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Trend of Realistic Mathematics Education Research on Indonesian Elementary Schools between 2013 and 2022

Eko Pradipta Kurnaedi[1*], Rahayu Condro Murti[2], Nur Afifah[3]
[1,2,3] Faculty of Education and Psychology, Universitas Negeri Yogyakarta, Yogyakarta, Indonesia
*Corresponding author: ekopradipta.2022@student.uny.ac.id

Abstrak

Penelitian tentang Pendidikan Matematika Realistik atau RME merupakan salah satu penelitian yang paling banyak dilakukan untuk mata pelajaran matematika, khususnya di Indonesia. Penelitian ini bertujuan untuk menganalisis artikel-artikel yang membahas topik RME di sekolah dasar di Indonesia antara tahun 2013 dan 2022. Penelitian ini menggunakan pendekatan kualitatif dengan menggunakan metode analisis konten. Penelitian ini menemukan bahwa jumlah publikasi tentang topik RME di sekolah dasar Indonesia mengalamai fluktuasi antara tahun 2013 dan 2022. Terdapat 155 jurnal yang terakreditasi Sinta dan terindeks Scopus dengan 265 artikel yang diterbitkan. Pulau Jawa menjadi lokasi sebagian besar penelitian. Di antara ratusan publikasi tersebut, sebagian besar merupakan penelitian kuantitatif. Selain itu, sebagian besar subjek penelitian adalah siswa kelas lima. Objek penelitian yang paling sering diteliti adalah hasil belajar. Pengukuran dan geometri adalah topik yang paling banyak dipilih dalam penelitian. Tes merupakan teknik pengumpulan data yang paling sering digunakan, dan persentase merupakan metode analisis data yang paling sering digunakan. Beberapa rekomendasi disertakan sebagai implikasi dari penelitian ini. Sumber data dan rentang tahun publikasi menjadi keterbatasan penelitian ini.

***Kata kunci*:** Realistic Mathematics Education, *Siswa Sekolah Dasar, Pendidikan Matematika, Tren Penelitian, Analisis Konten*

Abstract

Research on Realistic Mathematics Education or RME is one of the most widely conducted for mathematics subjects, specifically in Indonesia. This study aims to analyze the articles on RME topics in Indonesian elementary schools between 2013 and 2022. This study employed a qualitative approach using a content analysis method. This study has found that the number of publications on RME topics in Indonesian elementary schools has fluctuated between 2013 and 2022. There were 155 Sinta-accredited, even Scopus-indexed journals with 265 articles published. Java was the location of the majority of research. Among hundreds of publications, quantitative research was mostly found. In addition, the majority of the research subjects were fifth-grade students. The most frequently examined research object is learning outcome. Measurement and geometry were the most chosen topic in research. Test was the most commonly used data collection technique, and percentage was the most frequently used data analysis method. Several recommendations are included as implications of this study. The source of data and the range of publication years are limitations of this study.

Keywords: Realistic Mathematics Education, Elementary Students, Mathematics Education, Research Trend, Content Analysis

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1. INTRODUCTION

Indonesia's Programmed Research activities are one form of effort to improve the quality of education. Research activities in education are one of the indicators that can be used to assess the development of a country's education system (Cai et al., 2017; Christensen et al., 2014). Research results are significant because they not only influence policies and implications in the field of education but also form an empirical basis for implications and become a guide for educational practitioners (Eğmir et al., 2017; Ion & Iucu, 2015; Silalahi et al., 2020). As in other fields, research in education is conducted to address a problem by testing a hypothesis or explaining an educational phenomenon. Scientific research, at the minor level of the education system, the learning process, is often conducted to investigate issues related to the effectiveness of learning, such as mathematics learning (Laurens et al., 2018; Mattoliang et al., 2022). There are many related to mathematics learning, especially those related to the Realistic Mathematics Education approach.

Mathematics Education – hereinafter known as RME – is a learning theory for mathematics subjects developed in the Netherlands (Van den Heuvel-Panhuizen & Drijvers, 2020). Realistic Mathematics Education (RME) is a learning method oriented toward the relationship between mathematics and everyday life. RME implementation has a positive effect on students' mathematical abilities compared to expository learning, and at the elementary school level, it is recommended to apply RME (Juandi et al., 2022; Nurjamaludin et al., 2021). Numerous research have shown that the RME approach can significantly improve students' mathematical abilities. RME can improve critical thinking ability, problem-solving skills, mathematical justification skills, learning outcome, statistical thinking, mathematical communication skill, mathematical disposition skills, and mathematical concept understanding skills (Nailurrohmah & Murdiyani, 2022; Zuliyanti & Rizkianto, 2022).

Many research on RME can be found in Indonesia, especially in the elementary education context. Furthermore, various systematic analyses on RME have been conducted in various educational journal articles. Several studies conducted a meta-analysis on RME (Juandi et al., 2022; Kutluca & Gündüz, 2022), several other studies conducted a systematic review on RME (Leng et al., 2020; Prahmana et al., 2020; Yilmaz & Sönmez, 2021), and other studies conducted a bibliometric study (Bayrak & Aslanci, 2022; Tinh Thi Phan et al., 2021). However, theres is not trend analysis or content analysis on RME research yet. This research type contributes to providing noticeable recommendations for future research (Choi et al., 2016; Yavuz et al., 2015). A content-analysis-method study can also provide an overview and guidance for the novice researchers (Gökbulut & Yİğİt, 2022; Lin et al., 2014).

Therefore, it is crucial to conduct a trend analysis on RME research in Indonesia. This study is also different from the previous study and have novelty collect information about various studies discussing RME in Indonesia, specifically at the elementary education (Altaylar & Kazak, 2021; Cahyaningsih & Nahdi, 2021; Darto, 2021). This study conducted a content analysis on many research articles published between 2013 and 2022. RIn detail, this study aims to find out 1) the trend in the number of studies on RME topics in Indonesian elementary schools from year to year; 2) the journals that published articles on RME topics in Indonesian elementary schools and their Scopus index or Sinta accreditation; 3) the location of the studies conducted; 4) the variety of research designs on RME topics in Indonesian elementary schools; 5) the subject of research on RME topics in Indoensian elementary schools; 6) the object of research on RME topics in Indonesian elementary schools; 7) the most frequently used mathematical material in research on RME topics in Indonesian elementary schools; 8) the techniques of data collection were used by researchers in research on RME topics in Indonesian elementary schools; 9) the method of data analysis techniques used by researchers in research on RME topics in Indonesian elementary schools.

2. METHODS

This study employed a qualitative approach using content analysis study. This study followed the content analysis principle, focusing on findings from numerous studies published in scientific journals. The research method employed was similar to that of Susetyarini and Fauzi (Susetyarini & Fauzi, 2020). The data were collected from the results of content analysis on the articles on RME topics in Indonesian elementary schools. The articles were taken from *Dimensions* database on December 2022. *Dimensions* is an interconnected research information system that provides open-access journals. The articles taken from the databases were research articles in the journals between 2013 – 2022, excluding review articles and conference proceedings.

The current study's instrument was a content analysis guideline that included related aspects under analysis (Table 1). In this study, there were up to seven major aspects to review for content analysis. Those aspects were 1) publication year; 2) Scopus index or Sinta accreditation and the number of publications; 3) the location of the studies conducted; 4) type of research; 5) research subjects; 6) research objects; 7) Mathematics topic chosen; 8) techniques of data collection; 9) method of data analysis. The categories of each aspect were defined before data collection, except for aspects 3 and 6. The categories are shown in Table 1.

Table 1. Recapitulation of Expert Validation Test

Aspects	Categories			
1) Publication Year	1.a) 2013	1.d) 2016	1.g) 2019	1.j) 2022
	1.b) 2014	1.e) 2017	1.h) 2020	
	1.c) 2015	1.f) 2018	1.i) 2021	
2) Scopus Index or SINTA Accreditation	2.a) S1/Scopus		2.d) S4	
	2.b) S2		2.e) S5	
	2.c) S3		2.f) S6	
4) Type of research	4.a) Qualitative Research		4.d) CAR	
	4.b) Quantitative Research		4.e) R&D	
	4.c) Mixed Metod		4.f) Design Research	
5) Research subjects	5.a) 1st-grade students		5.d) 4th-grade students	
	5.b) 2nd-grade students		5.e) 5th-grade students	
	5.c) 3rd-grade students		5.f) 6th-grade students	
7) Mathematics topic chosen	7.a) Numbers		7.c) Data Presentation and Processing	
	7.b) Measurement and Geometry			
8) Technique of data collection	8.a) Questionnaire		8.d) Interview	
	8.b) Observation		8.e) Documentation	
	8.c) Test			
9) Method of Data Analysis	9.a) Qualitative Analysis		9.c) Inferential Statistics	
	9.b) Descriptive Statistics		9.d) Retrospective Analysis	

Each article was assigned to a specific category based on a specific aspect that met the criteria. The decision was based on information provided by the authors in the abstract, method, and discussion sections. Furthermore, the collected data was presented in the form of a table with frequencies and percentages.

3. RESULTS AND DISCUSSION

Results

Number of Publication per Year

Figure 1 presents the number of publications per year between 2013 – 2022 in Dimensions database. The total number of publications on RME topics in Indonesian elementary schools between 2013 and 2022 was 265 articles. Most studies were conducted in 2021 (f = 49), and the fewest were conducted in 2014 (f = 5). Based on figure 1, the trend of RME research, specifically in Indonesian elementary schools, continued to increase from 2014 to 2021. Furthermore, the trend decreased from 2013 to 2014 and from 2021 to 2022.

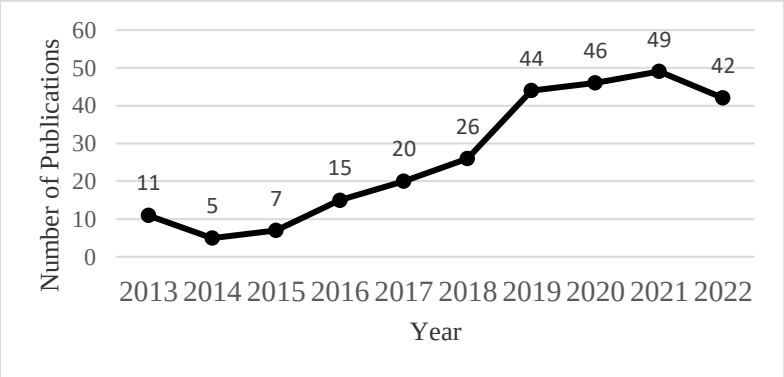

Figure 1. Number of RME Research Per Year

Journal Title, Sinta Accreditation, and Number of Publications

Based on the search process, there were 155 journals with 265 articles published on RME topics in Indonesian elementary schools. The journals were primarily published in Indonesian journals and Sinta-accredited from Sinta 1 (S1) to Sinta 6 (S6). In addition, there were also articles published in Scopus-indexed journals. The journals indexed by Scopus were Journal on Mathematics Education, Mathematics Teaching-Research Journal, International Journal of Instruction, European Journal of Educational Research, International Journal of Interactive Mobile Technologies, and International Journal of Scientific and Technology Research. The top ten journals and their number of publications are given in Table 2.

Table 2. Top Ten Journals According to The Sinta Accreditation and The Number of Publications

Journal Title	Sinta Accred.	f	%
Jurnal Basicedu	S3	18	7%
Jurnal Cendekia: Jurnal Pendidikan Matematika	S3	12	5%
Journal on Mathematics Education	S1/Scopus	11	4%
Jurnal Prima Edukasia	S2	8	3%
Aksioma	S2	7	3%
Jurnal Ilmiah Sekolah Dasar	S2	6	2%
Jurnal Review Pendidikan Dasar	S5	6	2%
Anargya	S4	4	2%
PrimaryEdu - Journal of Primary Education	S3	4	2%
Tunjuk Ajar: Jurnal Penelitian Ilmu Pendidikan	S6	4	2%

Location the Study Conducted

The distribution of published articles according to the location where the studies were conducted is given in Table 3.

Table 3. The Distribution of Studies According to The Location Study Conducted

Location	f	%	Location	f	%
Aceh	8	3%	East Java	27	10%
North Sumatera	7	3%	Bali	8	3%
West Sumatera	32	12%	West Kalimantan	2	1%
Riau	18	7%	Central Kalimantan	3	1%
Jambi	1	0.4%	South Kalimantan	1	0.4%

Location	f	%
Bengkulu	4	2%
South Sumatera	24	9%
Bangka Belitung	1	0.4%
Lampung	5	2%
Banten	11	4%
Jakarta	5	2%
West Java	33	12%
Central Java	37	14%
Yogyakarta	15	6%

Location	f	%
South Sulawesi	8	3%
Central Sulawesi	1	0.4%
Southeast Sulawesi	1	0.4%
West Sulawesi	1	0.4%
West Nusa Tenggara	3	1%
East Nusa Tenggara	3	1%
North Maluku	1	0.4%
Unidentified	6	2%

Types of Research

The articles reviewed were divided into six research types. The articles were grouped based on research method and design under that research type. The distribution of the studies according to the research types is shown in Table 4.

Table 4. The Distribution of Studies According to Research Types Used

Research Methods	Research Design	f	%
Quantitative	Observational Study	2	1%
	Factorial Design	6	2%
	Pre-Experimental Design	19	7%
	Quasi-Experimental Design	51	19%
	True-Experimental Design	21	8%
	Survey	1	0.4%
	Sub Total	**100**	**38%**
Qualitative	Descriptive	6	2%
	Case Study	2	1%
	Ethnography	1	0.4%
	Phenomenology	1	0.4%
	Sub Total	**10**	**4%**
Mixed Method	Sequential Explanatory	1	0.4%
	Sequential Exploratory	1	0.4%
	Concurrent Embedded	1	0.4%
	Sub Total	**3**	**1%**
CAR		72	27%
R&D		44	17%
Design Research		36	14%

As shown in Table 4, 38% (f = 100) of the studies employed quantitative method. The research design used in the quantitative method category is a quasi-experimental design with 19% (f = 51) of all studies. As can be seen, the number of studies with quasi-experimental design is higher than the total number of the other research design in quantitative method category. The second frequent research method used in studies of RME topics in Indonesian elementary schools was Classroom Action Research (CAR), with a total of 72 studies (27%). Meanwhile, the fewest research method used was mixed method, with a total of 3 studies (1%).

Research Subjects

Based on the articles reviewed in this study, the research subjects involved in the studies on RME topics in Indonesian elementary schools were students from grade 1 to grade 6. The various research subjects are presented in Table 5.

Table 5. Research Subjects on RME Research in Indonesian Elementary Schools

Research Subjects	f	%
1st-grade students	10	4%
2nd-grade students	13	5%
3rd-grade students	25	9%
4th-grade students	92	34%
5th-grade students	108	40%
6th-grade students	19	7%

As seen in Table 5, 5th-grade students were the most research subjects involved in studies on RME topics in Indonesian elementary schools. The fewest research subjects involved were 1st-grade students. The table shows that upper-grade elementary school students (4th – 6th grade) were more involved in RME study at the elementary school level than lower grade (1st – 3rd grade).

Research Objects

Various studies use various research objects. Table 6 shows the variety of research objects on RME topics in Indonesian elementary schools.

Table 6. The Distribution of Various Research Objects on RME Topics in Indonesian Elementary Schools

Research Objects	f	%	Research Objects	f	%
Learning Outcome	91	30%	Mathematical Reasoning	7	2%
Creative Thinking Ability	7	2%	Concept Understanding	38	12%
Problem-Solving Skills	30	10%	Mathematical Disposition	3	1%
Learning Motivation	13	4%	Logical Thinking Ability	3	1%
Algebraic Thinking Ability	1	0.3%	Learning Interest	4	1%
Students Activity	19	6%	Learning Independence	1	0.3%
Learning Achievement	19	6%	Mathematical Representation	3	1%
High Order Thinking Skills	1	0.3%	Self-efficacy	3	1%
Knowledge Competence	2	1%	Self-confidence	1	0.3%
Friendly Attitude	1	0.3%	Metacognitive Skills	1	0.3%
Numerical Literacy Skill	8	3%	Metaphorical Thinking Skills	1	0.3%
Critical Thinking Ability	8	3%	Learning Atmosphere	1	0.3%
Mathematical Communication	11	4%	Unidentified	29	9%

As shown in Table 6, the most frequent research object involved was learning outcome (f = 91, 30%), followed by concept understanding ability (f = 38, 12%) and problem-solving skills (f = 30, 10%). Meanwhile, the research objects rarely involved were algebraic thinking ability, higher-order thinking skills, friendly attitude, self-confidence, metacognitive skills, and learning atmosphere.

Mathematics Topics Chosen for the Study

Mathematics topic chosen in studies on RME topics in Indonesian elementary schools is shown in Table 7.

Table 7. The Distribution of Mathematics Topics Chosen for The RME Study in Indonesian Elementary Schools

Topic	Sub Topic	f	%
Numbers	Kind of Numbers	65	24%
	Operation	45	17%
	Least Common Multiple (LCM) and Greatest Common Divisor (GCD)	12	5%
Measurement and Geometry	Quantitative Units of Measure: Length, Weight, Volume	4	2%
	Time, Distance, and Speed	6	2%
	Comparison and Scale	3	1%
	Geometry	86	32%
Data Presentation and Processing	Data Presentation	8	3%
	Data Processing	1	0.4%
Unidentified		36	14%

Techniques of Data Collection

In carrying out research, data collection techniques are one of the crucial things that must be considered to collect research data. Each study used different data collection techniques, and several data collection techniques were used in one study. The variety of data collection techniques in the studies with RME topics in Indonesian elementary schools is presented in Table 8.

Table 8. The Distribution of the Variety of Data Collection Technique Used in Several Studies

Data Collection Techniques	f	%
Interview	86	14%
Observation	159	26%
Questionnaire	85	14%
Test	217	35%
Documentation	69	11%

Base on Table 8, tests (f = 217, 35%) and observation (f = 159, 26%) were the most used data collection techniques in the studies on RME topics in Indonesian elementary schools. Other data collection techniques used are interviews (f = 86, 14%), questionnaires (f = 85, 14%), and documentation (f = 69, 11%).

Methods of Data Analysis

All 265 articles reviewed used different data analysis methods to analyze the data or to test the hypotheses. The distribution of data analysis methods used in the studies on the RME topics in Indonesian elementary schools is presented in Table 9.

Tabel 9. The Distribution of Data Analysis Methods Used

	Data Analysis Methods	f	%
Qualitative Analysis	Descriptive Qualitative	8	3%
	Constant Comparison	1	0.3%
Descriptive Statistics	Percentage	100	34%
	Mean	24	8%
	Standard Deviation	2	1%
Inferential Statistics	Sign Test	1	0.3%
	N-gain test	11	4%
	t-test	70	24%
	Anova/Ancova	25	9%
	Manova/Mancova	4	1%
	Simple Regression	5	2%
	Pearson Correlation	1	0.3%
	Mann-Whitney U Test	5	2%
Retrospective Analysis		35	12%

Discussion

This study aims to find out 1) the trend in the number of studies on RME topics in Indonesian elementary schools from year to year; 2) the journals that published articles on RME topics in Indonesian elementary schools and their Scopus index or Sinta accreditation; 3) the location of the studies conducted; 4) the variety of research designs on RME topics in Indonesian elementary schools; 5) the subject of research on RME topics in Indoensian elementary schools; 6) the object of research on RME topics in Indonesian elementary schools; 7) the most frequently used mathematical material in research on RME topics in Indonesian elementary schools; 8) the techniques of data collection were used by researchers in research on RME topics in Indonesian elementary schools; 9) the method of data analysis techniques used by researchers in research on RME topics in Indonesian elementary schools.

The trend in the number of studies on RME topics in Indonesian elementary schools from year to year is found to fluctuate. This study found a decrease in the number of publications in 2014 and an increase from 2014 to 2020. This finding is in accordance with a previous study (Prahmana et al., 2020). The finding also inform that the number of studies on RME in Indonesia is more than studies in other countries (Gökbulut & Yİğİt, 2022; Yilmaz & Sönmez, 2021).

This study found several journals that published articles on RME topics in Indonesian elementary schools. The journal was found Sinta accredited and even Scopus indexed. Journal on Mathematics Education was the top journals that publish articles on RME topics. This study is similar to the previous study (Prahmana et al., 2020). In another study, it was mentioned that Journal on Mathematics Education was the second most journal based on the articles published (Tinh Thi Phan et al., 2021). In fact, another study stated that Journal on Mathematics Education was the journal with the highest number of published articles (Bayrak & Aslanci, 2022).

This study found 26 locations in Indonesia conducted research on RME topics in Indonesian elementary schools, with five studies unidentified the location. The most frequent locations conducted research are West Sumatera, Riau, South Sumatera, West Java, Central Java, and East Java. As can be seen, most of the studies conducted were in Western Indonesia. However, only a few studies were conducted in central Indonesia as Bali, Kalimantan, Sulawesi, and Nusa Tenggara, even with no studies in Papua. Notwithstanding the distribution of locations where research on RME was conducted, the number of publications on RME in Indonesia can be categorized as the largest. This is in line with

previous studies, which state that the number of publications on RME is one of the largest of several other countries (Bayrak & Aslanci, 2022; T T Phan et al., 2022).

The findings also found higher number of quantitative studies than other research types. This is consistent with previous studies that found that researchers preferred quantitative research designs to conduct educational research (Eğmir et al., 2017; Fidan & Tuncel, 2018; Susetyarini & Fauzi, 2020; Takkaç Tulgar et al., 2022; Yavuz et al., 2015) and specific research on RME topics (Gökbulut & Yİğİt, 2022; Yilmaz & Sönmez, 2021). Specifically, in quantitative research types category, quasi-experimental design is the most research design used in line with some previous studies in educational research (Gökbulut & Yİğİt, 2022; Susetyarini & Fauzi, 2020; Takkaç Tulgar et al., 2022). However, this contradicts another study that mentioned that researchers preferred RnD (Fauzi & Pradipta, 2018). There was even another study that mentioned that qualitative was preferred (Nur et al., 2021).

The high number of fifth graders as research subjects was found in this study. This finding is in line with other studies that have found that fifth graders are more involved in research in elementary school (Juliyantika & Batubara, 2022). However, this is in contrast to finding in another study that found sixth-grade students were the majority of research subjects (Yilmaz & Sönmez, 2021). This research is limited to studies on RME topics in Indonesian elementary schools, where the research subjects are elementary school students. Several other studies have shown that elementary school students are among the least involved as research subjects (Fauzi & Pradipta, 2018; Nur et al., 2021; Yavuz et al., 2015). Nevertheless, in some other studies, elementary school students are pretty involved (Eğmir et al., 2017; Fidan & Tuncel, 2018; Takkaç Tulgar et al., 2022).

The high number of learning outcome as research objects than others was found in this study. This finding is in line with the finding in the other studies (Fidan & Tuncel, 2018; Gökbulut & Yİğİt, 2022; Takkaç Tulgar et al., 2022). However, the finding in this study is different from the previous study mentioned that mathematical understanding was the most frequently examined research object (Prahmana et al., 2020). Another study mentioned that mathematical ability, such as reasoning, communication, disposition, connection, and representation, was the most frequent research object examined (Nur et al., 2021).

The most frequent topic used in the studies on RME topics in Indonesian elementary schools was measurement and geometry with geometry sub-topic, followed by numbers topic with kind of numbers sub-topic. Meanwhile, the fewest frequent topic was data presentation and processing with data processing sub-topic. In line with another study, the most chosen mathematics topics on RME research were measurement and geometry (Yilmaz & Sönmez, 2021). However, this is in contrast to the findings of the previous study which found that research on RME topics in elementary schools in Indonesia tends to focus more on number topics (Prahmana et al., 2020).

This study found that tests as the most frequent data collection technique used. This finding is similar to the other studies (Gökbulut & Yİğİt, 2022; Susetyarini & Fauzi, 2020; Yilmaz & Sönmez, 2021). However, this also differs from previous studies, which state that questionnaires are the most widely used data collection technique. Whereas, according to two earlier studies (Eğmir et al., 2017; Takkaç Tulgar et al., 2022), the quasi-experimental research design was the most frequently used. It can be said that tests and questionnaires are acceptable data collection techniques in quasi-experimental research.

The most used data analysis method in the studies on RME topics at the elementary school level was percentage technique. The data analysis methods found can be classified into several categories. The first category is the qualitative analysis model, which consists of descriptive and constant comparison. The second category is a quantitative analysis model using descriptive statistics consisting of percentages, averages, and standard deviations. The

third category is a quantitative analysis model using inferential statistics, including the sign test, n-gain test, t-test, Anova/Ancova, Manova/Mancova, simple regression, Pearson correlation, and Mann-Whitney U test. The last category is retrospective analysis.

Several other studies have also found that data analysis methods with descriptive statistics are the most widely used data analysis methods. Specifically, previous study found that the most widely used data analysis methods were mean and standard deviation (Fidan & Tuncel, 2018). Meanwhile, other study found that 27% of the data analysis methods used were frequencies, percentages, and tables, followed by averages and standard deviations at 22% (Takkaç Tulgar et al., 2022). This contrasts with a study that discovered the t-test to be the most popular data analysis method (Susetyarini & Fauzi, 2020).

In accordance with the findings of this study, recommendations for future research on RME in elementary schools can be made. First, RME implementation and research must be conducted in elementary schools, particularly in eastern Indonesia. Secondly, qualitative research is required to examine the use of RME in elementary schools in depth. In addition, R&D and design research methods must be widely conducted to develop innovative learning products to enhance the efficacy of RME. In order to improve the quality of research, particularly in the field of RME, it is expected that researchers, particularly in Indonesia, will include the methods clearly. The data source is the first limitation of this study. The data source retrieved only comes from the Dimensions database. Articles included were from Sinta-accredited or Scopus-indexed journals, excluding conference proceedings and review articles. Secondly, the articles included were limited to the last ten years.

4. CONCLUSION

This research reviewed studies addressing RME in Indonesian elementary schools published from 2013 to 2022. This study has found that the number of publications on RME topics in Indonesian elementary schools had increased for several years, but there was a decrease from 2021 to 2022. There were 155 journals Sinta-accredited, even Scopus-indexed, with 265 articles published. Java Island was the location of the majority of research. Quantitative research was mainly found among hundreds of publications. Furthermore, most research subjects were fifth graders, and the most frequently examined research objects were learning outcomes. Measurement and geometry were the most chosen topic in research on RME topics in Indonesian elementary schools. Tests were commonly used for data collection techniques, and the percentage was the most frequently used data analysis method.

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