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NAVIGATING THE ACADEMIC JOURNEY: EXPERIENCES, CHALLENGES, AND COPING STRATEGIES OF EDUCATORS PURSUING A MASTER'S DEGREE

Norveen S. Campanilla

Matucay National High School, Matucay, Allacapan, Cagayan, Philippines

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***Corresponding author:** Norveen S. Campanilla

Matucay National High School, Matucay, Allacapan, Cagayan, Philippines

Abstract

This research examines the experiences, difficulties, and strategies for managing stress that these teachers faced while pursuing their master's degree. In this case, nine (9) math teachers in the Division of Cagayan were selected, all of whom are taking up a master's program in a public graduate school. The purposive sampling method was applied in choosing the participants of this study, and actual one-on-one interviews conducted face-to-face. For the teachers to understand Mathematics aligned in teaching experiences, the master's degree, the Colaizzi method of analysis was used. This analysis reveals that teachers go for postgraduate education both for professional and personal reasons. Professionally, they do it for promotion in credentials, promotion, and leadership. They believe in continuous learning and adapting to the latest education methodologies. Practically, they seek more wages, available jobs, and role models. When teachers experience frustration, the process of improvement continues with new mathematical know-how and instructional strategies. External incentives involve networks for support as well as economic constraints for further study. Mathematics teachers earn a master's for professional development and self-improvement purposes and enter the management hierarchy. Mathematics instructors believe that more study will improve teaching and have an impact on the students. Further education is essential for professional growth, leading, and instructional practice. Future studies on the support system for the masteral degree of Mathematics teachers will be very interesting to research. How these peer groups, mentorship, and institutional support impact performance and retention rates can be researched. Long-term performance of the career in these teachers, career advancement, job satisfaction, and opportunities to lead are also aspects of the study. It also needs to take into account the financial need and incentives in regard to Mathematics teachers' entry into graduate school.

Keywords: Masteral degree, coping mechanisms, challenges, education, Mathematics teachers

1. Introduction

Teaching is a noble profession, and it requires continuous learning. Teachers are expected to have more knowledge than their students; that's why there is a need to continue their professional growth and development by further learning and continuing postgraduate studies. Another challenge is to be updated with all the current trends in teaching. That's why there is really a need to attend seminars and webinars and participate in every training and workshop to be escalated and not to be left behind. Indeed, being a teacher requires sacrifice, time, and effort, which therefore makes it a uniquely challenging profession.

Postgraduate education plays a very important role in improving the professional prospects of educators since it imparts them with advanced knowledge and skills. This pathway of education encompasses numerous degrees and certifications building up from undergraduate studies and allows teachers to expand their teaching horizons as well as adapt to changes in pedagogical demands. According to Menezes (2023), postgraduate programs equip educators with special knowledge to develop a deeper understanding of educational theories and practices. The proof has shown that the students whose teachers have been having continued education tend to achieve better results as well as improved teaching effectiveness. Additionally, Reisdoefer (2024) said that the very dynamic nature of education makes it a never-ending learning process, and master's studies help teachers become equipped with new strategies and ways of doing things. Most programs work on practical implementations so the educators can combine their knowledge with pupil implementation within the classroom environment as found out by Menezes (2023). Experience leads to innovation in teaching designs that can overcome current learning issues. Hence, postgraduate education inspires instructors to perform research and contributes to knowledge in their specific areas as supported by Nemcovsky et al. (2023).

Decisions between higher education and work experience are becoming highly complex for graduates. With the current trend, an increasing number of post-graduate students enroll in schools because a bachelor's degree no longer guarantees attractive employment. This trend indicates that there has been a change in the way people perceive the nexus between education and employability. Factors that determine or influence this nexus include labour market demand and personal aspirations. On the other hand, Higher education might have a direct potential positive impact on employability since most studies show that the unemployment rate of graduates is relatively low compared to those without higher education: 4.9% vs. 12.4% according to Warren (2017). Moving further, Gomide (2023) mentioned that human capital theory indicates that skills and knowledge from higher education improve one's job prospects, yet the point of view is criticized for oversimplification of the relationship between education and employment. According to the research of Liu et al. (2022), Academic Performance Satisfaction, Satisfaction of Major, and Family Support are considered the most crucial factors in determining whether graduates plan to pursue postgraduate studies. Regarding employability after graduation, students undergoing postgraduate studies, which, according to Cook et al. (2021), universities need to provide suitable support and facilities to prepare students for careers better. It is very clear that the labor market is transforming; hence, there should be continuous skill development that requires making vocational education and

training compulsory to fill skills gaps as cited by Profiroiu et al. (2022). Graduates are increasingly appreciating the fact that they must have lifelong learning for competition in an economic globalized world.

On the other hand, enrollment figures increase, while issues on quality or relevance prevail on masteral level programs. That only means that the mere increase in enrollment does not positively impact educational standards or results. This is proof that higher qualifications have a high demand just like in other countries like Chile, where their enrollment in doctorate courses increased by 2,680.5% from 1984 to 2022, according to the "Situation of the offer Doctorate in Education Programs in Chile" (2023). Demand for master's education is rising extremely due to various socio-economic factors, including labor market competition, technological advancement, and a need for specialized knowledge. Jung (2023) and Popa (2022) mention that many graduates today are competing in the market by acquiring a master's degree. More and more, employers are looking for highly qualified candidates, especially those fields requiring specialized skills according to what Namjildorj (2023) founded. The growth still encounters challenges that include ensuring high quality in the education sector because of the multiple needs of students and the distinct needs of employers, as reported by Corvalán et al. (2011). It is essential that the curriculum be continuously improved and that learning resources be available so that the upward trend in enrollment can be maintained while improving outcomes. This misalignment might affect the graduates' ability to find appropriate employment which, again, shows the integration of education and work requirements needs permanent balancing according to Jung (2023).

Masteral education is significant in the development of succeeding personalities, and this is highly developed within management-based activities such as mentoring and supervision. These educational experiences boost professional competencies through valuable insights and support systems crucial for development. According to Wingfield & Wingfield (2023) Mentoring is a valuable component of graduate training, providing professional and career development. Consequently, Good mentoring relationships are based on respect and mutual reciprocity that enhances the learning of both mentors and mentees. A study by Millin et al. (2021) found out that supervision is a critical component of postgraduate studies, and appropriate support mechanisms enhance the quality of academic experience. Benchmarking studies show that students liked the orientation and induction processes, but more importantly, they still had to be introduced to further changes in research. Continuity of feedbacks also needs to be pursued since it enhances the supervisory experience and student satisfaction.

The purpose of this study was to investigate the experiences, challenges, and coping strategies of master's degree-holding mathematics teachers. This study also looked at the thorough investigation of the various approaches, routines, and behaviors of educators.

1.1 Research Questions

This study aimed to explore the experiences and routines of Mathematics teachers attending masteral education. Their experiences, challenges and coping strategies while participating in postgraduate education were considered, and the following questions were asked.

1. What were the previous experiences and factors that prompted Mathematics teachers to pursue masteral degrees?
2. What were the experiences encountered by Mathematics teachers pursuing masteral degrees?
3. What are the plans of Mathematics teachers pursuing masteral degrees?

2. Literature and Hypothesis/es Development

2.1 Mathematics Teaching

Higher education in mathematics is very important since it provides the root of many fields of studies, impacts on the improvement of cognitive developments, and has a value to professionals. Mathematics also enables a student to successfully gain expertise in all fields as well as critical thinking and problem-solving capabilities to promote personal and social developments. Mathematics is essential in the study programs of most disciplines, especially in science, technology, engineering, and mathematics (STEM) fields. In this regard, mathematics is basic to ensure the success of students in those fields. Thus, according to Rocha (2024), "good maths students tend to perform well in school and are likely to persevere in overcoming difficulties in tackling complex issues.". Not only this but also teachers gain success in the process of teaching and learning during mathematics higher education and actually enhance their cognitive skills to share them with their students. According to the study of Class (2023), using advanced mathematics actually enhances students' cognitive ability to fragment the problems that cannot be directly solved so the students make their proper strategy that helps solve it effectively. Mathematics is a manner of learning in which growing and growing understanding of a mathematical concept develops meaningfully and effectively and applies it into new situations, according to Debrenti (2013). Pursuing hence also gives the opportunity of teachers not only professionally but even personally. This was according to Prendergast & Roche (2017), who further pointed out that an education in mathematics leads to several fields of work while especially at the educational fields, for which qualified instructors of mathematics are highly sought after due to the progressive curriculum changes. In these fields, the skills derived from mathematics education benefit individuals as well as serve in personal and economic ways as seen in Rocha (2024). This findings can be also corroborated with the study of Campanilla and Mendoza (2024) on their analysis of pattern on the problem solving of grade 10 students which tells that there should be a need not only for students to make their reading comprehension better to solve word problems but also for the teachers to pursue higher education to find new ways of teaching strategies and methods that could be effective in improving the mastery skills of the students. Similarly, Campanilla (2024) teaching tool and strategy innovation through the use of SIGNS as an effective tool for enhancing mastery skills towards the solution of integers among grade 7 students is a major contributing factor in the discovery of new and innovative styles of teaching, in this case, as teachers, to provide the most possible learning style for the student so that they may achieve or offer what a teacher can deliver through the pursuit of furthering higher education.

2.2 Utilizing Value in Masteral Education

This form of education promotes the delivery and reception of masterly teaching and learning by acquiring knowledge that is

more specialized, advanced, and modern and pedagogical ways in their application. It creates a professional teacher through training to specialize and become in positions of leadership. Through such a program, professional growth is also realized: development through critical thinking, reflection on practice, and continuing lifelong learning. Finally, the teacher will be transformed in their ability to provide even better learning conditions for his/her students. Such significant contributions as a master's education in mathematics makes to professional development, pedagogical skills, and career advance foreground why master's education in mathematics is important for teaching occupations. Overall, graduate programs in mathematics education enrich not only the content knowledge of educators but also their research capabilities and effective teaching strategies, hence raising educational quality. According to Dimla et al. (2022), master's programs offer the opportunity to obtain superior learning, which may bring out the enhancement of mathematics contents and pedagogies, especially for mathematics instructors. Similarly, in a previous study by Prendergast & Roche (2017), it found out that continuous professional development should be encouraged, so, postgraduate qualifications may need to be acquired on reforming the curriculum to facilitate the teaching process or change in the teaching behavior to cope with other possible changes in the students as well. This doesn't only give quality professional developments but also gives advanced promotions in their career advancement. According to Dimla et al. (2022) and Bisognin et al. (2014), graduates of master's programs have greater career opportunities. Those include higher education positions, as well as leadership posts in educational institutions and institutions as a whole. Professional Master's training is a type of ongoing education for teachers, which harmonizes the competencies of teachers with the needs of primary and secondary education. This therefore points to the pedagogical impact of continuing post-graduate education. As relates to this, Andrews & Rowland (2014) demonstrated that programs support reflective practice and the utilization of international teaching strategies. The educators are therefore able to adapt to various cultural contexts. Thus, integrating research into teaching practices is essential, promoting the teacher-as-researcher model to enhance instructional quality. Others counter that effectiveness in master's education may depend on teaching context and the support that comes with a particular institution, meaning not all educators are bound to reap equally the same fruits.

2.3 Education Cost and Task-switch Cost

The education cost to pursue the master's level in mathematics is high. These comprise fees, books, and all other required materials in addition to several other cost liabilities. All these might become too hefty an amount to pay off when paid from one's pocket for the student funding himself for higher education. Task switching also comes at a greater cost since this individual balances' responsibilities both towards academic roles as well as towards other professional and personal responsibilities as well. Stress builds due to continuous changes between various activities, loss of efficiency and burn out due to work overload are other reasons that might become applicable as well. However, the investment usually pays off in the long run as graduates gain more advanced knowledge, improved problem-solving skills, and better career prospects. In the end, despite the challenges, benefits of a master's degree in Mathematics can significantly increase one's professional and personal growth. Master's education in mathematics costs students a mix of direct monetary cost and opportunity cost from

the balancing of student responsibilities with other commitments: these costs become very important considerations to both the prospective student and to the institution. The mean cost for a master's in mathematics varies hugely as the price of programs that are ranging from 0.58 to 7.18 times of minimum wage monthly, averaging to around 3.46 minimum wages as cited by Contabilidade et al. (2014). Cost efficiency varies in public institutions that offer master's level of studies with some showing a perfect way of reducing expenditures, and this was confirmed by Titus et al. (2017). Contabilidade et al. (2014) have also found that students very often experience significant opportunity costs, particularly when studying on a full-time basis and would nearly double the sponsoring burden of financing. That was the case of Edwards (2008), that also discovered that balancing between coursework and teaching or other kinds of professional responsibilities increase their cognitive load that negatively impacted both academic and personal well-being. This financial and intellectual investment in a Master of Mathematics degree is an enormous burden, but such programs help in improving professional development and improve teaching practices, to their advantage both as instructors and students.

3. Methodology

This chapter discusses the study's methodologies, such as research design, participants, instrumentation, and data analysis.

3.1 Research Design

This study utilized a qualitative narrative inquiry approach to explore the experiences of Mathematics teachers attaining a masteral degree. Narrative inquiry is particularly effective in capturing the experiences of mathematics teachers pursuing their master's degrees due to its focus on personal stories and reflective practices. This qualitative methodology allows for a deep exploration of teachers' lived experiences, fostering a richer understanding of their professional development. According to Hegde et. al (2016) and Clandinin (2019), narrative inquiry encourages teachers to reflect on their teaching practices and educational journeys, enabling them to articulate their challenges and successes and by sharing their stories, teachers can identify key moments that influenced their decision to pursue further education, thus making sense of their professional identities.

3.2 Participants

The nine (9) math teachers in the Schoos Division of Cagayan, Philippines, who were pursuing master's degrees at the time this study was done, were the participants. The study participants were selected through the use of purposive sampling. A set of criteria was used to choose the participants. The requirements were as follows: (1) the participant had to have either completed, been pursuing, or be pursuing a master's degree from Cagayan State University; (2) the participant had to have earned at least 18 units in the program; (3) the participant had to have worked for at least three to five years in a public or private school; and (4) the participant had to have taught or be currently teaching mathematics subjects.

3.3 Instrumentation

A semi-structured interview was done by the researcher and every participant went through validation from experts. In addition, focus group discussions for triangulation were tracked and followed up on with the participants' consent using an audio

recorder, a face-to-face interview, online group video calls, and group chat messages.

3.4 Data Analysis

Colaizzi's approach of data analysis was utilized to investigate the interviewees' responses. After that, the data was transcribed. The narrative was then thoroughly described by the researchers using clustering of themes, which they then reduced to a basic structure that the participants validated (Morrow, Rodriguez, & King, 2015). The descriptive character of Colaizzi's method enabled the study to consider the participants' reactions, behaviors, thoughts, feelings, and impressions.

4. Results and Discussion

This chapter presents the discussion and results of analysis and interpretation of data regarding the experiences, challenges, and coping strategies of master's degree-holding mathematics teachers.

4.1. Previous Experiences and Factors that Prompted Mathematics Teachers to Pursue Masteral Degrees

Theme 1. Holistic Professional and Personal Advancement through Higher Education

Higher education is mostly pursued by math teachers in order to support their professional development, increase their degree of expertise in their field, and enhance their teaching methods and approaches during the teaching and learning process. Similarly, to stay abreast of the latest developments in mathematics education, which are mostly focused on enhancing their knowledge and improving their instruction. Many respondents highlighted the desire to enhance their subject matter expertise and stay updated with the latest teaching methodologies.

Participant 1: As a Mathematics teacher, several factors might have prompted the decision to pursue my master's degree. These could include my desire for professional growth, enhancing subject matter expertise, and staying updated with the latest teaching methodologies

Participant 3: Pagnanais na magkaroon ng deeper understanding of mathematics and I want to learn new teaching strategies that will help me in my profession.....

Participant 5: As a Mathematics teacher, I want to improve my teaching skills and learn more about the subject.

Participant 8: I needed to pursue higher education to suffice my efficiency as a teacher and to be updated to the new ways of teaching and learning process.

They mentioned the importance of deepening their understanding of mathematics and improving their teaching strategies. This theme underscores the teachers' commitment to continuous learning and professional development to better serve their students and advance their careers. This finding aligns with studies by Vural and Başaran (2021), which indicate that teachers pursue master's degrees for personal development and professional growth. Further, their initial statements are solely supported by their personal ideologies that such educational attainment could provide advancement in their career and a better ranking status in their employment. A significant number of respondents were motivated by the potential for career advancement and better employment opportunities.

Participant 2: ... I can use it later for promotional purposes.

Participant 3: ...and of course I'm also motivated to pursue my master's degree to increase my salary

Participant 4: ...and the major reason is to be promoted.

Participant 6: For more opportunities such as applying for a higher teaching position ...

Participant 7: ...and it is a big help for me especially sa ranking diba.

Participant 8: Likewise, for promotion purposes na din.

Participant 9: I wanted to have a higher chance to be promoted since ang mga kasama ko ay amy master's degree na.

These participants cited promotion and higher positions as key factors which reflect the practical benefits of obtaining their master's degree, such as increased chances for promotion and securing more desirable teaching positions. This is supported by research from the Midwestern Higher Education Compact (2017), which found that teachers often pursue graduate education to enhance their career prospects and achieve higher salaries. The potential for a salary increase was one of the motivating factors for some respondents in which they explicitly mentioned the financial benefits of obtaining a master's degree. This then illustrates the practical considerations that influence teachers' decisions to invest in further education. The Midwestern Higher Education Compact (2017) also found that financial incentives, such as salary increases, are significant motivators for teachers pursuing graduate education. Likewise, personal fulfillment and the desire to achieve personal goals were also prominent among the participants. Two participants viewed pursuing a master's degree as a way to challenge themselves academically and contribute more significantly to the academic community.

Participant 1: Experiences such as recognizing gaps in content knowledge, the need for improved teaching strategies, or a desire to contribute more significantly to the academic community might have also influenced me this decision and seeing the positive impact of advanced qualifications on student outcomes and career advancement could be a strong motivator.

Participant 7: Beyond professional benefits, pursuing a master's degree was a personal goal that would allow me to challenge myself academically...

Their response highlights the intrinsic motivations of teachers who seek personal growth and satisfaction through advanced education. Studies have shown that personal aspirations and the desire for intellectual challenge are significant motivators for teachers pursuing higher education as cited by Greene et al. (2021). Moreover, support from peers, colleagues, and mentors played a crucial role in the decision to pursue a master's degree. Two of the participants mentioned being inspired by other teachers and receiving encouragement from colleagues and mentors.

Participant 4: I got inspired by the other teachers who finished their master's degree...

Participant 5: Being on the island of Calayan, I felt the need to keep learning to better help my students. The support and encouragement from Sir MJ Tamanu and my colleagues also pushed me to take this step

The response of the participants emphasizes the importance of a supportive professional network in motivating teachers to further their education. Research by Vural and Başaran (2021) also highlights the role of external support and inspiration from peers in motivating teachers to pursue advanced degrees. Overall, the

analysis reveals that Mathematics teachers are driven by a combination of professional, personal, and practical factors in their pursuit of master's degrees. These themes highlight the multifaceted motivations behind their commitment to advanced education and professional development.

4.2. Experiences Encountered by Mathematics Teachers Pursuing Masteral Degrees

Theme 1. Professional and Personal Challenges

a. Balancing Responsibilities

One of the top factors in managing time effectively to juggle teaching duties and academic commitments, and striving for work-life balance, especially when supporting a family are the main challenges encountered by the respondents. Many respondents highlighted the challenge of balancing teaching responsibilities with academic commitments. Four of the participants mentioned time management difficulties, while two of the participants also emphasized the struggle to maintain a work-life balance, especially when supporting a family. This theme is supported by Cervantes and Inlow (2022), who found that graduate students often face significant stress in managing their dual roles as students and professionals.

Participant 1: Pursuing a master's degree as a Mathematics teacher likely involves balancing the demands of teaching with academic commitments. This can include time management challenges, handling coursework alongside teaching responsibilities, and adapting to new research or pedagogical approaches.

Participant 4: Balancing my time at work and doing the academic requirements.

Participant 6: Time management in working as a teacher and studying.

Participant 8: Ang hirap pagsabayin ng career and pag-aaral kasi I really need to be flexible lalo na at may pamilya din akong need isupport...

b. Academic and Professional Growth

Several respondents discussed the academic and professional benefits of pursuing a master's degree. These respondents noted the acquisition of new mathematical concepts and teaching strategies, which contributed to their professional development. Respondents 1 and 7 also experienced moments of professional fulfillment, such as applying new knowledge in the classroom. This aligns with findings from the Midwestern Higher Education Compact (2017), which indicate that graduate education can enhance teaching effectiveness and professional growth.

Participant 1: There may also be moments of professional fulfillment, such as applying new mathematical concepts directly to classroom instruction, collaborating with fellow educators, and conducting research that can improve teaching practices.

Participant 3: I learned new mathematical concepts and new teaching strategies which should be applied during my class sessions talaga.

Participant 7: Pursuing a master's degree while teaching mathematics was a demanding but enriching experience. It pushed me to grow academically and professionally, and it helped me become a more effective and passionate educator.

Participant 9: Well andun yung growth and development towards the teaching and learning process kasi along the way I got to experience new ways of teaching lalo na sa mathematics, and I want to integrate it sa klase...

c. Personal and Professional Motivation

Personal growth and professional motivation were also significant among the respondents. Respondent 7 viewed the pursuit of a master's degree as a personal challenge that pushed them to grow academically and professionally. Respondent 2 found the master's program helpful in refreshing previously learned topics. This reflects the intrinsic motivations of teachers who seek personal and professional development through advanced education, as supported by Greene et al. (2021).

Participant 7: ... It pushed me to grow academically and professionally, and it helped me become a more effective and passionate educator.

Participant 2: It's very difficult because I'm aiming for a higher level. If I didn't need it for a specific purpose, I wouldn't take my master's for now. However, my journey in the master's program has helped a lot in refreshing the topics I had forgotten.

Theme 2. Challenges caused by External Factors

a. Support Systems

Support from professors, colleagues, and classmates was crucial for many respondents. Respondents emphasized the importance of understanding and flexibility from professors, particularly in an online learning environment with internet issues. This underscores the value of a supportive academic community, as highlighted by Greene et al. (2021), who found that support systems are vital for the success of teachers pursuing advanced degrees.

Participant 5: However, my professors have been very understanding, giving me more time for assignments and helping me whenever needed.

Participant 8: One more thing ay sobrang compacted ang activities ng deped that's why minsan di nakakaattend ng klase pero the graduate school professors were very understanding kaya kinakaya pa din.

Participant 9: Likewise mabigat na workloads sa school pero buti nalang kahit madami ring activities and reporting on graduate class my professors were very easy to be talked to and talagang nakapaconsiderate nila.

b. Financial Constraints

Financial challenges were a significant barrier for several respondents. Respondents mentioned the financial difficulties associated with pursuing a master's degree, including the cost of education and the need to support a family. This theme is consistent with research by the Midwestern Higher Education Compact (2017), which found that financial constraints are a common obstacle for teachers seeking advanced degrees.

Participant 3: One thing for sure for me is that the financial, ang hirap kasi andaming need bayaran muna and kailangan magsave pag gusto mo talagang makatapos.

Participant 4: ... Most of it I really find difficult is on financial matters.

Participant 8: ...may pamilya din akong need isupport kaya talaga isa ang financial sa nagpapahirap...

Participant 9: ... pero ang mahirap na kalaban lang ay financial constraints...

c. Technological and Logistical Issues

Another factor that the respondents faced with challenges is with online classes due to internet connectivity issues. Despite these difficulties, the support from professors and classmates helped manage these challenges. This highlights the logistical issues that can arise in online learning environments, as discussed by Cervantes and Inlow (2022), who noted the additional stress caused by technological barriers. Overall, the analysis reveals that Mathematics teachers encounter a range of experiences while pursuing master's degrees, from balancing multiple responsibilities to overcoming financial and logistical challenges, all while striving for academic and professional growth.

Participant 2: One thing for sure that I find difficulties is on my internet connectivity during online classes.

Participant 5: Studying MST-Mathematics at CSU Aparri through online classes has been tough, especially with the internet issues on the island. ... The online setup is difficult, but I've been able to manage with the support of my professors and classmates.

Participant 7: Yung online class is good kasi nababawasan ang fare going to CSU pero syempre sometimes din kasi hindi maganda ang internet connection lalo na fluctuating sya kasi medyo nasa far flung area kami.

4.3. Plans of Mathematics Teachers Pursuing Masteral Degrees

Theme 1. Professional Cultivation

a. Career Advancement and Employment

Pursuing a master's degree can significantly enhance a teacher's qualifications, making them more competitive for promotions and higher-level positions. This can lead to increased job security, higher salaries, and greater professional recognition. Research indicates that postgraduate studies not only improve teachers' pedagogical skills but also open up new career opportunities. This enhancement in qualifications is supported by various studies that highlight the benefits of advanced education for teachers. Dimla et al., (2022) stated that teachers reported that their master's programs enhanced their content knowledge and research abilities, which are essential for career advancement. Further, earning a master's degree often leads to increased job prospects and eligibility for higher-level positions within educational institutions.

Participant 2: For employment talaga.

Participant 3: I'm interested in applying for a higher-level position kahit T3 lang.

Participant 7: I aim to gain a deeper understanding of advanced mathematical concepts, theories, and applications. This will enable me to teach more complex topics with confidence and provide students with a more comprehensive and engaging learning experience. Mostly to promote my ranking status.

Participant 8: I would be a hypocrite if diko sasabihin siyempre una diyan is promotion. Second is that for growth and development.

b. Leadership and Mentorship:

Advanced degrees prepare teachers for leadership roles within educational institutions, enabling them to mentor new teachers, lead professional development workshops, and influence

educational policies and practices. These programs equip educators with essential skills and knowledge, promoting a culture of collaboration and innovation in schools. Makuachukwu (2023) stated that tailored professional development programs have been shown to positively impact teacher leadership skills, enhancing mentoring, collaboration, and decision-making abilities. Which was also found out by Machynska (2022) and Din et al. (2022) that leadership in education is a critical component of effective educational policy, promoting innovative behaviors among teachers and ensuring quality education access and programs like the Teaching Scholars Community of Practice foster reflective practices and mentorship, enabling educators to lead innovative teaching strategies and enhance their leadership identity.

Participant 1: "Future plans for pursuing further master's degrees could involve specializing in areas such as curriculum development, educational leadership, or mathematical research. The aim might be to enhance teaching effectiveness, assume leadership roles in educational institutions, or contribute to policymaking in education."

Participant 5: "I also want to keep studying to further improve myself, and maybe even guide other teachers who face challenges like I do here in Calayan."

Theme 2. Personal Cultivation

a. Personal Growth and Development:

Engaging in further education allows teachers to continuously improve their knowledge and skills, fostering a sense of personal achievement and intellectual fulfillment. This ongoing learning process can also help them stay updated with the latest educational trends and methodologies. Cabanová (2014) and Dhimitri et al. (2014) tackled about the continuous education allows teachers to expand their professional competencies, aligning with current scientific knowledge and societal needs and it is essential for maintaining high standards in teaching, as ongoing training directly influences the quality of education delivered to students. Thus, lifelong learning is increasingly necessary for teachers to adapt to evolving educational demands and technological advancements according to Li (2023).

Participant 5: "I plan to use what I've learned to improve my teaching and help my students more effectively. I also want to keep studying to further improve myself."

Participant 8: "Second is that for growth and development. Need ko ng advancement and update on how I would teach better later which could provide me avenues later."

b. Impact on Students

Teachers pursue advanced degrees to enhance their teaching strategies and methodologies, ultimately aiming to improve student learning outcomes. By gaining deeper insights into their subject matter and innovative teaching techniques, they can create more engaging and effective learning environments. This synthesis of knowledge and skills allows educators to better meet diverse student needs and foster a culture of inquiry. Subramani & Iyappan (2018) and Khairnar (2015) found out that advanced degrees equip teachers with cutting-edge pedagogical techniques, such as hybrid teaching, which combines e-learning with traditional methods and innovative strategies like problem-based learning, simulation, and role-playing are effective in motivating students and enhancing their learning experiences. It was further explained by the researches Chang et al. (2020) and Berces (2023) which indicates

that teachers with advanced degrees positively influence student and school growth, as they apply their enhanced knowledge to improve educational practices and continuous professional development through advanced studies fosters a deeper understanding of subject matter, leading to improved student engagement and performance.

Participant 6: "Applying the knowledge and skills that are acquired in pursuing a master's degree in improving students' outcomes."

Participant 9: "As math teacher one of my main goals in pursuing my master's degree is to learn new concepts, theories, and ways on how to teach math effectively kasi aminin natin o hindi isa ang math sa pinakamahirap ituro."

These explanations and respondent statements illustrate the dual focus on professional and personal cultivation among Mathematics teachers pursuing masteral degrees. They seek to advance their careers and leadership roles while also striving for personal growth and improved student outcomes.

5. Conclusion

This chapter presents the summary of the major findings of the study, conclusions, and recommendations for possible implementation.

5.1 Synthesis

Mathematics teachers are also seen pursuing higher education for professional and personal advancement. On the professional front, most of the teachers advance their qualifications to get more promotions, better positions, and challenging employment. As revealed by the respondents, promotional purposes, salary advances, and getting a more wanted teaching position are the reasons. They further help prepare teachers for leadership responsibilities and leadership roles. Teachers, for example, will be in a position to mentor newly registered teachers, manage professional development workshops, and influence educational policy and practices. As a matter of fact, the teachers are most motivated by continuous learning and personal growth. Teachers will strive to improve their skills as teachers, keep updated with the current trends in education, and have a deeper understanding of what they teach. This motivation for self-improvement is manifested as the desire to improve their teaching strategies and methodologies so as to obtain good results in terms of students' learning. Supporting studies point out that professional development programs are crucial for teachers to improve knowledge and skills, which they can utilize for teaching practices and improve student results. In addition to that, this continuing professional development enables teachers to improve themselves and to enhance better teaching techniques in class. All these aforementioned benefits testify to the multiple dividend outcomes of matriculating into a masteral degree.

5.2 Conclusion

The purpose of this narrative study was to investigate the habits and experiences of math teachers pursuing master's degrees. Emerging themes included the teachers' prior experiences, the reasons for their decision to obtain a master's degree, their doctoral education experiences, and their future aspirations. A review of the findings led to the following conclusions:

1. The results show that math teachers take postgraduate education both for professional and personal purposes.

From a professional perspective, they want to advance their credentials, get promoted, and take leadership roles because of a desire to advance their careers and seek better working opportunities. In their view, they have to look deeper into the subject matter to enhance the strategy of teaching and updates to the latest methodology in education. This approach has shown to constantly improve continuous learning and consider the development and skills in a person. In the practical outlook, higher salaries, job opportunities, and co-workers and mentors support this step also. Multifaceted motivations reflect teachers' commitments to their personal and professional development, much like studies conclude that advanced education is a must for individual and professional development.

2. Plenty of professional and personal challenges exist in pursuing masteral degrees among mathematics teachers. Among them is balancing the critical teaching duties with academic commitments and keeping a balance between work and life-particularly if there are children to support. Despite all these hurdles, academically and professionally, they grow through acquiring new mathematical concepts and teaching strategies that enhance their professional development. The push factors can be of both personal and professional interest, like a need for personal development and the inherent challenge in advanced education. External factors, such as support systems from professors, colleagues, and classmates, are important factors in being able to cope with these challenges, particularly online environments where technological issues have marred their operations. The fiscal restrictions provide a vital hindrance, and thus fiscal support is imperative to facilitating advanced education. Overall, the experiences of Mathematics teachers underscore the fact that attaining advanced education is multifaceted but incorporates the fine balance of responsibilities, opportunities for growth, and external support.
3. Mathematics teachers pursue master's degrees primarily for professional growth and development and personal improvement. Professionally, they do so for higher qualifications, promotions to more responsible positions, advancement up the corporate ladder, and job security. Advanced studies prepare them for leadership positions and enable them to take charge of mentoring new teachers and impacting educational policies. For the teachers, learning never ends, for personal achievement and keeping abreast of the latest in the education world is of prime importance. This ongoing education will help them develop better teaching strategies as they move along, and, in turn, make a positive impact on the students. The research supports these reasons. Further education is still a boost of professional progress, leadership, and instructional practices.

5.3. Limitation

Participants at the master's level emphatically targeted a Master of Science in Teaching with a specialization in mathematics. However, if participants follow degrees in fields related to their experience, for instance, teaching languages or literature, science education, educational administration, or educational management,

then results may differ. Comments from the participants suggest that they were doing a degree course in educational management mainly because they hoped to become principals one day. It would be also worthwhile for the purpose of comparative analysis to consider the experiences of teachers working in public or private higher education institutions doing postgraduate studies.

5.4. Recommendations

The identified limitations yield several recommendations for future research. The first one calls for an in-depth study of the impact of support systems on the ultimate success of Mathematics teachers with masteral degrees. Hence, further studies should look at how different kinds of support, such as peer groups, mentorship programs, and institutional assistance, may have effects on academic performance and retention rates. With this kind of knowledge, it may be possible for educational institutions to provide more appropriate forms of support to teachers during their return to school programs.

The long-term career performance of Mathematics teachers after earning masteral degrees is also considered vital in this study. For example, studies can identify whether the master's degree has an influence over career advancement, job satisfaction, and opportunities for leadership as compared to those who do not hold an advanced degree. Such research would inform a researcher about the advantages of advanced education of the teachers' career tracks.

Relatedly, the financial constraints that limit Mathematics teachers' access to graduate school as well as incentives for doing so should be addressed. Research may be conducted into specific financial constraints imposed on such teachers and the effectiveness of different financial support mechanisms, including scholarships and grants, which could help understand these factors.

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