

Awareness and Understanding of Realistic Mathematics Education Among Middle School Students – A Study

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Abstract

In this present study, the Realistic Mathematics Education Level of Awareness Among Middle School Students is most important of modern era. Most of the students are less interested in mathematics. Many students consider mathematics difficult, abstract, and disconnected from real life. because they face abstract thinking in real mathematical calculations. Realistic Mathematics Education is based on the idea that students create their knowledge of mathematics. This study mainly focuses on the Realistic Mathematics Education level of awareness among middle school students. The methodology of the study was a descriptive survey design adapted. The sample size is 226 middle school students randomly selected for the collection of data. The findings of the study were that middle school students 2.21% are Not Aware, 10.62% are Slightly Aware, 33.19% are Moderately Aware, and 34.95% are Aware, 19.03% are Highly Aware of Realistic Mathematics Education.

Keywords: Awareness, Education, Mathematics, Realistic, Students.

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INTRODUCTION

Mathematics, as a scientific tool, uses abstract symbols and formulas to precisely express and analyse objective phenomena (Qian, L. (2025). Many students consider mathematics difficult, abstract, and disconnected from real life. This perception often leads to fear, anxiety, and a lack of interest. To overcome these challenges, innovative teaching approaches have been introduced, one of which is Realistic Mathematics Education. The present study focuses on examining the awareness of Realistic Mathematics Education among middle school students. Realistic Mathematics Education is an innovative pedagogical approach designed to make mathematics more meaningful and accessible by linking abstract concepts to real-world contexts. Developed in the Netherlands, RME emphasises the use of realistic scenarios as a starting point for learning mathematical principles (Erma Susanti *et al.*, 2025). The term “realistic” does not only refer to real-world problems but also to situations that students can imagine and relate to from their daily experiences. Realistic Mathematics Education is based on the idea that students create their knowledge of mathematics. Teachers do not give students formulas or procedures directly. Instead, they give students problems that are related to life and help them find ways to solve these

problems. Students talk about their methods. Think about what they have done. They gradually begin to understand mathematical concepts. This is called mathematization. Realistic Mathematics Education focuses on understanding and using mathematics to solve problems rather than just memorising things. It is connected to ideas from psychologists like Jean Piaget and Lev Vygotsky. They said that children learn by doing things and talking to people. Realistic Mathematics Education uses these ideas by having students work in groups and talk about their ideas. Students learn by trying things out asking questions and sharing their thoughts with each other. This helps them understand the concepts of mathematics. Middle school is a time for students because they start to form opinions about mathematics. If teachers just teach formulas and procedures, students might get bored. If teachers connect mathematics to things that happen in everyday life, like shopping or playing games, students find it more interesting. Realistic Mathematics Education helps students feel less anxious about mathematics and more confident. The National Council of Educational Research and Training says that mathematics should be connected to real-life situations in textbooks and classrooms. The National Education Policy 2020 says that students should learn by doing things and thinking

critically. These ideas are similar to the principles of Realistic Mathematics Education. So it is important to study what students think about Realistic Mathematics Education in India. In this study, awareness means that students understand and appreciate learning mathematics through real-life situations and interactive methods. It means that students know mathematics is useful in life they like learning by solving problems they value talking about their ideas and they think that understanding is more important than just memorizing things. When students are aware of these approaches they participate more in class. Develop positive attitudes, towards mathematics. Realistic Mathematics Education is a way of teaching mathematics that focuses on the student. It tries to make mathematics understandable, relevant and fun by connecting it to real-life experiences. Looking at what middle school students think about Realistic Mathematics Education can help improve teaching methods make students more engaged. Help them understand concepts better.

REVIEW OF THE RELATED LITERATURE

Qian, L. (2025) conducted a Research paper titled *“The impact of academic pressure on mathematical academic achievement in middle school students: A perspective based on mediation effects.”* The study aims to examine the impact of academic pressure on mathematical academic achievement among middle school students, where academic self-concept and academic engagement are examined as mediating variables. The population of the study consisted of middle school students from Yunnan Province, China, and a randomly selected sample of 454 students from two public middle schools took part in the study. A quantitative check design with the aid of institutionalised Likert-type scale measurements of academic pressure, academic tone conception, and academic engagement, fine academic achievement with sanctioned scholars’ mathematics test score outcome, showed substantial negative covariation with academic pressure and fine academic achievement and substantial covariation with academic tone conception mediating the relationship between academic pressure and fine academic achievement. Effective ways of decreasing academic pressures and improving scholars’ academic tone conception and academic engagement, conceived as substitutes to fine academic achievement, showed substantial counteraccusations with regard to intervention in educational and academy-grounded internal health practices.

Kiran & Sankar (2025) in their research paper *“A Study on Attitude Towards Learning Mathematics Among Secondary School Students of Telangana State.”* focusing on attitude towards mathematics. The population of the study are the secondary school students of the Mahabubnagar district of Telangana State, from which a sample of 360 students was selected from 18 government and private residential and non-residential

schools using stratified random sampling. Using a descriptive survey design, the study adopted the Attitude towards Mathematics Scale, developed and consisting of 46 items of the Likert-type scale, measuring the emotional, cognitive, and behavioural aspects of mathematics attitude, and employed descriptive and inferential statistics to analyse the results. The findings indicated that 43.89% of the students had a moderate or average attitude towards mathematics, which was neither very positive nor very negative towards the subject. Analysis indicated that management type was not a significant factor in determining students’ attitudes, but gender and type of institution were significant, with girls showing a more positive attitude than boys and residential school students showing significantly higher levels of attitude than non-residential school students. The study concluded that students’ attitudes towards mathematics are influenced by institutional and demographic variables, and the need for a supportive learning environment, gender-sensitive approaches, and engaging pedagogies to promote positive attitudes towards mathematics, particularly in non-residential and rural school settings.

Ayyubi, S.A; Man, M. & Dewanti, D. (2025) in their research paper entitled *“Exploring the implementation of realistic mathematics education in mathematics learning for mathematics education students.”* aim to investigate the Realistic Mathematics Education approach in greater detail so that students can apply it in their teaching and learning activities as prospective teachers. The participants of this research were the student population enrolled in a mathematics educational programme at the Sunan Kalijaga State Islamic University in Indonesia. A sample of 12 students was chosen from this larger student population to be participants in this research. Data was collected for purposes of this study using a quantitative methodology with a descriptive survey design. Data collected from the participants was analysed using descriptive statistical analyses. The analysis of the results indicated that all participants reported having previously been exposed to RME and reported that RME improved their understanding of mathematical concepts, increased their motivation to learn mathematics, improved their critical thinking and problem-solving abilities, provided an opportunity for collaboration with others, and provided a connection to mathematics and real-life situations. Most students reported having positive experiences with RME, rated their instructor as an effective user of RME within his/her mathematics education curriculum, and reported being highly motivated to learn mathematics in occasions when RME was used. The current use of RME in classrooms is more sporadic than regular occurrence. The research also identified the need for student-centred mathematics education approaches due to the lack of instructional variety relating to mathematics, due to an over-dependence on mechanical explanations of mathematics.

Andini, P.; Hasratuddin & Kandaga, T. (2025) in their research paper entitled *“The Effect of Realistic Mathematics Approach on Emotional Intelligence and Mathematical Communication Ability of Grade V Students.”* aims to investigate the effect of RME on emotional intelligence and mathematical communication. The population were Grade V students of an elementary school, with a sample of 50 students divided into an experimental group taught using the realistic mathematics approach and a control group taught using conventional learning. The study used a quantitative quasi-experimental approach with a factorial design. The data were collected using a mathematical communication ability test and an emotional intelligence questionnaire. The data analysis included descriptive and inferential statistics. The findings showed that students taught using the realistic mathematics approach scored significantly higher in mathematical communication ability than students taught using conventional learning, and students with high emotional intelligence scored higher than those with low emotional intelligence in mathematical communication ability. The interaction effect between the learning approach and emotional intelligence was found to be significant, indicating that the realistic mathematics approach was more effective for students with high emotional intelligence. The conclusion of this study emphasised that the realistic mathematics approach is more effective than conventional learning in enhancing students’ mathematical communication skills and emotional intelligence.

Das (2020). Conducted a research paper entitled *“Realistic Mathematics and Vygotsky’s Theories in Mathematics Education”*. Which focuses on Realistic Mathematics Education and socio-cultural aspects. The researcher used a secondary method of data collection for their research work. The secondary sources, such as books, articles, Journals, theses, etc. The research based on Qualitative research by using RME, the possibility that students achieve mathematical information by utilizing his/her casual knowledge by methods for reconnecting under the direction of an Educator has a huge role in the investigations led in the field of mathematics education. Vygotsky’s treatment of scientific ideas suggests an objectivist approach towards the topic be education. Vygotsky’s connection between the private and the social one of strategy that comprehends the higher mental functions of a person as a developmental process. The teacher or researcher needs to encourage the process. After the study, the researcher found out that Vygotsky’s impact on mathematics education.

Hasbi, Jutato & Sulaiman (2019) In their Research Paper *“Mathematical Connection Middle School Students 8th in Realistic Mathematics Education”*. This research was conducted to note the effect of RME is improving 8th-grade middle school

students. Research Conducted in Universitas Negeri Surabaya, Indonesia. Researcher used Experimental research with the design of the two groups of pretest-Post test design. The study population was all 8th grade student of middle school Chandi Sidoarjo. The sample of this study consists 8.5 grade and 8.6 grade from the Population sampling 8th grade with a total of 74 students. The product-moment correlation will be used to find out the correlation efficiency. To calculate the reliability coefficient. The Alpha-Con bach test item is used. It was be discovered to, based on the results of the mathematical Connection test 83.78 of students obtained N-Grain more than or Equal to 8.7. Therefore, it is possible to say that realistic mathematics Education is more efficient than learning in the control group.

Lady, Utamo, Trù Bi, Lovi & Chikita (2018) In their journal *“Improving mathematical ability and student learning outcomes through realistic mathematics education (RME) approach”*. This study was based on a preliminary study. The purpose of this study is to improve student learning outcomes. After using the RME Learning approach. The type of this research is Classroom action research. The subject of this study was all students of Class 8th ASMP Negeri 2 Lumajang, academic year of 2016/2017, which amounted to 32 students, consisting 16 male students and 16 female students. the application of RME Learning consists of 4 aspects: understanding the conceptual problem-solving, problem comparing and discussing answers, and finally, concluding percentage of achievement in cycle 1, 72% increased in cycle 2, 92%. The conclusion that can be obtained is that the application of RME is able to improve the ability of mathematization and students’ learning outcomes in Class 8th. ASMP Negeri 2 Lumajang.

Trisnawati, Pratiwi & Waziana (2018) In their research paper entitled *“The effect of realistic mathematics education on students’ mathematical communication ability”*. Their research paper objective was to obtain a description of the realistic mathematics education that can improve students’ mathematical communication ability. The process of communication in learning mathematics is said to be good if students are able to construct the knowledge gained. The type of research used is a Classroom Action Research that refers to the design of Kemmis and McTaggart’s research, which involves planning action, observation, and reflection. This study used a vertical instrument that is modal. In this case relates to the mathematical model developed by students themselves. After the results and discussion, it can be concluded that the implementation of mathematics learning with RME approach that can improve the mathematical Communication ability of XI IPS I SMA Muhammadiyah 5 Yogyakarta is mathematics. learning that has been done in accordance with RME Characteristics, the use of real context.

Zakaria & Syamaun (2017) In their research paper “*Realistic Mathematics Education Approach on Students' Achievement and Attitude Toward Mathematics*”. This study was conducted to determine the effect of RME on Mathematics achievement. This study used a quasi-experimental research approach, conducted on 61 high school students at SMA Unggul Sigli. This study was conducted for 6 weeks. The data were analyzed using SPSS. To negotiate the differences in mean achievement and attitudes between the two groups, the data were analyzed using a one-way ANOVA Test. For this study, the mathematics achievement test and attitude questionnaire were used to collect data. The finding indicates that the null hypothesis is rejected, and the use of RME can enhance the mathematics achievement of students. The result of the Study, to some extent, provides information that students who RME approach are taught using are better than students taught by a traditional approach.

Wahyudi, Joharman, & Ngatman (2017), their research paper “*The development of Realistic Mathematics Education (RME) for primary school's prospective teachers*”. focuses on the development of RME and improving maths learning with the help of RME. The research was conducted in 2015-2016 using Action research to produce RME learning modalities. This research used subjects as research participants, all School of Primary Education faculty of Teacher Training and Education, Seblas Merat University, who took the subject of primary school Mathematics education 2, a many as 71 students. The data collection techniques are observation, test, interview, and the data analysis used in this research, Quantitative and Qualitative data analysis. To find out that RME improves the effectiveness of mathematical learning, RME is done through 5 steps.

Dickinson, Hough, Searle & Parmby (2011) In their Research paper “*Evaluating the impact of a Realistic Mathematics Education project in secondary schools*”. The research is conducted at Manchester Metropolitan University and Durham University. RME is an approach to teaching utilised in the Netherlands and has developed over 30 years. The mic project was carried out in England from 2004 to 2007. The MSM project

used materials produced by researchers at Manchester Metropolitan University in Collaboration with the Freudenthal Institute in Utrecht. In 2010, Durham University was asked to evaluate both the results from the mic project and also the more recent work from the MSM project. The evaluation was carried out by Durham University. researcher involved in qualitative and quantitative methods. The t-test is used in this research. The outcome of this study is the exemplification of the use of Rasch Analysis to enhance the information that can be gained from pupils ' assessment in mathematics.

Objectives of the study:

The Objectives for the study are as follows -

- 1- To find out the Realistic Mathematics Education level of awareness among middle school students.
- 2- To find out the Realistic Mathematics education level of Awareness among Middle School Male Students.
- 3- To find out the Realistic Mathematics education level of Awareness among Middle School Female Students.
- 4- To find out the Realistic Mathematics Education level of awareness among middle school students of their age.

METHODOLOGY OF THE STUDY

Method of the study: The present study adopted a quantitative research approach. A descriptive survey method was used to examine the level of awareness of Realistic Mathematics Education.

Sample selection: The population of the study consisted of all middle school students of Shahjahanpur district of Uttar Pradesh. From the population, a sample of 226 middle school students was selected from different schools by the simple random sampling technique.

Tool of the Study: For the Data collection, the researcher developed a Realistic Mathematics Education Awareness Scale with the guidance of the supervisor.

RESULT AND INTERPRETATION

Table 1: Item-wise respondents' percentage

ITEM 1	58.85%(133)	15.93%(36)	14.60%(33)	4.42%(10)	6.20% (14)	100.00%(226)
ITEM 2	32.30%(73)	25.22%(57)	29.65%(67)	9.29%(21)	3.54%(8)	100.00%(226)
ITEM 3	25.66%(58)	20.80%(47)	23.90%(54)	18.58%(42)	11.06%(25)	100.00%(226)
ITEM 4	32.30%(73)	20.80%(47)	20.80%(47)	15.04%(34)	11.06%(25)	100.00%(226)
ITEM 5	24.78%(56)	19.03%(43)	14.15%(32)	20.80%(47)	21.24%(48)	100.00%(226)
ITEM 6	38.49%(81)	21.68%(49)	17.26%(39)	13.72%(31)	8.85%(20)	100.00%(226)
ITEM 7	39.38%(89)	23.45%(53)	17.26%(39)	12.83%(29)	7.08%(16)	100.00%(226)
ITEM 8	30.97%(70)	23.01%(52)	19.03%(43)	12.39%(28)	14.60%(33)	100.00%(226)
ITEM 9	50.89%(115)	18.14%(41)	12.83%(29)	10.62%(24)	7.52%(17)	100.00%(226)
ITEM 10	20.80%(47)	20.35%(46)	20.80%(47)	20.35%(46)	17.70%(40)	100.00%(226)
ITEM 11	43.81%(99)	16.81%(38)	18.14%(41)	7.52%(17)	13.72%(31)	100.00%(226)
ITEM 12	30.09%(68)	32.74%(74)	18.58%(42)	9.74%(22)	8.85%(20)	100.00%(226)

ITEM 13	39.38%(89)	18.14%(41)	23.90%(54)	7.96%(18)	10.62%(24)	100.00%(226)
ITEM 14	45.58%(103)	20.35%(46)	13.72%(31)	13.27%(30)	7.08%(16)	100.00%(226)
ITEM 15	34.07%(77)	21.24%(48)	25.22%(57)	11.50%(26)	7.97%(18)	100.00%(226)
ITEM 16	41.15%(93)	20.35%(46)	20.80%(47)	11.95%(27)	5.75%(13)	100.00%(226)
ITEM 17	34.07%(77)	26.99%(61)	15.93%(36)	16.37%(37)	6.64%(15)	100.00%(226)
ITEM 18	61.95%(140)	16.37%(37)	11.50%(26)	6.20%(14)	3.98%(9)	100.00%(226)
ITEM 19	35.40%(80)	21.24%(38)	19.47%(44)	14.60%(33)	9.29%(21)	100.00%(226)
ITEM 20	41.59%(94)	23.01%(52)	15.49%(35)	14.60%(33)	5.31%(12)	100.00%(226)
ITEM 21	65.94%(149)	13.27%(30)	11.50%(26)	3.98%(9)	5.31%(12)	100.00%(226)
ITEM 22	43.37%(98)	18.14%(41)	18.58%(42)	12.83%(29)	7.08%(16)	100.00%(226)
ITEM 23	35.40%(80)	24.34%(55)	19.47%(44)	13.27%(30)	7.52%(17)	100.00%(226)
ITEM 24	33.19%(75)	26.10%(59)	23.45%(53)	11.95%(27)	5.31%(12)	100.00%(226)
ITEM 25	44.70%(101)	21.68%(49)	13.27%(30)	16.37%(37)	3.98%(9)	100.00%(226)
ITEM 26	38.06%(86)	18.58%(42)	22.57%(51)	11.50%(26)	9.29%(21)	100.00%(226)
ITEM 27	46.46%(105)	14.16%(32)	16.37%(37)	12.39%(28)	10.62%(24)	100.00%(226)

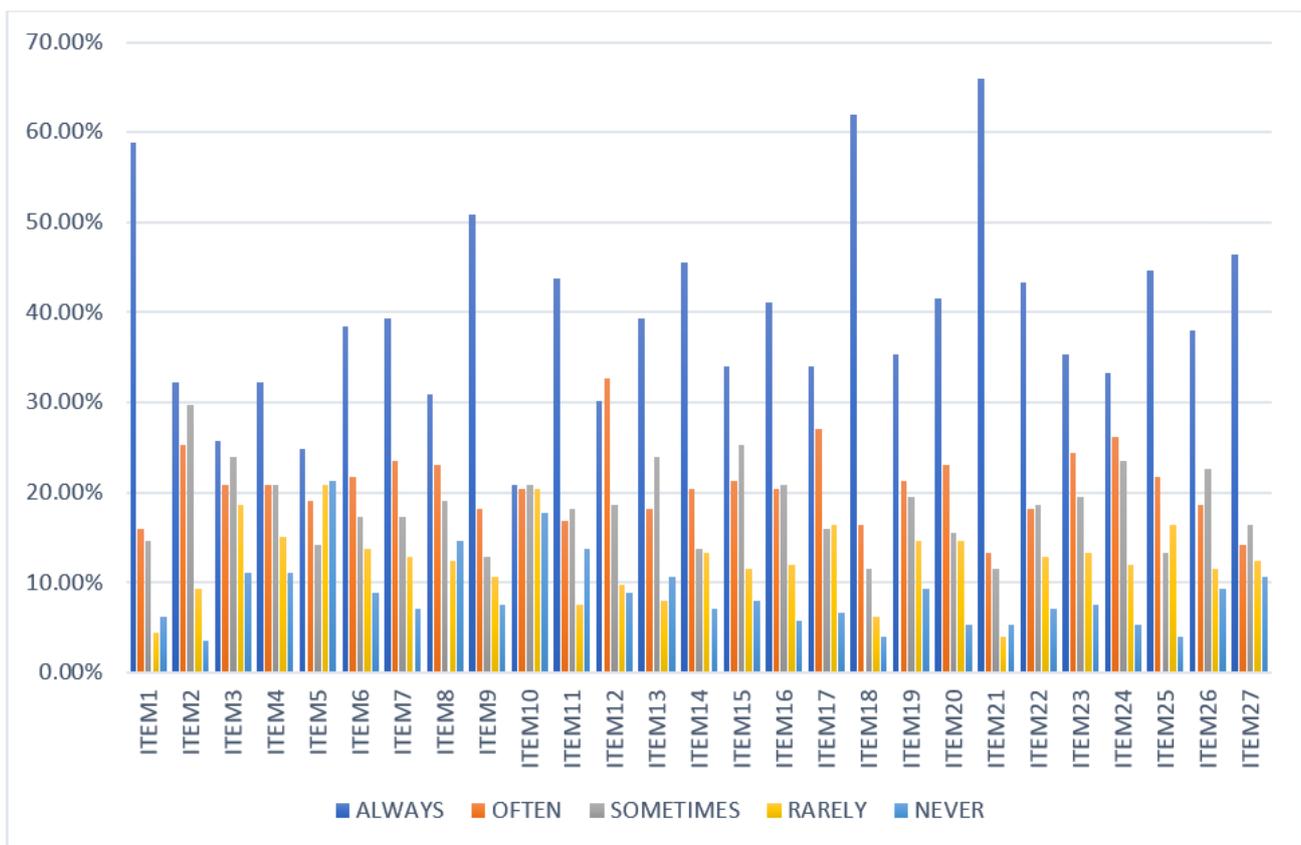


Figure 1: Item-wise respondents' percentage

Interpretation:

The above-mentioned table shows the researcher interpreted the item-wise percentage distribution of responses of 226 middle school students on the Realistic Mathematics Awareness Scale. The responses are categorised into Always, Often, Sometimes, Rarely, and Never. The table indicates that for most items, a large proportion of students selected “Always” and “Often,” suggesting a relatively high level of awareness of Realistic Mathematics Education. As per the data, Item 18 (61.95%) shows the highest percentage of students selecting “Always,” indicating that Students frequently experience aspects of realistic mathematics in

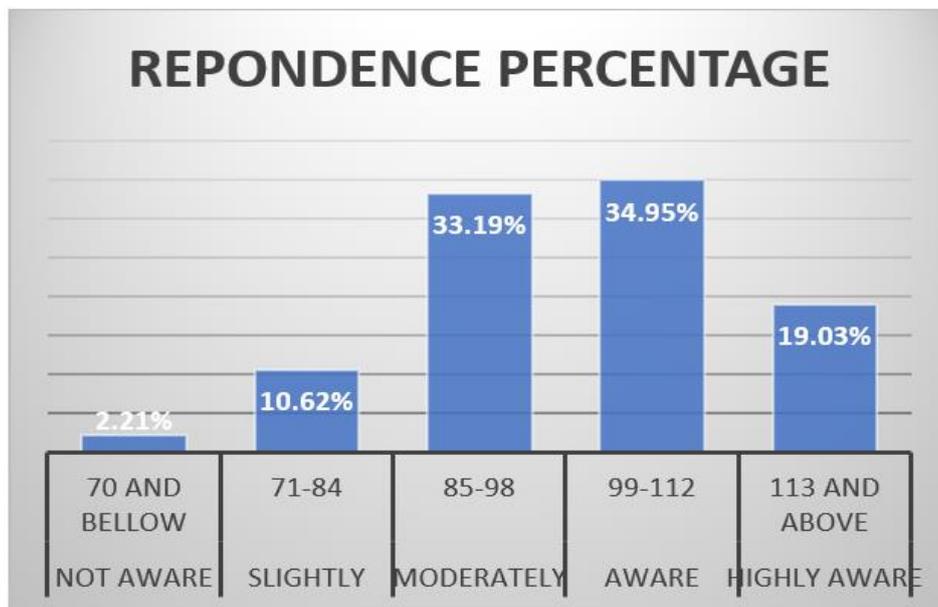
their learning and also be applied in life. Item 21 (65.94%) shows the highest percentage of students selecting “Always,” indicating that mathematics is not only for exams, but also for life. Similarly, Item 1 (58.85%) demonstrates strong positive responses reflecting that the teacher uses real-life situations to teach mathematics, and Item 9 (50.89%) demonstrates strong positive responses, reflecting that when the teacher teaches the concepts by relating it to real life, the students understand it easily. On the other hand, Item 5 show comparatively lower percentages in the “Always” category and relatively higher responses in “Rarely” and “Never,” suggesting that the teacher does not use

bangles/discs to explain the concept of a circle. Item 10 shows comparatively lower percentages in the “Always” category and relatively higher responses in “Rarely” and “Never,” suggesting that the students are not aware of using realistic things and real-life situations in algebraic expressions. From the given data researcher can say that

Students may face difficulties in some areas of realistic mathematical application. Overall, the item-wise analysis reveals that most students demonstrate moderate to high awareness of realistic mathematics concepts, though a few items indicate areas where awareness can be improved.

Table 2: Realistic Mathematics Awareness Scale for Middle School Students

Statement	Percentile Range	Score Range	Repondents	Repondence Percentage
Not Aware	1-20	70 and below	5	2.21%
Slightly Aware	21-40	71-84	24	10.62%
Moderately Aware	41-60	85-98	75	33.19%
Aware	61-80	99-112	79	34.95%
Highly Aware	81-100	113 and above	43	19.03%
Total			226	100%



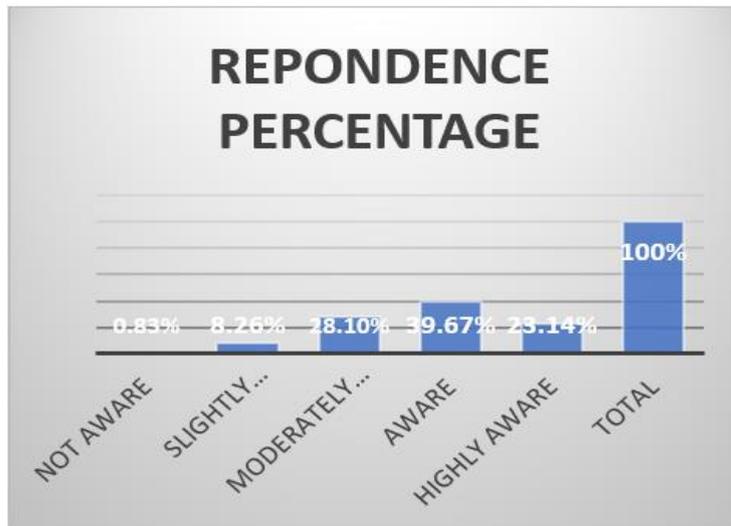
Interpretation:

The researcher interpreted the overall level of awareness of Realistic Mathematics Education among 226 middle school students. The data show that middle school students 2.21% are Not Aware, 10.62% are Slightly Aware, 33.19% are Moderately Aware, and

34.95% are *Aware*, 19.03% are *Highly Aware* of Realistic Mathematics Education. This indicates that 68.14% middle school students have a reasonable level of awareness of realistic mathematics, while only a very small percentage show a lack of awareness.

Table 3: Realistic Mathematics Awareness Scale for Middle School Male Students

Statement	Percentile Range	Score Range	Repondences	Repondence Percentage
Not Aware	1 – 20	56 – 70	1	0.83%
Slightly Aware	21 – 40	71 – 84	10	8.26%
Moderately Aware	41 – 60	85 – 98	34	28.10%
Aware	61 – 80	99 – 112	48	39.67%
Highly Aware	81 – 100	113 – 128	28	23.14%
Total			121	100%



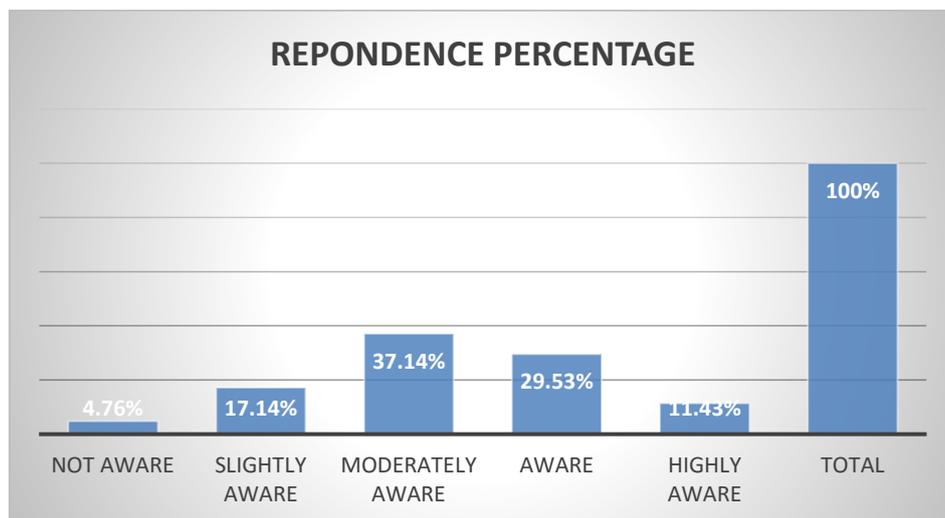
Interpretation:

The researcher interpreted the awareness levels among 121 male students. The data table shows that 0.83% of male middle school students are *Not Aware*, 8.26% are *Slightly Aware*, 28.10% are *Moderately Aware*, 39.67% are *Aware*, and 23.14% are *Highly Aware*

of the realistic mathematics education. The major male students 39.67% fall in the *Aware* category, followed by *Moderately Aware* (28.10%) and *Highly Aware* (23.14%). This indicates that a large majority of male students possess good awareness of realistic mathematics concepts.

Table 4: Realistic Mathematics Awareness Scale for Middle School Female Students

Statement	Percentile Range	Score Range	Repondences	Repondence Percentage
Not Aware	1 – 20	62 – 74	5	4.76%
Slightly Aware	21 – 40	75 – 87	18	17.14%
Moderately Aware	41 – 60	88 – 100	39	37.14%
Aware	61 – 80	101 – 113	31	29.53%
Highly Aware	81 – 100	114 – 127	12	11.43%
Total			105	100%



Interpretation:

Table 4 presents the awareness levels among 105 female students. The data table indicates that 4.76% of female students are *Not Aware*, 17.14% are *Slightly Aware*, 37.14% are *Moderately Aware*, 29.53% are *Aware*, and 11.43% are *Highly Aware*. The largest

proportion of female students falls in the *Moderately Aware* category (37.14%), followed by *Aware* (29.53%). Although most female students demonstrate moderate awareness, the percentage of students in the *Highly Aware* category is comparatively lower than that of male students.

Table 5: Age-wise, middle school students are aware of realistic mathematics

AGE	N	MEAN	SD
11 YEARS	6	92.83	9.600
12 YEARS	66	100.26	13.505
13 YEARS	82	100.44	14.056
14 YEARS	49	98.88	12.637
15 YEARS	15	100.13	15.165
16 YEARS	8	102.88	10.855
TOTAL	226	99.91	13.413

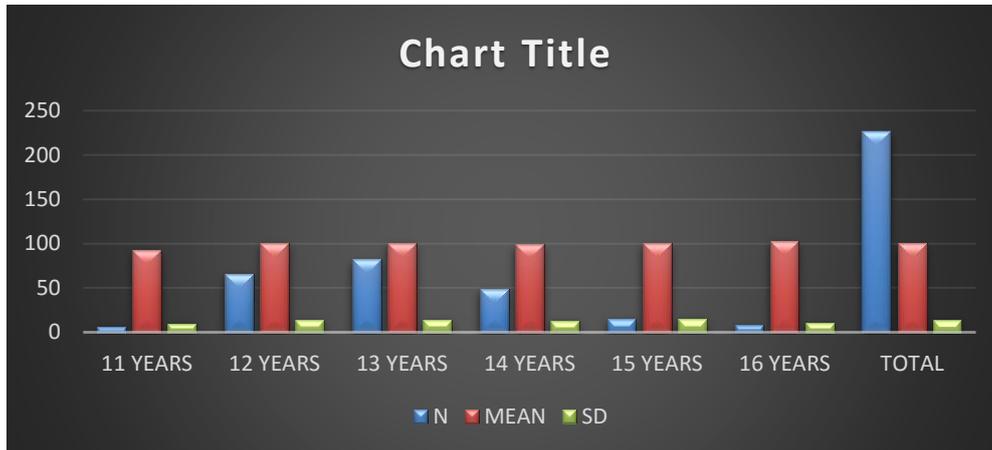
**Interpretation:**

Table 5 shows the mean awareness scores of students according to age groups. The Data table indicates that the mean score of 11-year students is 92.83, 12-year students is 100.26, 13-year students is 100.44, 14-year students is 98.88, 15-year students is 100.13 and 16-year students is 102.88. The highest mean score (102.88) is observed among 16-year-old students, while the lowest mean score (92.83) is found among 11-year-old students. This indicates that awareness of realistic mathematics tends to increase slightly with age, showing that older students may have better exposure to real-life mathematical applications.

DISCUSSION

The present study was conducted to examine the awareness towards Realistic Mathematics Education among middle academy students. The findings of the study indicate that the maturity of students has shown moderate mindfulness about realistic mathematics education. The item-wise analysis of the data (Table 1) indicates that a large number of students have ticked Always and frequently for most of the particulars. This indicates that a large number of students have endured realistic mathematics in their classroom literacy. According to the findings of the study, point 21 has shown the highest chance (65.94%) of students ticking Always. This indicates that students have understood that mathematics isn't only useful for examinations but also for their daily lives. Point 18 has shown a chance of 61.95%, and point 1 has shown a chance of 58.85%, indicating that exemplifications are used by the school teacher while tutoring mathematics. Point 9 has shown a

very high positive response. This indicates that students have understood mathematics more when it's related to real-life situations. Particulars 5 and 10 have shown fairly advanced probabilities in the Rarely and Never columns. This indicates that certain concrete tutoring accoutrements or real-life operations, similar to the use of objects to educate geometrical generalities or realistic surroundings in algebra, aren't used regularly. From the overall awareness position (Table 2), it's observed that the chance of students falling in the apprehensive and largely apprehensive orders is 68.14%. It's also observed that only a small chance (2.21%) of the total students falls in the "Not aware" category. This indicates that most of the middle academy students have a reasonable understanding of the significance of connecting mathematics with real-life situations. From the gender-wise overall awareness position (Table 3 and Table 4), it's observed that the chance of male students falling in the apprehensive order is the highest (39.67%), while the chance of male students falling in the largely apprehensive order is 23.14%. On the other hand, the chance of female students falling in the relatively apprehensive order is the loftiest (37.14%). The chance of female students falling in the largely apprehensive order is low (11.43%) compared to the chance of male students. This indicates that male students are slightly more aware of realistic mathematics education compared to female students. Also, it's observed that the age-wise analysis (Table 5) shows that awareness is added gradually with age. It's set up that the mean score of 11-year-old students is 92.83, which is the smallest, whereas the highest mean score is 102.88 among 16-year-old students. This shows that students of advanced age might

have further exposure to real- life operations of fine generalities, hence showing advanced mindfulness regarding realistic mathematics education. The findings of the present study match the findings of previous studies. It's set up that the present study supports the findings of Lady *et al.*, (2018), who mentioned that the operation of RME improves the literacy growth of the students. It's also set up that the present study supports the findings of Hasbi, Lukito, and Sulaiman (2019), who mentioned that the operation of RME improves the fine connections of the students. It's also set up that the present study supports the findings of Zakaria and Syamaun (2017), who mentioned that the operation of RME improves the achievement of the students. Eventually, Ayyubi, Man, and Dewanti (2025), who noticed that the perpetration of RME increases students' provocation, abstract understanding, and problem-working chops, support the results of the study The current study also supports Das's (2020) theoretical points of view, which recognises the part of Vygotsky's proposition and socio-artistic literacy on mathematics education through contextual and cooperative literacy gestures.

CONCLUSION

Middle school students reveal an appropriate level of awareness related to realistic mathematics education, based on the analysis and interpretation of the findings that result. Male students show a slightly greater percentage of awareness than female students, as per an analysis of awareness levels regarding both men and women. Still, both male and female students highlight an appropriate level of awareness of realistic education about mathematics. Age-wise analysis shows that the awareness level regarding realistic mathematics is higher in the case of older students. In summary, it can be concluded that the present study shows that it is possible to create a better understanding, interest, and engagement in the subject among middle school students by incorporating realistic contexts in the teaching of mathematics. This study would help teachers, curriculum designers, and researchers in promoting an innovative approach in the teaching of mathematics.

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