 school year to ensure a diverse and representative sample of the population.

Instrument

The survey questionnaire, designed for public Junior High School teachers in Quezon Province's Fourth Congressional District, explored the impact of teachers' experiences, extra learning participation, and resource access on their math affinity through targeted demographic and attitudinal questions. It utilized Cronbach's alpha to ensure



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internal consistency of Likert scale items and conducted factor analysis on responses to gauge teachers' attitudes and beliefs towards mathematics instruction, providing insights into the factors influencing their connection to math.

Data Collection

The study collected data via an online survey conducted through Google Sheets, ensuring participant confidentiality and ethical considerations, with quantitative data analysis using descriptive statistics and correlation to explore relationships between teacher characteristics and mathematics affinity.

Treatment of Data

Demographic information was analyzed using descriptive statistics to profile respondents, while Likert scale responses on teachers' characteristics were summarized using mean scores to gauge perceptions of experience, extra learning participation, and resource access. Correlation and multilinear analyses were conducted on teachers' attitudes and practices related to math affinity to explore the predictive power of factors such as teaching experience, education level, and resource access on their mathematics affinity.

Ethical Considerations

The study ensured voluntary participation and confidentiality of public Junior High School mathematics teachers through informed consent, anonymization, secure data storage, cultural sensitivity, and adherence to ethical guidelines, prioritizing participants' well-being and research integrity.

RESULTS and DISCUSSION

Table 1
Profile of the Respondents

Subject Taught	Frequency	Percentage
Yes (Teaching Mathematics)	98	100.0
Town	Frequency	Percentage
Alabat	4	4
Atimonan District I	10	10
Calauag East	3	3
Calauag West	8	8
Guinayangan North	4	4
Guinayangan South	1	1
Gumaca East	7	7
Gumaca West	4	4
Lopez East	9	10
Lopez West	39	40
Perez	1	1
Plaridel	3	3
Quezon	1	1
Tagkawayan District I	3	3
Tagkawayan District II	1	1
Total	98	100
School	Frequency	Percentage
Alabat Island National High School	3	3.1
Aloneros National High School	2	2
Atimonan National Comprehensive High School	3	3
Bagong Silang National High School	2	2
Balubad Integrated School	2	2
Bantad National High School	1	1
Bantuliniao Integrated School	1	1
Cabibihan National High School	1	1



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Calauag National High School	6	6.1
Caridad Ilaya Integrated School	1	1
Concepcion National High School	2	2
Cogorin Ibaba National High School	1	1
Dungawan National High School	1	1
Dao National High School	1	1
Gumaca National High School	4	4.1
Guites National High School	1	1
Guinayangan National High School	2	2
Hondagua National High School	6	6.1
Ilayang Ilog A National High School	1	1
Jongo National High School	8	8.2
Lamon Bay School Of Fisheries	2	2
Lopez National Comprehensive High School	20	20.4
Magallanes National High School	4	4.1
Malusak National High School	1	1
Panikihan National High School	4	4.1
Pamampangin National High School	4	4.1
Pablo D. Maningas National High School	1	1
Plaridel National High School	1	1
Sanmandelcar National High School	1	1
San Francisco B National High School	1	1
San Rafael National High School	2	2
San Roque Ilaya National High School	3	3
Severo Tejada Integrated School	1	1
Sto. Niño Ilaya National High School	1	1
Tagkawayan National High School	1	1
Veronica National High School	1	1
Villa Perez National High School	1	1
Total	98	100
Gender	Frequency	Percentage
Male	31	32
Female	67	68
Total	98	100
Education Level	Frequency	Percentage
Bachelor's Degree	75	76.5
Master's Degree	22	22.4
Doctorate Degree	1	1
Total	98	100
Age Group	Frequency	Percentage
25 years old and below	5	5.1
26-30 years old	49	50
31-35 years old	24	24.5
36-40 years old	8	8.2
41-45 years old	8	8.2
46-50 years old	2	2
56-60 years old	2	2
Total	98	100
Years in Teaching Mathematics	Frequency	Percentage



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Less than a year	4	4.1
1-3 years	24	24.5
4-6 years	34	34.7
7-9 years	19	19.4
10 years and above	17	17.3
Total	98	100
Number of Subject/s Handled	Frequency	Percentage
1 Preparation	34	34.7
2 – 3 Preparations	42	42.9
More than 3 Preparations	22	22.4
Total	98	100

The profile of respondents reveals a diverse group of public junior high school mathematics teachers in Quezon Province, with all 98 participants engaged in teaching mathematics. The geographical distribution shows a significant concentration in Lopez West (40%) and Lopez East (10%), with other towns less represented. Lopez National Comprehensive High School has the highest affiliation rate (20.4%), followed by Jongo National High School (8.2%). Gender distribution is relatively balanced, with 68% female and 32% male respondents. The majority hold a Bachelor's Degree (76.5%), while 22.4% have a Master's Degree, and only 1% possess a Doctorate. The predominant age group is 26-30 years (50%), with fewer participants in other age brackets. Teaching experience ranges widely, with 34.7% having 4-6 years of experience and 17.3% with 10 years or more. Regarding the number of subjects handled, 42.9% manage 2-3 preparations, while 34.7% handle only one.

These findings illustrate a varied demographic among mathematics teachers, with a strong representation from the Lopez areas and a predominantly younger age group. The educational background shows a prevalence of Bachelor's degrees, indicating a potential area for further professional development (Aquino, 2018; Reyes, 2019). The majority of teachers have between 1 to 6 years of experience, suggesting a balance between newer and more seasoned educators (Garcia, 2021). The high proportion of teachers handling multiple subjects may affect their ability to focus exclusively on mathematics, potentially impacting their instructional effectiveness (Villanueva, 2023; Tan, 2019).

This demographic diversity underscores the necessity for tailored professional development programs addressing the specific needs of teachers at different career stages and experience levels (Reyes, 2019; Smith & Brown, 2020). Increasing access to targeted professional development and educational resources could enhance mathematics instruction, as emphasized in the literature (Cruz, 2020; Johnson & Lee, 2022). Given the range of experience levels and educational backgrounds, it is crucial to provide support that meets the unique needs of both novice and experienced teachers (Nguyen & Thomas, 2019; Lee & Yang, 2019). Further research could explore the specific impacts of these factors on teaching practices and student outcomes, guiding more effective interventions to improve mathematics education in the region (Wang & Chen, 2021; Hernandez, 2023).

The data imply that increasing access to targeted professional development and educational resources could enhance mathematics instruction. Given the diverse experience levels and educational backgrounds, it is crucial to provide support that addresses the unique needs of both novice and experienced teachers. Further research could explore the specific impacts of these factors on teaching practices and student outcomes, potentially guiding more effective interventions to improve mathematics education in the region.

Table 2
Teachers Perceived Characteristics as to their Experience

No.	Statements	Mean	Standard Deviation	Descriptive Interpretation
1	Managing of diverse classroom dynamics.	3.95	.709	Proficient
2	Showcasing expertise through flexibility in adapting teaching strategies, methods, and techniques.	4.06	.730	Proficient
3	Creating a positive learning environment for meaningful Mathematics learning experiences for the students.	4.21	.8030	Proficient
4	Enriching professional growth significantly through encountering diverse teaching scenarios.	4.06	.757	Proficient
5	Promoting ongoing development in teaching methodologies	4.06	.744	Proficient

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6	Developing instructional materials appropriate for diverse learners.	4.04	.824	Proficient
7	Honing experience through implementing effective strategies for student engagement and motivation.	4.12	.736	Proficient
8	Serving as a testament to accumulated expertise in navigating classroom challenges with confidence.	4.07	.840	Proficient
9	Evidencing the hallmark in establishing rapport with students and fostering trust.	4.11	.745	Proficient
10	Demonstrating mastery in mentoring through guiding and supporting novice teachers	4.08	.833	Proficient
Overall Mean		4.08	0.77	Proficient

Legend: 4.50 – 5.00 – Highly Proficient; 3.50 – 4.49 – Proficient; 2.50 – 3.49 – Intermediate; 1.00 – 1.49 – Beginner

The data in Table 2 reflect teachers' perceived characteristics regarding their experience in various teaching aspects. The overall mean rating is 4.08, categorized as "Proficient," with a standard deviation of 0.77, indicating a relatively high level of agreement among respondents. Specific statements reveal that teachers perceive themselves as proficient in managing diverse classroom dynamics (mean = 3.95, SD = 0.709) and showcasing flexibility in teaching strategies (mean = 4.06, SD = 0.730). They also rate themselves highly in creating a positive learning environment (mean = 4.21, SD = 0.803), enriching professional growth through varied teaching scenarios (mean = 4.06, SD = 0.757), and developing instructional materials (mean = 4.04, SD = 0.824). Other notable areas include effective student engagement strategies (mean = 4.12, SD = 0.736) and mentoring novice teachers (mean = 4.08, SD = 0.833).

The findings suggest that teachers generally view their experience as proficient across various dimensions of their teaching practice. They feel confident in their ability to adapt teaching methods, create supportive learning environments, and mentor newer colleagues. This perception of proficiency highlights a strong sense of capability and effectiveness among the teachers in their roles.

These results indicate that teachers are well-regarded for their adaptability, professional growth, and classroom management skills. However, the slightly lower mean scores in managing classroom dynamics and developing materials suggest areas where targeted support or additional resources might further enhance their effectiveness.

Research indicates that teachers' proficiency in various teaching aspects is crucial for enhancing educational outcomes and student engagement (Smith & Brown, 2020; Nguyen & Thomas, 2019). The findings from this study highlight the importance of continued professional development and support systems to sustain and build upon the existing proficiency levels observed. This includes addressing specific areas where teachers feel less confident, such as managing classroom dynamics and developing instructional materials (Wang & Chen, 2021; Lee & Yang, 2019). Targeted professional development and resource allocation in these areas could further enhance teachers' effectiveness and improve overall student outcomes.

The data imply that while teachers feel proficient in their teaching roles, there is room for improvement in certain areas, particularly in classroom dynamics and material development. Providing focused professional development and resources could enhance these aspects, leading to even greater effectiveness in teaching and student outcomes.

Table 3

Teachers Perceived Characteristics as to their Participation to Access to Classroom Resources

No.	Statements	Mean	Standard Deviation	Descriptive Interpretation
1	Effective management of textbooks and instructional materials indicates accessible learning resources.	4.1429	.70345	High Level
2	Dedication to excellence is shown through proactive efforts to enhance student learning experiences using supplementary resources.	4.1327	.65232	High Level
3	Leveraging resources for student benefit is demonstrated by seamlessly integrating technology tools into lessons.	3.9592	.71679	High Level



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4	Enriched learning experiences are facilitated by resourcefulness in acquiring specialized equipment or materials for hands-on activities.	4.0306	.77929	High Level
5	Uninterrupted learning is ensured through timely resolution of technical issues related to accessing classroom resources.	4.0102	.73911	High Level
6	Proactive acquisition of grants or funding opportunities demonstrates awareness and access to additional resources.	3.9082	.73340	High Level
7	Resourcefulness is demonstrated through thoughtful selection of print and digital resources catering to diverse learning styles.	4.1531	.75097	High Level
8	Commitment to student success is underscored by advocating for additional resources as needed.	4.2245	.71119	High Level
9	Optimization of classroom resources through collaboration with colleagues reflects a proactive approach to resource access.	4.1429	.73218	High Level
10	Conducive learning environment is indicated by satisfaction with the support and accessibility of resources provided by the school administration.	4.1735	.71832	High Level
Overall Mean		4.08778	0.723702	High Level

Legend: 4.50 – 5.00 – Very High Level; 3.50 – 4.49 – High Level; 2.50 – 3.49 – Moderate Level; 1.50 – 2.49 – Low Level; 1.00 – 1.49 – Very Low Level

Table 3 presents data on teachers' perceived characteristics regarding their access to classroom resources. The overall mean rating is 4.09, categorized as "High Level," with a standard deviation of 0.72. Notable individual statements include high ratings for the effective management of textbooks and materials (mean = 4.14, SD = 0.70) and the dedication to using supplementary resources to enhance student learning (mean = 4.13, SD = 0.65). Teachers also report a high level of resourcefulness in integrating technology tools (mean = 3.96, SD = 0.72) and acquiring specialized equipment (mean = 4.03, SD = 0.78). Satisfaction with the support and accessibility of resources provided by the school administration is notably high (mean = 4.17, SD = 0.72).

The findings suggest that teachers perceive their access to and management of classroom resources as very effective. They feel confident in leveraging resources, including technology and supplementary materials, to enhance student learning. This high level of perceived resource availability and effective management reflects a supportive teaching environment where resources contribute positively to instructional practices.

These results indicate a strong perception among teachers regarding the adequacy and management of classroom resources. Teachers are proactive in acquiring and utilizing resources, advocating for additional needs, and resolving technical issues, which suggests a robust resource environment conducive to high-quality teaching.

Research highlights the essential role of adequate classroom resources and proactive management in enhancing teaching effectiveness and student outcomes (Kumar & Yadav, 2021; Taylor & Miller, 2020). The teachers' high ratings for resource access and management in this study align with findings that suggest effective utilization of resources significantly contributes to teaching success and student engagement (Martinez & Rivera, 2023). This alignment underscores the importance of a well-supported resource environment in fostering high-quality teaching practices.

The data denotes that teachers generally have a favorable view of their access to classroom resources and their ability to manage them effectively. The high levels of perceived resourcefulness and satisfaction with support indicate that teachers are well-equipped to provide a high-quality learning experience. Continued support in maintaining and enhancing these resources will likely sustain and potentially improve these positive perceptions.



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Table 4

Summary Table for Teachers Perceived Characteristics as to their Experience, Participation in Extra Learning and Access to Classroom Resources

No.	Statements	Mean	Standard Deviation	Descriptive Interpretation
1	Experience	4.08	0.77	Proficient
2	Participation to Extra Learning	4.06	0.7378	High Level
3	Participation to Access to Classroom Resources	4.09	0.7237	High Level
Overall Mean		4.08	0.770	Proficient

Legend: 4.50 – 5.00 – Very High Level; 3.50 – 4.49 – High Level; 2.50 – 3.49 – Moderate Level; 1.50 – 2.49 – Low Level; 1.00 – 1.49 – Very Low Level

Table 4 provides a summary of teachers' perceived characteristics regarding their experience, participation in extra learning, and access to classroom resources. The overall mean rating for these categories is 4.08, classified as "Proficient," with a standard deviation of 0.77. Specifically, the mean rating for experience is 4.08 (SD = 0.77), indicating proficiency. Teachers' participation in extra learning has a mean of 4.06 (SD = 0.74), and their access to classroom resources has a mean of 4.09 (SD = 0.72), both categorized as "High Level."

The findings indicate that teachers generally perceive their professional experience as proficient, while their participation in extra learning and access to resources are seen as high. This suggests that teachers not only engage effectively in ongoing professional development but also have a high level of access to resources that support their instructional practices. These perceptions contribute to a positive view of their professional environment and capabilities.

The high ratings across these dimensions reflect a favorable teaching context, where teachers feel supported in their professional growth and resource utilization. This support likely enhances their instructional effectiveness and overall job satisfaction.

Research emphasizes the significance of ongoing professional development and access to quality resources for effective teaching and positive student outcomes (Nguyen & Thomas, 2019; Kumar & Yadav, 2021). The high levels of perceived proficiency, participation in extra learning, and resource availability in this study correspond with findings that suggest robust support systems and resource management greatly enhance teacher performance and student engagement (Martinez & Rivera, 2023; Taylor & Miller, 2020). This correspondence reinforces the crucial role that well-supported professional development and resource access play in fostering a positive teaching environment and improving instructional effectiveness.

The data suggest that teachers are well-supported in their professional roles, with high levels of perceived proficiency in their experience and positive assessments of their participation in extra learning and resource access. Maintaining and further enhancing these supportive factors will likely continue to benefit both teachers and their students.

Table 5

Level of Teachers' Mathematics Affinity

No.	Statements	Mean	SD	Interpretation
	Eagerness to explore diverse mathematical concepts and problem-solving strategies is evident.	4.41	0.65546	Strongly agree
	Intrigued by the beauty and elegance of mathematical principles and patterns.	4.32	0.65167	Strongly agree
	Passion for fostering a deep understanding and appreciation of mathematics in students.	4.47	0.64543	Strongly agree
	Enthusiasm for engaging students in meaningful mathematical discourse and exploration.	4.44	0.61033	Strongly agree
	Dedication to creating a supportive and enriching learning environment that nurtures mathematical curiosity.	4.43	0.62590	Strongly agree
	Commitment to continuously improving instructional practices to enhance students' mathematical proficiency.	4.40	0.63797	Strongly agree



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Excitement about integrating real-world applications and interdisciplinary connections into mathematics instruction.	4.40	0.63797	Strongly agree
Devotion to cultivating a growth mindset and resilience in students towards mathematical challenges.	4.33	0.63855	Strongly agree
Inspired by the transformative power of mathematics to shape critical thinking and problem-solving skills.	4.37	0.67941	Strongly agree
Determination to instill a lifelong love for learning and applying mathematics beyond the classroom.	4.43	0.70345	Strongly agree
Enthusiastic about exploring creative and innovative approaches to teaching mathematics.	4.41	0.67100	Strongly agree
Committed to fostering a growth mindset in students towards mathematical challenges and mistakes.	4.40	0.63797	Strongly agree
Inspired by the connections between mathematics and other disciplines, fostering interdisciplinary learning opportunities.	4.39	0.65224	Strongly agree
Intrigued by the historical and cultural contexts of mathematical concepts, enriching the learning experience.	4.30	0.73512	Strongly agree
Dedicated to providing differentiated instruction to meet the diverse learning needs of all students in mathematics.	4.38	0.69631	Strongly agree
Passionate about empowering students to see themselves as capable mathematicians, regardless of background or ability.	4.49	0.66185	Strongly agree
Excited to integrate technology tools and resources to enhance mathematical exploration and understanding.	4.47	0.66121	Strongly agree
Driven by the belief that mathematics is accessible and relevant to all students, fostering inclusivity in the classroom.	4.50	0.63001	Strongly agree
Engaged in ongoing professional development to deepen understanding and pedagogical knowledge in mathematics.	4.43	0.67350	Strongly agree
Committed to fostering a collaborative classroom culture where students feel supported and encouraged to take risks in their mathematical learning.	4.48	0.67701	Strongly agree
Overall Mean	4.41	0.659	Strongly agree

Table 5 presents the level of teachers' mathematics affinity, with an overall mean of 4.41 and a standard deviation of 0.66, indicating a strong agreement with the statements about their passion and commitment to teaching mathematics. Individual statements show high scores, with the mean ranging from 4.30 to 4.50. The highest scores reflect strong agreement on fostering a growth mindset, dedication to creating supportive learning environments, and a commitment to integrating real-world applications and interdisciplinary connections.

The findings demonstrate that teachers have a deep and enthusiastic commitment to mathematics education. They exhibit a strong desire to explore diverse mathematical concepts, engage students in meaningful discourse, and continually improve their instructional practices. This passion is evident in their eagerness to integrate real-world applications, use innovative teaching approaches, and foster a growth mindset in their students.

These results indicate that teachers' mathematics affinity is exceptionally high, suggesting that their dedication positively impacts their teaching approach and student engagement. Their strong inclination towards enhancing students' mathematical proficiency and their enthusiasm for continuous professional development highlight a robust alignment with best practices in mathematics education.

Research demonstrates that teachers' passion and commitment significantly influence student learning outcomes. Enthusiastic and dedicated educators are more likely to engage students and foster positive attitudes towards the subject, which can lead to improved academic performance and deeper appreciation of the material (Smith & Brown, 2020; Johnson & Lee, 2022). The exceptionally high levels of mathematics affinity observed in this study reflect the literature's emphasis on the vital role of teacher motivation in enhancing instructional effectiveness and student engagement (Wang & Chen, 2021; Lee & Yang, 2019). This strong commitment among teachers is crucial for advancing students' mathematical understanding and ensuring a supportive learning environment.



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The data suggests that teachers possess a high level of mathematics affinity, which likely enhances their effectiveness in the classroom and fosters a positive learning environment for their students. This strong commitment to the subject is crucial for promoting mathematical understanding and student success.

Conclusions and Recommendations

The study underscores the critical role that teachers' experiences, engagement in extra learning, and access to resources play in shaping their Mathematics Affinity and ultimately impacting student learning outcomes. Contrary to the initial hypothesis, these factors emerge as pivotal in enhancing teachers' capabilities to foster a positive and effective learning environment for mathematics.

The findings reveal that teachers exhibit a high level of proficiency in managing various aspects of their teaching practice. They are adept at handling diverse classroom dynamics, developing instructional materials, and engaging in continuous professional growth. This commitment to ongoing learning and effective resource management significantly supports their mathematics teaching practices. Teachers also show a strong inclination towards mathematics, with their enthusiasm and passion positively influencing their teaching methods and student engagement.

Teachers' perceptions of their access to and management of classroom resources are notably positive. They feel confident in leveraging available resources, including technology and supplementary materials, to enhance their instructional strategies. This effective utilization of resources highlights the importance of having adequate support and tools for teaching.

Considering these findings, several recommendations emerge. Tailored professional development opportunities should be provided to address the varied needs and experiences of educators. Such programs should focus on enhancing pedagogical skills, integrating real-world applications, and fostering interdisciplinary approaches. Additionally, establishing mentorship programs can facilitate knowledge sharing and skill enhancement among teachers.

Curriculum improvements should emphasize real-world applications and interdisciplinary connections, ensuring that teachers have equitable access to high-quality resources and technology. Creating a supportive environment that promotes work-life balance and encourages lifelong learning is also crucial. This includes fostering community engagement and providing ongoing support to maintain teachers' enthusiasm and commitment to mathematics education.

Supporting innovative and interdisciplinary teaching approaches is essential. Educational institutions should prioritize comprehensive professional development programs and cultivate an environment that nurtures teachers' passion for mathematics. By addressing these areas, schools can enhance teachers' effectiveness, improve student outcomes, and contribute to a more robust mathematics education system.

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