

An Investigation of Teachers' Perceptions on Parental Involvement in Teaching and Learning Mathematics

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Abstract:

Parental involvement is the foundation stone of academic success. When parents interact with teachers and with their children to encourage mathematics learning, it builds a positive relationship that leads to better teaching and learning. Previous studies indicated that parental involvement affects learners' achievement. However, less is known about the effects of teacher perceptions of parental involvement on learners' mathematics achievement in primary school. The critical problem to be explored is teachers' perceptions toward parental involvement in learning mathematics. This paper investigates teachers' perceptions of parental involvement in teaching and learning mathematics. This study was guided by the following central question: What are teachers' perceptions of parental involvement in teaching and learning mathematics? The study used a qualitative exploratory case study design. Purposive convenience sampling is used to select research participants. The participants in the study are 18 junior primary teachers in Windhoek, Khomas Region, Namibia. Questionnaires and semi-structured interviews were administered to eighteen (18) teachers from selected schools located in Windhoek to explore teachers' perceptions of parental involvement in teaching and learning mathematics. The study's findings revealed that lack of parental support is one factor affecting the learners' achievement in mathematics, and the teachers need training on effectively involving the parents in learning mathematics. The anticipated contribution of the study is to motivate teachers and parents to collaborate in developing appropriate mathematical knowledge in children to understand mathematics concepts, to apply them in solving everyday problems and to encourage parents to support their children's mathematics learning, to equip parents with the necessary resources and skills for mathematics should we be faced with another disruption like the Covid-19 pandemic or exist in the future and for them to develop appropriate mathematical knowledge.

Keywords: Teachers' perception, teaching, learning, Mathematics, parental involvement

Introduction

Parental involvement is the actions parents perform to enrich their children's school achievement in

collaboration with teachers and other school staff (Mcneal, 2014). Parental involvement is a main factor for learners' achievement in primary school settings, specifically for learning mathematics. Parents can be perceived as their children's first teachers, and numerous parents are unwilling to relinquish this title even when their children start school. Parents are generally dynamic participants in children's formal education, encouraging social, emotional, and academic development (Green, Walker, Hoover-Dampsey & Sandler, 2007; Kalayci & Ergül, 2020). Children begin to learn from the womb of their mothers.

Moreover, with the knowledge of parents' beliefs and attitudes about parental involvement in the school's structure of the parental role, schools may be able to design and implement adequate parental involvement programs or initiatives that would address significant obstacles that parents need to overcome to be able to become effective contributors to their children's mathematics education (Wilders, 2017). As a consequence, parental involvement also promotes achievements in mathematics. Furthermore, Anderson (2000) suggests that parents' active involvement in children's education improves their academic achievement and cognitive growth. The study explored the teachers' perceptions of parental involvement in teaching and learning mathematics. The study has been guided by the central question of teachers' perceptions of parental involvement in teaching and learning mathematics. Thus, this study aims to describe the teachers' perception of parental involvement in teaching and learning mathematics in the Junior Primary phase.

Statement of the Problem

Africa has reported poor mathematics performance among their learners (International Mathematics Union Report, 2014). According to the Organization for Economic Cooperation and Development (OECD), mathematics is a stumbling block for most learners (OECD, 2014). Like many other countries, in Namibia, mathematics is a compulsory subject in Pre-primary to grade 12 curricula because of its influence and practical value in everyday applications (Hamukwaya, 2019). However, Hamukwaya (2019) continued to state that in the last three decades, since Namibia's independence in 1990, most learners have performed poorly in mathematics. Moreover, writings on mathematics education in Namibia emphasised various causes that lead to poor performance, comprising learners' difficulties in learning mathematics and learners' recorded low academic achievements in mathematics over the years (e.g. Haimbodi, 2019). Recent studies indicate that learners spend significantly less time on schoolwork during the COVID-19 lockdown than they would when attending face-to-face classes at the school (Andrew et al., 2020; Green, 2020) and that numerous parents feel inadequately equipped to help the learners with mathematics content (Bol, 2020). Thus, due to the lockdown during the COVID-19 pandemic, learners were kept home, and teaching and learning mathematics was supposed to continue with parents during COVID-19. Hence, post-COVID-19 teachers' perception of parental involvement in teaching and learning mathematics at home is significant for this study. Even before COVID-19, many learners performed below grade level in mathematics due to unfinished learning from prior grades. The critical problem to be explored is the teachers' perceptions toward parental involvement in learning mathematics.

Literature Review

The literature review for this study focused on the importance of parental involvement in general and specifically in teaching mathematics concepts and teachers' perception of parental involvement in teaching and learning mathematics in the junior primary phase.

Importance of Parental Involvement

Parental involvement is tremendously significant in education (Chen, 2018). Parental involvement is fundamental for a child's academic success, and schools, staff members, state authorities, and lawmakers play some vital roles in the success of a child (Berkowitz et al., 2017). When all the stakeholders come together to assist learners, there is remarkable longevity in the learners' schooling and the adoration that the learners have for their education (Flemmings, 2013). It should be noted that the time and effort the parents invest in their child's education have a positive relationship with academic performance (Votruba-Drzal, Bachman, & Nokali, 2011). Parental involvement in the educational process can significantly impact learner achievement/or success (Kohn, 2013). Learners are more likely to finish school when parents are involved in their child's education.

Furthermore, Kooy (2012) stated that most people think parental involvement is the primary way to improve schools. Hence, Jurado (2014) noted that parental involvement is one of the most critical factors. Parental involvement is the only most tremendously significant element of learner achievement, according to the executive director of external communications for Miami-Dade Public Schools, John Schuster (McBane, 2017). As Newchurch (2017) indicated, for learners to progress or succeed in school, it is essential to boost parental involvement, which must be active. In one study, two-thirds of the parents surveyed reported that their involvement is necessary to help boost their child's academic performance (Public Agenda, 2012). Parental involvement is crucial at all educational levels, from pre-primary to secondary education (Oates, 2017). In addition, parental involvement plays a vital role in a child's development and education. It has numerous benefits and is widely recognised as essential in promoting positive outcomes for children.

Consequently, parental involvement significantly impacts the bond between the learners and their parents, their creativity, their emotional well-being, and their interest in learning in school (Kohn, 2013). Consequently, many tremendous researchers have found that parental involvement positively affects learners' academic performance (Murray et al., 2014). Altogether, parental involvement is associated with improved academic performance. When parents actively participate in their children's education, it reinforces the value of learning, creates a supportive environment, and encourages higher educational aspirations.

Parents' Involvement in Teaching Mathematics Concepts

The area of parental involvement and contribution has been inspected in numerous studies (e.g. Zhou, Zhou, & Traynor, 2020; Kelley, 2020; Civil, 2020). In a broad spectrum, increasing children's education, academic performance, and achievements is a crucial goal at all levels of education, and the parents are considered to be one of the main influencing factors. Parents are the children's first teachers since learning begins at home, though some parents may need training to assist with the content of school subjects, especially mathematics. Moreover, Weerasinghe (2019) writes that "it is the involvement of parents with their children's education at home that is most likely to result in a positive difference to academic outcomes" (p. 755). However, parental involvement, particularly in junior primary education, is desirable because children whose parents are involved in their education exhibit increased motivation and higher levels of self-esteem. Parental support and encouragement foster a sense of belief in their abilities, leading to greater confidence and a positive attitude toward learning. Thus, involvement has been linked with positive results (Gomes, 2015) concerning academic performance, interaction, and coping with students'

behaviour (Panaoura, 2021).

Furthermore, mathematics is perceived as a significant beginning ability, and parents are perceived as a fundamental wellspring of numerical turn of events (Rahmawati & Amri, 2020). Hence, parents' involvement positively impacts children's mathematics learning at an early age, and at that point, it will lead to accomplishment later on. Even so, the methods of parent-child cooperation which can uphold the advancement of early numerical abilities in children should be inspected entirely, for example, arithmetic learning encounters (Rahmawati & Amri, 2020)—these utilisations to improve learning strategies for understanding numerical information acquired at home.

Educators need to see how mathematics learning is advanced by younger learners' commitment to playing and how best they can uphold that learning and understand the school-home relationship in the furtherance of mathematics teaching and learning during COVID-19 lockdowns. Along these lines, parents can assist their children with augmenting their learning by helping them address and ponder their encounters. Parent involvement in the junior primary phase of mathematics significantly improves educational and non-educational results in younger learners (Koch, 2018). Parental involvement is a state where parents are unswervingly involved in their children's education. However, parental involvement includes different options, such as the perception of support, organisation, interest in the educational process, expectations, school relationships, and time for help with homework (Veas et al., 2018). Recent studies (e.g. Rahmawati & Amri, 2020) indicate that learners with lower academic results have parents characterised by a more controlling style of raising children. Parents of learners with more learning difficulties in primary education tend to show more controlling behaviour in secondary education (Panaoura, 2021).

Teachers' Perception of Parental Involvement in Teaching and Learning

Here, the researchers explored teachers' perceptions of the impact of parental involvement on learner success in mathematics and on the practical strategies that can be used to increase parental involvement at a school. Parents can be viewed as the primary instructors of their children, and a few parents cannot relinquish this work when their children start school (Kalayci & Ergül, 2020). Teachers' efforts alone are inadequate to sustain learners' academic achievement and growth. Thus, past studies confirmed that parents' "participation in their children's early learning can lead to better reading, understanding, and language skills" (Al-Fadley., Al-Holy & Al-Adwani, 2018). However, Beard (2017) concludes that parental involvement is essential for learners' achievement in school because when parents are involved in school activities, it can enhance children's learning and school experiences. Göktürk and Dinçkal (2017) have highlighted that teachers and parents may have different viewpoints about parental involvement as teachers, in their study, regarded parental involvement as the support given by parents to children during home activities such as homework or projects while parents desire to have a voice in educational decisions. As such, the incompatibility between parents' and teachers' perspectives decreases the efficiency of their partnership (Göktürk & Dinçkal, 2017). In addition, in the study on teachers' perspective on parental involvement, Pakter and Chen (2013) suggest that teachers who are aware of the importance of parental involvement employ several strategies for improving parents' involvement in education, such as calling and e-mailing home, sending newsletters home, setting up websites for parents to follow their children's progress, etc., which highlights the significance of increasing teachers' awareness on the importance of parental involvement.

The perceptions of junior primary teachers may provide an understanding of the present level of parental involvement and the significance of parental involvement in school activities in primary grades, and they may assist in looking at how school administrators and teachers can employ parents more efficiently in partaking in school-related activities. The teachers recognise the significance of parental involvement; however, their statements show that they do not make any particular effort to foster parent-teacher partnerships (Kalayci & Ergül, 2020). Schools, parents, and the community must work together to ensure that all children reach their academic potential. For example, homework, studying, and projects all occur in the home realm under parental supervision and guidance; thus, parental involvement is influential (Young, Young, & Hamilton, 2013).

Theoretical Framework

The theoretical framework for this study was established from the principles asserted in the Epstein framework because it consists of significant components necessary to conceptualise family and school partnerships, which can lead to better learners' mathematics performance and the social capital theory. The two theories are integrated because Epstein's framework, first and foremost, emphasises different types of parental involvement, such as home-based, school-based, and community-based activities (Epstein, 2001). On the other hand, Social Capital Theory adds an extra layer by considering the various resources parents can access through their social networks. This could consist of relationships with other parents, community organisations, or educational professionals who can provide support, information, or coaching opportunities related to mathematics education (Bourdieu, 1986).

Methodology

This section will outline the research design, data collection procedures, and analytical methods used to address the research questions or objectives of the study.

The Research Design

A qualitative design well-suited this study in exploring the complex phenomena and gaining a deep understanding of the context of teachers' perceptions of parental involvement in teaching and learning mathematics in the junior primary phase.

Participants

The participants of this study are eighteen (18) junior primary school mathematics teachers who work at different schools in Windhoek, Khomas region. Purposive convenience sampling is used to identify research participants. Since researchers aim to reveal teachers' perceptions of parental involvement in teaching and learning to junior primary learners, researchers incorporated the teachers working in different primary schools into the study. The study used a qualitative exploratory case study design.

Instrument

To answer the research question: *What are the teachers' perceptions of parental involvement in teaching and learning mathematics?* a Google questionnaire was used to collect the data from junior mathematics primary teachers, including five open-ended questions created by the researchers. The questionnaire items focused on the following objectives.

1. Factors affecting the learners' achievement in mathematics.
2. Significant factors affecting learners' mathematics achievement caused by parental involvement.

3. Parental involvement in their children's learning of mathematics.
4. Strategy used by teachers to make parents get involved in learners' mathematics education process.
5. Teachers' Training for further knowledge on parental involvement in mathematics.

The table below displays the biographical profiles of the teachers who participated in this study.

Table 1 Biographical profile of participants

Number of participants	18
Age range	-30=61.5% 30-40=30.8% 40+ 7.7%
Gender	Female= 84.6% Male= 15.4%
Years of teaching experiences	-5=69.2% 5-10=23.1% 10+ 7.7%

Data Analysis

The data collected were analysed using the manual thematic approach. Five themes were identified as factors that affected the learners' mathematics achievement, parental involvement as a significant factor affecting learners' achievement in mathematics, involvement of parents in their children's learning of mathematics, strategies to make parents get involved in learners' mathematics education process and training for further knowledge about parental involvement in mathematics. This qualitative research required the researchers to analyse the data descriptively because it was collected in a virtual setting. The data analysis process enabled the researchers to find answers to research questions. The results from the data collection are interpreted and written in a report form to determine the participants' perceptions of parental involvement in teaching and learning mathematics.

The author(s) confirm(s) that the study received an ethical clearance approval (Reference number: HS22/3/13) by the Humanities and Social Science Research Ethics Committee of the University of the Western Cape according to the research integrity rules (Date of Approval: May 26, 2022). All participants consented to participate in this study.

Results

This study investigated the participants' perceptions of parental involvement in teaching and learning mathematics through the answers provided by the participants to five open-ended questions. The inductive content analysis revealed five emergent themes about parental involvement in the answers provided by the mathematics teachers who participated in the study. A summary of the emergent themes is illustrated in Table 2.

Table 2 Emergent themes

Themes
1. Factors that affected the learners' mathematics achievement
2. Parental involvement as a significant factor affecting learners' achievement in mathematics
3. Involvement of parents in their children's learning of mathematics
4. Strategies to make parents get involved in learners' mathematics education process
5. Training for further knowledge about parental involvement in mathematics

The first theme, factors that affected the learners' mathematics achievement, has emerged primarily in participants' answers to the questions regarding what influences the junior primary learners' achievement. The second theme, parental involvement as a significant factor, refers to the teachers' opinions on whether they think parental involvement is an essential factor affecting learners' achievement. The third theme, the involvement of parents in their children's mathematics learning, describes parents' attempts to engage in their children's teaching and learning mathematics from the teachers' perspectives. The fourth theme,

strategies to involve parents in learners' mathematics education process, refers to teachers' initiatives for engaging parents in learners' teaching and learning of mathematics. The last theme, training for further knowledge about parental involvement in mathematics, relates to the teachers' possible need for training to increase their awareness of the role of parental involvement and collaborate with the parents more efficiently. Thus, The study's findings revealed that lack of parental support is one factor affecting the learners' achievement in mathematics, and the teachers need training on effectively involving the parents in learning mathematics. These themes will be discussed in detail in the following section.

Factors that affected the learners' mathematics achievement

Below is a Stacked bar chart representing factors affecting the learners' mathematics achievement, supported by the teachers' perspectives.

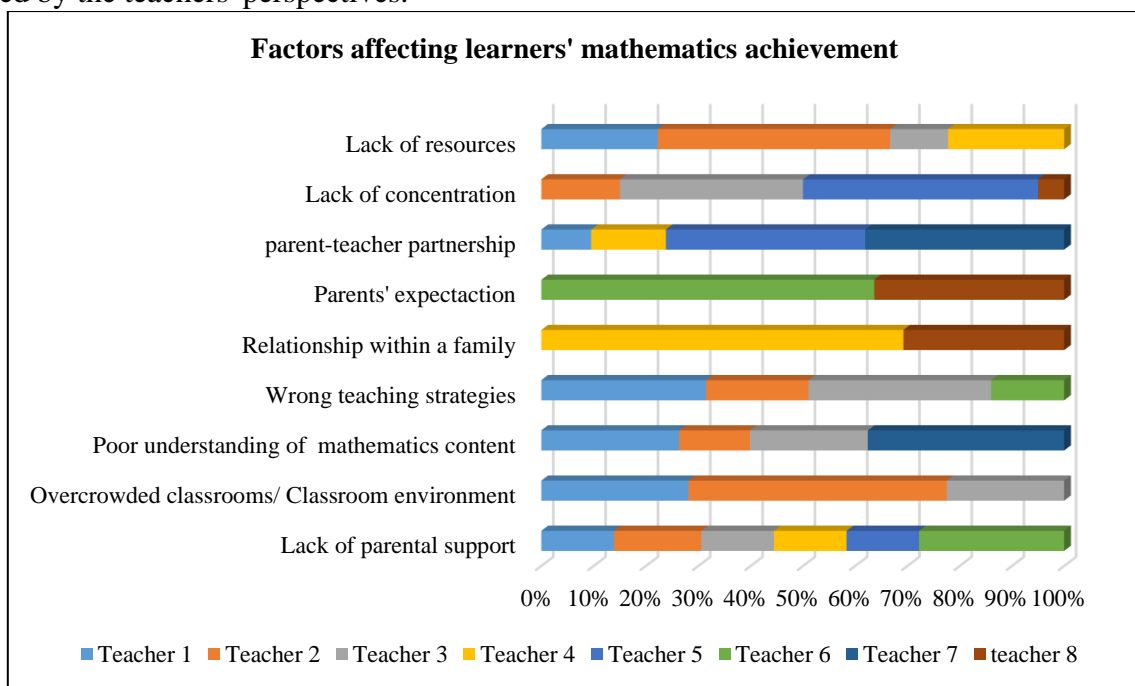


Figure 1. Factors affecting learners' mathematics achievement.

The analysis exposed that the teachers who participated in the study revealed that many factors affected the learners' achievement in mathematics, such as lack of parental support, overcrowded classrooms, the class environment, wrong teaching strategies, lack of understanding of the mathematics content, lack of resources and lack of concentration due to hunger. The main factors linked to parental involvement have been identified and discussed by most of the teachers as participants. The participants addressed parental involvement, parent-teacher partnership, and parents' expectations. The following excerpts show the results from the teachers expressing the factors that affected learners' achievement. According to Teacher 1, there is a *poor understanding of several primary factors and a lack of different approaches to teaching computation*. In addition, Teacher 3 states that a *lack of support from parents or guardians can affect the learners' achievement*. The researchers concur with this teacher because support can lead to discouragement and minimum performance.

Moreover, Teacher 2 stresses the absence of parents' support, the fact that they think the teacher's support *is enough when it is not*. Furthermore, Teacher 2 continues to state the relationship within a family: sometimes a child comes from a broken home, affecting the child emotionally and leading to poor

performance. In addition, if teachers do not talk to learners with respect and treat them as their children, for instance, a teacher calling a learner ill names like stupid and so forth, it can affect the learner's performance because such a learner will always feel intimidated and not accessible to learn.

Parental involvement is a significant factor affecting learners' achievement in mathematics.

In the next section, we looked at the pie chart that displays participants' answers on whether parental involvement significantly affects learners' mathematics achievement.

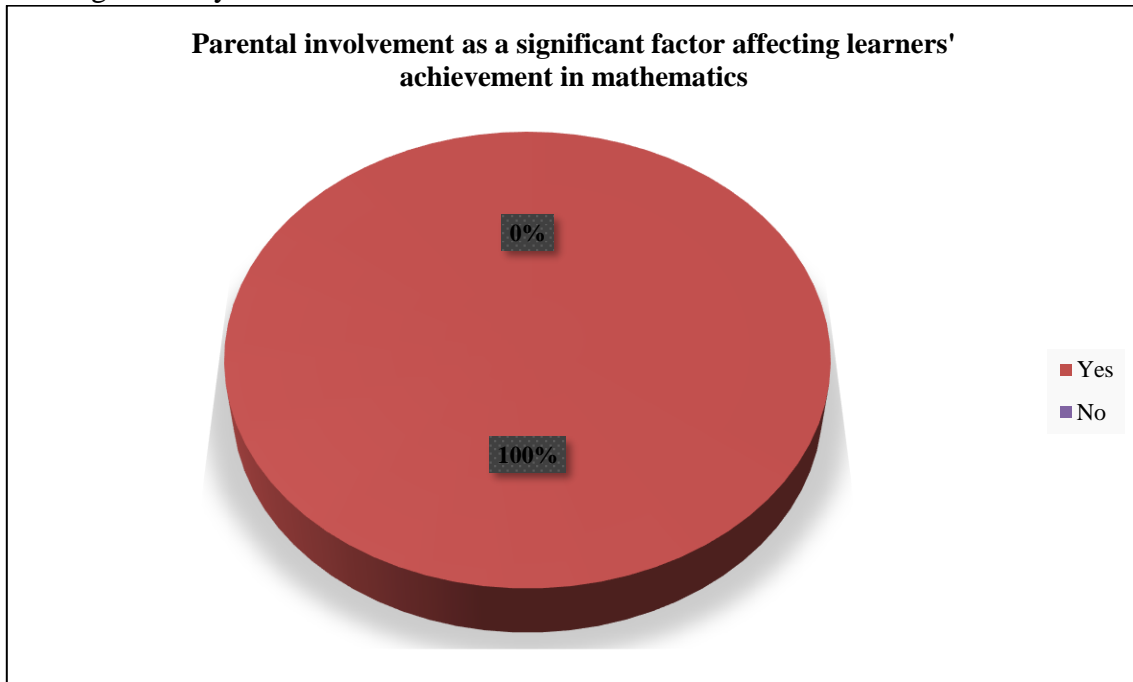


Figure 2. Pie chart confirming parental involvement as a significant factor affecting learners' achievement in mathematics.

All the teachers confirmed that parental involvement is a significant factor affecting learners' achievement in mathematics.

A study (Göktürk & Dinçkal, 2017) revealed that teachers believe cooperation between school and parents fundamentally influences students' academic achievement. Moreover, Niehaus and Adelson (2014) acknowledged the significance of parental involvement in students' development. For this reason, parental involvement is essential for teaching and learning mathematics. The research question: Does parental involvement significantly affect learners' mathematics achievement? Explain. All the teachers provided a "yes" answer for many reasons. The researchers admittedly agree with the participants. However, the following quotes reveal the reasons and explanations for the participants' yes reply: Teacher 4 stated that *yes, parents' involvement is another or one of the factors that affect learners' achievements since some parents only believe it is only the teacher who can teach their child. They had no other role to play.*

However, teaching and learning mathematics is not the sole duty of a teacher to impart knowledge to learners. Furthermore, Teacher 5 confirms that *parents doing learners' homework for mathematics on their behalf is another major factor affecting learners' achievements, which causes them to be poor, as a learner needs to be helped by parents to understand.* On the other hand, Teacher 7 differs in saying yes; *parents serve as role models and guides in encouraging their children to pursue high educational goals and*

desires by establishing the educational resources in the home and holding particular attitudes and values towards their children's learning. Teacher 8 agrees with Teacher 7 to say *yes* because *once the parents support a learner, he feels motivated and tends to develop an eagerness to learn*. Moreover, Teacher 8 also agrees to communicate "yes" because it reinforces continuous learning by helping with homework and other school-related stuff. Teacher 9 added that *a parent's interest and encouragement in their child's education could positively impact their attitude toward school, classroom behaviour, self-esteem, absenteeism, and motivation, resulting in a good performance*. In line with what Teacher 9 said, Teacher 10 agrees that *learners perform better when they receive support and encouragement from their parents. If parents are present, more than the support the learners get from teachers is needed for better achievement*. Also, teacher 11 added that, *yes, because the moment the parents are involved in the child's education, they can know their kids' progress and motivate them every time they do poorly on a test*. In addition, Teacher 12 positively agrees that *parental support and encouragement matter the most*. Teacher 12 further continues to say that when parents are involved in their children's education, it helps them appreciate education. Teacher 13 agreed with Teacher 12 by stating that *education is based on three pillars: teachers, parents, and learners*.

Furthermore, Teacher 13 established that *if parents are not involved, for instance, they are drunkards, which can make their child underperform because they will not have time to assist their child with school work*. In line with what Teacher 13 has said, Teacher 14 said that learners without parental involvement tend to perform very poorly compared to those who do. Teacher 15 agreed that lack of parental involvement leads to failure, and Teacher 16 concurred with Teacher 15 that *if a child does not get help from home, it is most likely that the child's performance is affected, plus parents are the third stakeholder in education*. Beard (2017) concludes that parental involvement is essential for learners' achievement in school because when parents are involved in school activities, it can enhance children's learning and school experiences. From the data presented here, it becomes clear that parental involvement significantly affects the learners' achievement.

Involvement of parents in their children's learning of Mathematics

Below is the table to show how parents are involved in their children's mathematics learning.

Table 3 Parental involvement in children's mathematics learning

Teacher	Parental Involvement in Children's Mathematics Learning
Teacher 17	"Some parents review their children's mathematics books to assess their performance and identify areas where they need help. They assist accordingly."
Teacher 18	"Parents help their children with homework and explain concepts they may not have understood in the classroom."
Teacher 3	"The level of parental involvement depends on the parents' education and experience. If parents lack knowledge, the child's learning may be neglected, and they may face pressure to achieve good results."
Teacher 5	"Some parents complete their children's homework for them, although it is not the ideal approach. Instead, parents should guide their children in completing their homework."
Teacher 8	"Parents assist with homework, attend parent meetings to track their child's progress, and incorporate mathematics into daily activities such as cooking and shopping."
Teacher 9	"Parents unknowingly support their children's mathematics learning by engaging in activities that involve counting, measuring, comparing prices, and estimating"

	quantities.”
Teacher 10	“Parents and children learn and understand mathematics concepts by reviewing homework together.”
Teacher 14	“Parents indirectly assist children with mathematics by incorporating numerical tasks into everyday situations, such as counting animals or arranging objects by size.”

Parents can be viewed as the primary instructors of their children, and a few parents cannot relinquish this work when their children start school (Kalayci & Ergül, 2020). Teachers' efforts alone are inadequate to sustain learners' academic achievement and growth. Thus, past studies confirmed that parents' participation in their children's early learning could lead to better reading, understanding, and language skills (Al-Fadley., Al-Holy & Al-Adwani, 2018). Parents send children almost every hour in the house, telling them how many things they need to bring, the size of something, and how many spoons of salt to use when baking. The involvement of parents depends on each family.

Strategies to make parents get involved in learners' Mathematics education process

The following table serves as a concise strategy for getting parents involved in learners' mathematics education process.

Table 4 Strategies to involve parents in learners' mathematics education process

Teachers	Strategies
Teacher 3	“A strategy that can be used to get parents involved in learners' mathematics education is by ensuring that parents end the tendency of doing learners' work on their behalf and also to help always where they can.
Teacher 18	“Giving homework that requires parents to be hands-on and involved with their learners' education process.”
Teacher 16	“Parents should use new-age fun methods for practising mathematics, such as Manga High, an app that consists of mathematical games that their child may use in their free time instead of watching television.”
Teacher 14	“Make time with their children and go through the school work together, for instance, helping with projects and assignments, assisting learners in collecting bottle tops, buying toys that help learners learn math while playing, for example, puzzles, encouraging parents to give their children different riddles to solve.”
Teacher 15	“Parents to visit the lessons and be part of them and caution them to use math language at home, tell them to say numbers correctly rather than roughly, e.g. "omilongombali nambali and not mbali na mbali” (22 is pronounced as twenty-two and not two-two).

According to Göktürk and Dinçkal (2017), school and teacher strategies are the predictors of parental involvement. Thus, this theme is vital for the study. The question: Do you use any strategy to make parents get involved in learners' mathematics education process? Explain. Participants were expected to share the strategies they use to make parents get involved in the teaching and learning of their children. Most of the teachers occasionally invite parents to come and see how their children are doing in school and also brief them that mathematics is used in everyday life and, therefore, must practice it at home by making children do the work as per their instruction and correct them when they are wrong. When children get mathematics homework, they must help learners develop a few examples related to the question. In addition to those strategies, the parents give learners mathematical problems to solve using their strategies and reasoning.

From the result above, we can tell that most participants answered “yes” and indicated their strategies. On the other hand, few gave a negative answer like no or not sure. It is seen in the following quotes: Teacher

11 was not sure if it was a strategy but communicated with them on WhatsApp group, encouraging them to assist with math homework, and similarly, Teacher 13 said that *do not know how to go about it* and Teacher 18 admittedly that *do not have any idea on the strategy to use*. The results show that the teacher's standard strategies are sending homework and WhatsApp group communication.

Training for further knowledge about parental involvement in mathematics

The pie chart below displays the teachers' need for training to gain further knowledge about parental involvement in mathematics.

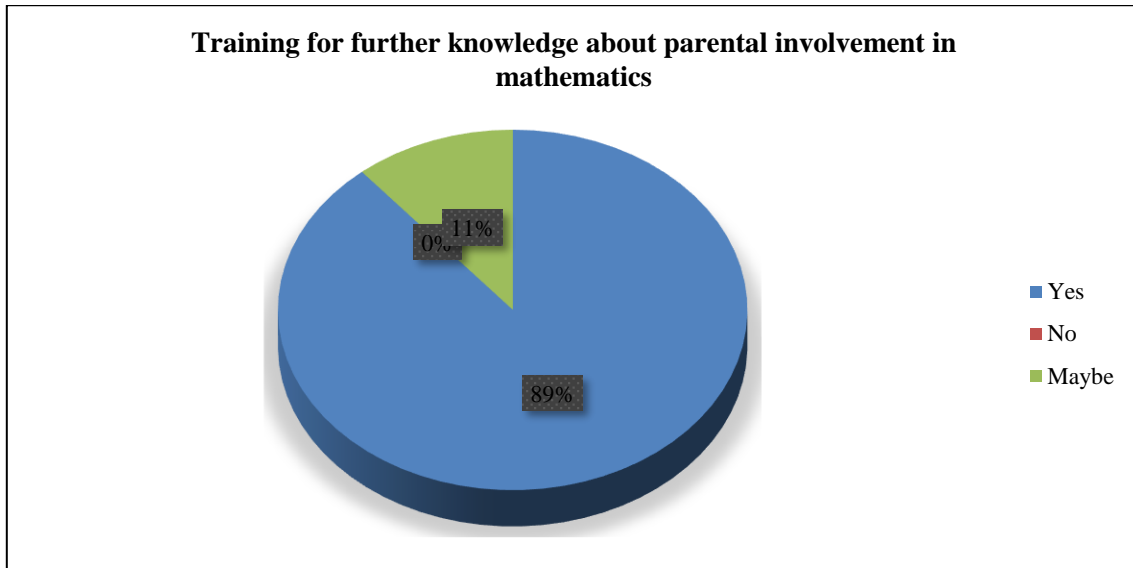


Figure 3. The pie chart shows the need for training for further knowledge of parental involvement.

Most participants indicated that they needed training for further knowledge of parental involvement. It is proved by their respondents as quoted: Teacher 13 admittedly that *one can get more ability on approaching them and making them understand without an argument*. All the same, Teacher 14 also states that *teachers require training to understand better how to engage parents in their children's education because some parents still need to be motivated enough and need to know how important it is to be involved in their child's education. Teachers also need to gain the skill to connect well with parents*. In the same vein, Teacher 15 argues that *the parents' involvement plays a significant role in the progress of a child and with the child knowing that their parents are constantly involved with their progress, they will strive to do better every time*.

Moreover, Teacher 16 agrees with the previous teacher that *training on parental involvement can add knowledge to one*. Teacher 17 clearly states *it is just tough sometimes not knowing how to talk to the parents to assist their children*. Teachers need training on effectively involving their parents in teaching and learning about their children because some parents are reluctant to assist their children academically. Teachers want to be equipped in this matter. Furthermore, parents also need encouragement and awareness of their role in their children's achievement. Consequently, teachers and parents, essential stakeholders, need training for better collaboration.

Discussion of Results

The study aimed to understand teachers' perceptions of parental involvement in teaching and learning

mathematics. Firstly, the results show that the teachers know the parents' influence on the learners' education process. Most of them agree on the significance of parental involvement; additionally, they claim that parents' involvement in teaching and learning mathematics affects the process as much as their involvement level. Secondly, they believe an efficient partnership between the school and parents must be established to nurture learners' successful academic achievement, especially in teaching and learning mathematics. Most teachers admit their need for further training to improve themselves as teachers. On the other hand, none stipulates any particular inadequacy about parental involvement.

Conclusion

Overall, the teachers recognise the significance of parental involvement; however, their statements show that they do not make any specific effort to nurture parent-teacher partnerships. This study extends our knowledge of teachers' perceptions of parental involvement; however, it has quite a few limits. To begin with, the small sample size of the study does not allow for generalisation of the results. Secondly, the results may show a discrepancy in different contexts since the data were collected from public school teachers. Further research involving other consequences of parental involvement may give more significant results for parents, teachers and teacher trainers. Also, it would be motivating to compare teachers', parents' and learners' perceptions regarding parental involvement in teaching and learning mathematics in the junior primary phase to gain a more wide-ranging understanding of it.

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