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## THE JOURNEY OF JOURNAL ON MATHEMATICS EDUCATION: FROM LOCAL TO GLOBAL

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### Abstract

One of indicators to determine the quality of a journal can be observed from how many indexing institutions recognized it nationally and globally, such as Sinta, Scopus, and ScimagoJR. Furthermore, the rank of a journal in the indexing institution will add more value to the reputation of a journal. However, few journal editors are willing to share their experiences in managing a journal, from the beginning to getting recognition at the international level. Thus, this article describes the journey of the first journal in the mathematics education field from Indonesia called the Journal on Mathematics Education (JME), which is globally recognized and indexed on Scopus. JME's journey to gain global recognition is narrated in a structured way, starting from the history of journal formation, recognition at the local level, strategies to get authors from various countries, promotional activities to get credit, until finally getting a global position. In addition, this article also describes many contributions from world-class Mathematics Education researchers who have published their research results in JME. Finally, this article also describes the position of JME at national and international levels based on the data of several indexing institutes and JME's future targets.

**Keywords:** Journal on Mathematics Education, International Reputable, Indexing, CiteScore, Sinta, Scopus, Scimagojr

### Abstrak

Salah satu penentu kualitas suatu jurnal dapat dilihat dari seberapa banyak Lembaga pengindeks yang diakui secara nasional maupun global, seperti Sinta, Scopus, dan ScimagoJR. Selanjutnya, peringkat suatu jurnal dalam Lembaga pengindeks tersebut akan menambah nilai lebih terhadap reputasi suatu jurnal. Namun, masih sedikit editor jurnal yang bersedia menceritakan pengalaman mereka dalam mengelola suatu jurnal, mulai dari awal hingga mendapatkan pengakuan di level internasional. Oleh karena itu, artikel ini menceritakan perjalanan Jurnal pertama dan satu-satunya bidang Pendidikan matematika dari Indonesia bernama Journal on Mathematics Education (JME) yang diakui secara global dengan terindeks di Scopus. Perjalanan JME untuk mendapatkan pengakuan secara global diceritakan dengan terstruktur mulai dari sejarah terbentuknya jurnal, pengakuan di level local, sejumlah strategi mendapatkan penulis dari berbagai negara, sejumlah aktivitas promosi untuk mendapatkan rekognisi, sampai akhirnya mendapatkan posisi di level global. Selain itu, artikel ini juga mendeskripsikan sejumlah kontribusi dari para peneliti Pendidikan matematika level dunia. Mereka telah mempublikasikan hasil risetnya di JME. Terakhir, artikel ini juga menjelaskan tentang posisi JME di level nasional dan internasional berdasarkan data dari sejumlah Lembaga pengindeks, dan target JME di masa yang akan datang.

**Kata kunci:** Journal on Mathematics Education, Reputasi Internasional, Indeksasi, CiteScore, Sinta, Scopus, Scimagojr

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Journal on Mathematics Education (JME) or known as the Indonesian Mathematical Society Journal on Mathematics Education (IndoMS-JME), is the first international journal in the field of mathematics education in Indonesia that indexed in Scopus (Zulkardi et al., 2019). This journal provides a venue for the publication of original research articles, review articles by invited experts, and novel technology news in the mathematics education field. This journal is intended for and dedicated not only to members

of the Indonesian Mathematics Society (IndoMS) but also to lecturers, researchers, mathematics school teachers, teacher educators, and university students (Master and Doctoral) who wish to publish their research reports or literature review articles (exclusively for invited contributors), as well as brief communications about mathematics education and its implementation. Apart from regular contributors, each volume's contents will be contributed by invited experts in mathematics education from Indonesia and abroad.

The focus and scope of this journal include Realistic Mathematics Education (RME), Design/Development Research in Mathematics Education, PISA Task, Mathematics Ability, ICT in Mathematics Education, and Ethnomathematics (Zulkardi, 2019). Currently, JME is one of the top journals in Indonesia that Sinta or Science and Technology Index created and developed by The Ministry of Research and Technology /National Agency for Research and Innovation of Indonesia. JME has been indexed in the S1 category, Scopus in the Q1 category, and Scimagojr in the Q2 category. However, this has, of course, gone through a journey which is not short and easy.

### **The History of Journal on Mathematics Education**

JME was initiated by the Vice President of IndoMS at that time, who worried that there was no Journal of Mathematics Education field managed under the auspices of IndoMS. At that time, IndoMS only had one journal called the *Majalah Ilmiah Himpunan Matematika (MIHMI)*, which has now changed its name to the Journal of the Indonesian Mathematical Society (JIMS). This journal focuses on pure and applied mathematics, even though most of the members of IndoMS come from the Lembaga Pendidikan Tenaga Kependidikan (LPTK), an Educational Institute for Educators which focuses on the field of Mathematics Education. Therefore, it was necessary to make a journal in the area of Mathematics Education published by IndoMS.

JME's journey began in 2010. At that time, the President and Vice President of IndoMS for Mathematics Education, Professor Widodo and Professor Zulkardi succeeded in launching JME at the Konferensi Nasional Matematika (KNM) opening at Universitas Negeri Manado (UNM) (Zulkardi, 2019). Universitas Sriwijaya collaborates with IndoMS in managing JME, where the core team, secretariat, and journal management processes are carried out at Universitas Sriwijaya.

Not long after its launching, JME published a volume consisting of five articles. One article was authored by Professor Lee Peng Yee, expert mathematicians from the National Institute of Education (NIE), Singapore. He wrote about designing a mathematics curriculum in Singapore (Yee, 2010). The other articles were authored by Professor Robert K Sembiring, a mathematician of Bandung Institute of Technology (ITB). He wrote about the developments and challenges of implementing the Indonesian Realistic Mathematics Education (PMRI) approach in Indonesia (Sembiring, 2010). At that time, JME was still in the form of a local journal that had not been indexed by any indexing agency and was still using WordPress for its website system, which could still be accessed <https://jims-b.org/>, as shown in Figure 1.

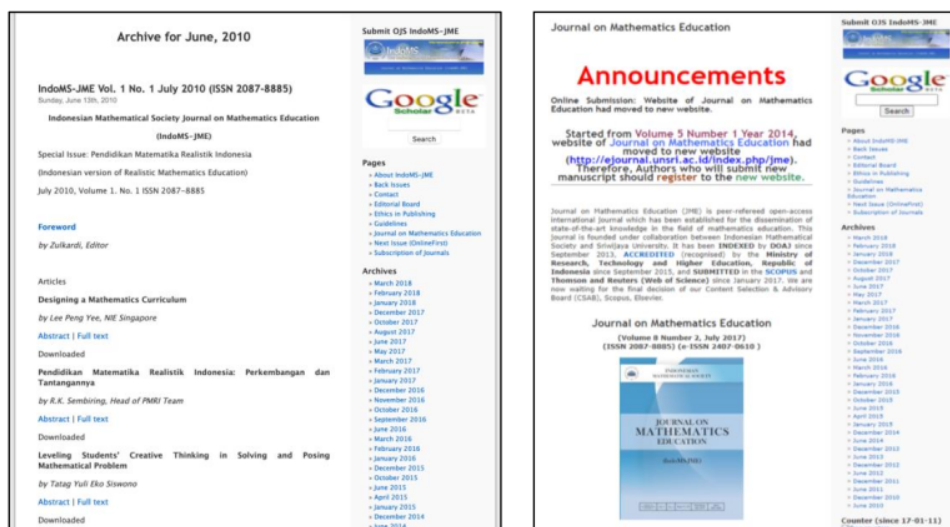


Figure 1. The first issue of JME and the first JME's website using WordPress

In 2011, JME succeeded in becoming a national journal by the efforts and hard work of the team in building a better JME, expanding networking and trying to get a journal governance grant from the Ministry of Research and Higher Education (Kemenristekdikti). JME managed to publish two issues with a total of 15 articles, of which world-class researchers wrote three papers. An expert on Realistic Mathematics Education (RME), Professor Koeno Gravemeijer from the Eindhoven University of Technology, Netherland, published his thoughts with the title *How Concrete is Concrete?* (Gravemeijer, 2011). Furthermore, Professor Kaye Stacey, the chairman of the Mathematics Expert Group for the OECD survey PISA from Melbourne University, Australia, wrote an article entitled *The PISA View of Mathematical Literacy in Indonesia*, which currently has the highest citations on Google Scholar as well as at Scopus (Stacey, 2011). Lastly, Professor Christa Kaune, a metacognitive expert from the Institut für Cognitive Mathematics, Universität Osnabrück, Germany, shared her idea by writing an article entitled *Development of Metacognitive and Discursive Activities in Indonesian Maths Teaching* (Kaune, Cohors-Fresenborg, & Nowinska, 2011). In addition, in this second volume, JME was fully supported by research outputs from the International Master Program on Mathematics Education (IMPoME), a collaboration between Sriwijaya University, Surabaya State University, and Utrecht University. Eleven of the fifteen articles published in the second year of JME publication came from the results of thesis research by IMPoME students from various regions in Indonesia related to design research methodology using the PMRI approach.

Over the next 3 years, the main contributors to JME would have been from IMPoME alumni with their results of their primary thesis research as many as 22 articles, students of the mathematics education doctoral program from the Indonesian Education University with their results of dissertation research as many as 5 articles, and invited authors who are Mathematics Education experts from around

the world, including Berinderjeet Kaur from the National Institute of Education, Nanyang Technological University, Singapore, with her article entitled Mathematics Education in Singapore - An Insider's Perspective (Kaur, 2014), Edyta Nowinska from the Institute for Didactics of Mathematics, A. Mickiewicz University, Poland, with the article title A Cognitive Theory Driven New Orientation of Indonesian Lessons (Nowinska, 2014), Frans Van Galen and Dolly van Eerde from Utrecht University, Netherlands, with the article Solving Problems with the Percentage Bar (van Galen & van Eerde, 2013), Wanty Widjaja from Deakin University, Australia, with the article title the Use of Contextual Problems to Support Mathematical Learning (Widjaja, 2013), Esther Yook-Kin Loong from Deakin University, Australia, regarding the use of the internet in learning mathematics for high school students (Loong, 2014), Caroline Bardini, Robyn Pierce, Jill Vincent, & Deborah King from Melbourne University, Australia, regarding understanding students majoring in mathematics on the concept of function (Bardini et al., 2014), and Fou-Lai Lin who was President of the International Group for the Psychology of Mathematics Education (PME) in 2007-2010, with his article entitled Designing Teacher Professional Development for Mathematics Teaching with Variation Theory, which was written with her doctoral students (Ekawati & Lin, 2014).

The JME team has been working hard to continuously improve and maintain the quality of its publications, one of which is 2014; JME successfully migrated by changing its website system from WordPress to the Open Journal System (OJS), seen in Figure 2.

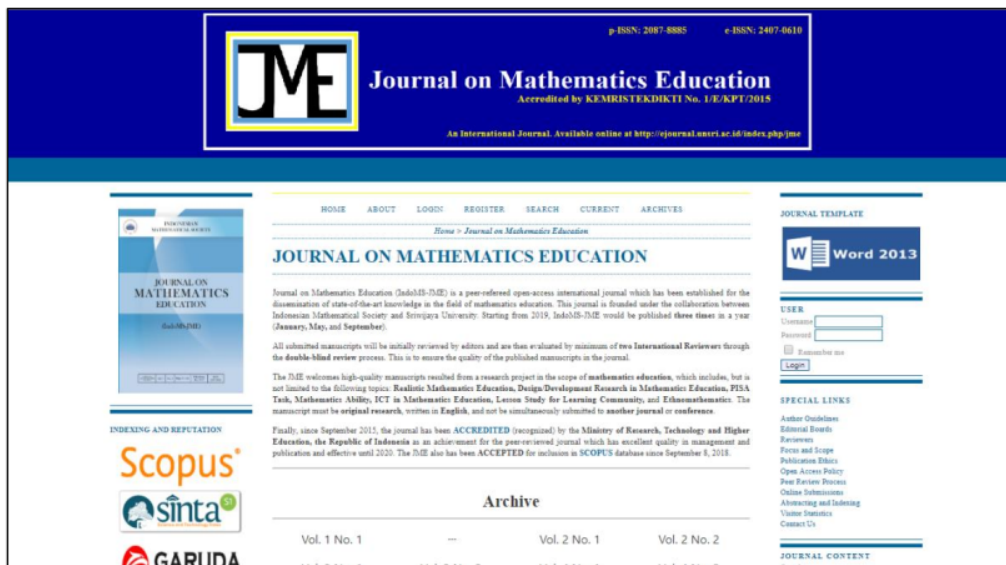


Figure 2. Display of JME in the first form with OJS

Furthermore, the JME OJS display has undergone a few changes to the current display, as shown in Figure 3. Every change that occurs on the website makes it easier for authors to complete the submission process and for readers to access every published article. The public can access it at

3 <https://ejournal.unsri.ac.id/index.php/jme/>.

Figure 3. Display of JME in the current website with OJS

### The First Recognition of Journal on Mathematics Education

In 2015, for the first time, JME was recognized at the national level. At that time, JME became the first mathematics education journal accredited by the Ministry of Research, Technology and Higher Education (Figure 4).



Figure 4. JME's first National Accreditation Certificate by Kemenristekdikti

This achievement was remarkable because, it was challenging to get recognition from <sup>10</sup> the Ministry of Research, Technology and Higher Education in the form of accreditation in a journal. There were only two accreditation ratings for scientific journals in Indonesia, namely accreditation A and B, with a very rigid number of assessment indicators. Furthermore, in the same year, JME was also indexed <sup>25</sup> by the Directory of Open Access Journals (DOAJ) and by the Education Resources Information Center (ERIC) from the United States. Not only satisfied with that, the team then focused on getting JME to be recognized globally by being indexed by the Scopus, by continuing to make guerrillas improve quality and expand JME promotions and networks both at home and abroad.

### The Activities of JME's Team for Getting International Recognition <sup>44</sup>

The JME team succeeded in promoting JME at significant events in the field of mathematics education, including at <sup>30</sup> the 13th International Congress on Mathematics Education (ICME) in Hamburg, Germany, the 17<sup>th</sup> Konferensi Nasional Matematika (KNM) in Pekanbaru, and the 4<sup>th</sup> South East Asian-Design Research (SEA-DR) at Universitas Negeri Padang, as shown in Figure 5.



Figure 5. Teams promoting JME at significant events both at home and abroad

In addition, the team also succeeded in promoting JME to researchers from Utrecht University, the Netherlands, who were visiting Indonesia. As a result, great researchers from the university published their articles at JME. There are several researchers from Utrecht University who have published their research paper in JME, including Prof. Mieke Abels, Prof. Maarten Dolk, Prof. Frans van Galen, Prof. Dolly van Eerde, Prof. Michiel Doorman, and Prof. Jan de Lange (Murdiyani et al., 2013; van Galen & van Eerde, 2013; Putri, Dolk, & Zulkardi, 2015; Tanudjaya & Doorman, 2020; Apsari et al., 2020;

Wijaya, Elmaini, & Doorman, 2021; de Lange, 2021). Finally, when the Chief Editor of JME visited that university, unexpectedly, they recognized JME by placing the journal in their campus library by aligning the journal side-by-side with other Top Journals in the field of Mathematics Education, such as ZDM-Journal on Mathematics Education, Educational Studies in Mathematics, Journal of Mathematics Teacher Education, Journal for Research in Mathematics Education, and Mathematics Education Research Journal, as shown in Figure 6.



Figure 6. JME recognition in the Utrecht University Library

### The Recognition as A Reputable International Journal

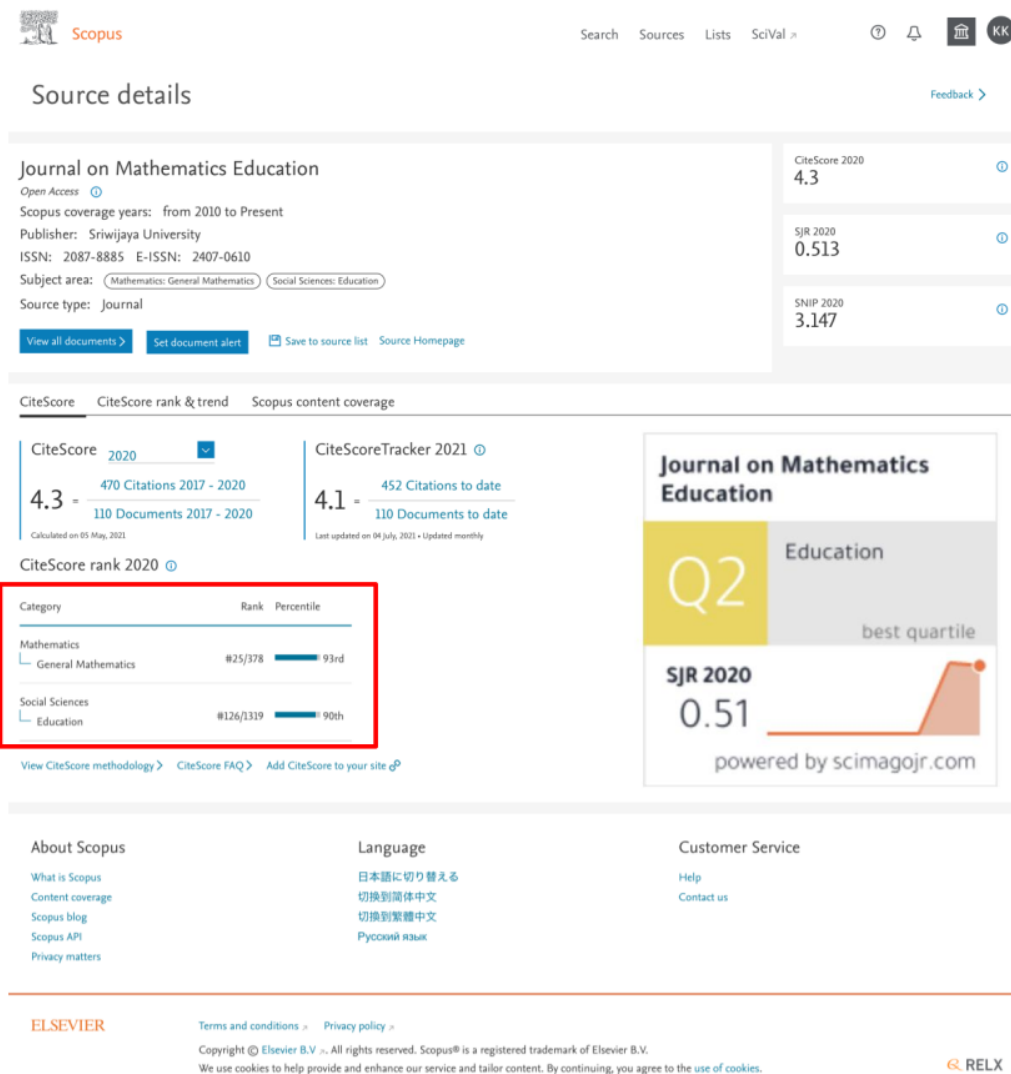
Finally, in 2018, JME was successfully accepted for indexation by Scopus and succeeded in asking Scopus to inclusion all JME articles starting from when they were first published or beginning in 2010. Its achievements have come from the hard work and prayers of the entire JME's team, including contributions from the JME Editorial Board members, reviewers, authors, the leader of IndoMS, and Universitas Sriwijaya. In that year, the Ministry of Research, Technology and Higher Education also awarded JME first rank accreditation (Sinta 1) to become one of the journals indexed by Scopus, as shown in Figure 7.



Figure 7. Submission of JME accreditation certificate rank 1



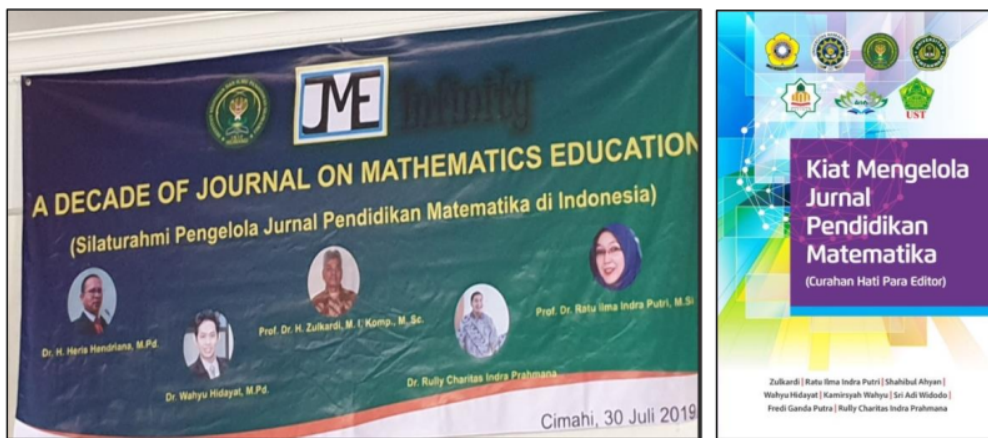
Since its inception until 2018, JME has published two issues every year. However, since 2019, the JME's Team has made a policy to increase the number of publications to 3 issues per year with a total number of publications of about ten articles per issue to maintain the articles' quality. This policy was a recommendation of the Ministry of Research, Technology and Higher Education to consider several issues related to the addition of good and quality articles to be displayed in the international arena as part of the nation's competitiveness. Currently, JME is in Q1 based on CiteScore 2020 data on Scopus and Q2 based on SJR 2020 data on Scimago Journal and Country Rank, as shown in Figure 8.



**Figure 8.** JME Profile on Scopus

Furthermore, <sup>35</sup> in 2019, the JME team succeeded in holding the anniversary of the decade of JME's journey at the Institut Keguruan dan Ilmu Pendidikan (IKIP) Siliwangi, Cimahi, Bandung, which is the

home of the Indonesia Mathematics Educators Society (I-MES), as shown in Figure 9. At the meeting, acting as the keynote speaker, there are Prof. Heris Hendriana (Chancellor of IKIP Siliwangi and Chair of I-MES), Prof. Zulkardi (Chief Editor of JME), Prof. Ratu Ilma Indra Putri (Editor of JME), Dr Wahyu Hidayat (Chief Editor of Infinity Journal and Secretary-General of I-MES), and Dr. Rully Charitas Indra Prahmana (Reviewer of JME). In addition, this activity was also attended by managing editors of mathematics education journals from various regions in Indonesia. Furthermore, to commemorate the 10<sup>th</sup> anniversary of JME, the chief and managing editors of the Mathematics Education journal collaborated to write down their experiences in managing the Mathematics Education journal and documented them in the form of a book entitled *Kiat Mengelola Jurnal Pendidikan Matematika* or *How to Manage Mathematics Education Journals* (Curahan Hati Para Editor/ Editors' Thought Sharing) (Zulkardi et al., 2019), shown in Figure 9.



**Figure 9.** JME One Decade Commemoration (left) and the book cover of journal managers (right)

Since JME was accepted for indexation by Scopus, the JME team tried to give a certain portion by publishing articles with the characteristics of international collaboration while maintaining the quality of the research produced in their articles. This is important to maintain the reputation and readability of articles published by JME at the global level. A number of articles that have the characteristics of international collaboration include an article entitled the Development of A Student Survey on Attitudes Towards Mathematics Teaching-Learning Processes, which is a collaboration between Indonesian and Australian researchers, one of the authors is Tom Lowrie, who is the Program Director for the Early Learning STEM Australia (ELSA) project (Mutohir, Lowrie, & Patahuddin, 2018); an article entitled the Integration of A Problem-Solving Framework for Brunei High School Mathematics Curriculum in Increasing Student's Affective Competency, which is a collaboration between researchers at the Universiti Brunei Darussalam, Brunei Darussalam and the University of Edinburgh, United Kingdom (Chong, Shahrill, & Li, 2019); an article entitled A Comparative Study of Quadrilaterals Topic Content in Mathematics Textbooks Between Malaysia and South Korea, which is

a collaboration between researchers at <sup>48</sup>Universiti Teknologi Malaysia (UTM), Malaysia, and Chonnam National University, South Korea (Abdullah & Shin, 2019); an article entitled <sup>1</sup>Elementary Preservice Teachers' Knowledge, Perceptions and Attitudes Towards Fractions: A Mixed-Analysis, <sup>26</sup> which is a collaboration between researchers at Universiti Kebangsaan Malaysia, Malaysia, Texas A&M University, Sam Houston State University, and the University of Houston, United States (Rosli et al., 2020); an article entitled Student Engagement and Math Teachers Support, which is a collaboration of researchers at Imam Abdulrahman Bin Faisal University, Saudi Arabia, and Saint Louis University, United States (Alrajeh & Shindel, 2020) <sup>1</sup>

Furthermore, an article entitled <sup>1</sup>Learning Mathematical Modeling with Augmented Reality <sup>49</sup>Mobile Math Trails Program: How Can It Work?, which is a collaboration of researchers at the State University of Semarang, <sup>31</sup>Indonesia, and Goethe-Universität Frankfurt, Frankfurt, Germany (Cahyono et al., 2020); an article entitled <sup>1</sup>Partitive Fraction Division: Revealing and Promoting Primary Students' Understanding, which is a collaboration of researchers at Mataram State Islamic University, Mataram University, Indonesia, and Technical University Dortmund, Germany (Wahyu et al., 2020); an article entitled <sup>1</sup>Using Robotics And Engineering Design Inquiries to Optimize Mathematics Learning for Middle Level Teachers: A Case Study, which is a collaboration of researchers at West University, South Africa, University of Massachusetts Lowell, Illinois Mathematics and Science Academy, and Georgia State University, USA (Chahine, Robinson, & Mansion, 2020); an article entitled <sup>1</sup>A Comparison of Mathematical Tasks Types used in Indonesian and Australian Textbooks based on Geometry Contents, which is a collaboration of researchers at SEAMEO QITEP in Mathematics, Indonesia, and Monash University, Australia (Hidayah & Forgasz, 2020); and an article entitled <sup>1</sup>An Analysis of Learners' Solution Strategies in the Context of Modeling Tasks, which is a collaboration of researchers at the University of Duisburg, Germany, and Rhodes University, South Africa (Reit & Schäfer, 2020).

<sup>14</sup> Finally, in the last edition of 2020, JME succeeded in publishing a scientific article entitled <sup>15</sup>Learning Geometry and Values from Patterns: Ethnomathematics on The Batik Pattern of Yogyakarta, Indonesia (Prahmana & D'Ambrosio, 2020), a collaboration of article writing between researchers at Universitas Ahmad Dahlan, Indonesia, and a mathematician, the initiator of Ethnomathematics, and the founder of the Brazilian Society for Mathematics and History of the International Group of Ethnomathematicians from Brazil, Prof. Ubiratan D' Ambrosio. He died on May 12, 2021, 8 months <sup>45</sup> after his collaborative article was published at JME and this is his last article published in a Reputable International Journal.

### **Journal on Mathematics Education in National and International Level**

JME's ranking among journals in Indonesia can be seen from the ranking order of journals on the SINTA Kemenristekdikti website (<https://sinta.ristekbrin.go.id/journals>), which is based on the Impact value in each journal. Figure 10 shows that JME ranks first out of a total of 5990 journals in the Sinta

database in Indonesia with the highest impact value; the difference in impact values is quite significant compared to the journals listed after.

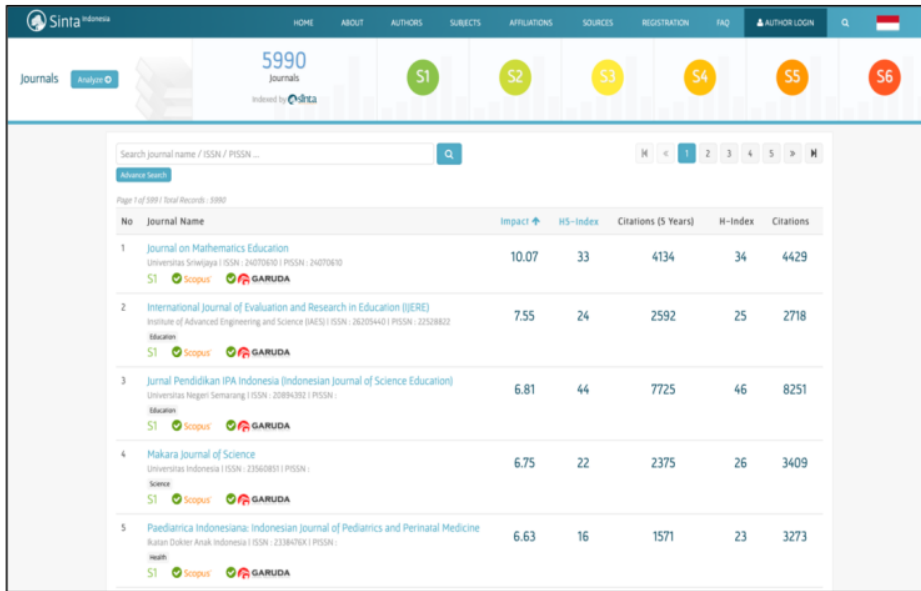


Figure 10. JME's position on the Sinta Kemenristekdikti website on Friday, 23 July 2021

The reputation and ranking of a journal at the Scopus indexing agency are determined by CiteScore data or the calculation of the 3-year average number of citations for the latest published articles divided by the number of documents in those three years in a journal. Based on these data, in 2021, JME is in the first quartile or Q1 with a CiteScore value of 4.3. This result puts JME in first place out of a total of 95 Indonesian journals indexed in the Scopus database, as shown in Figure 11.

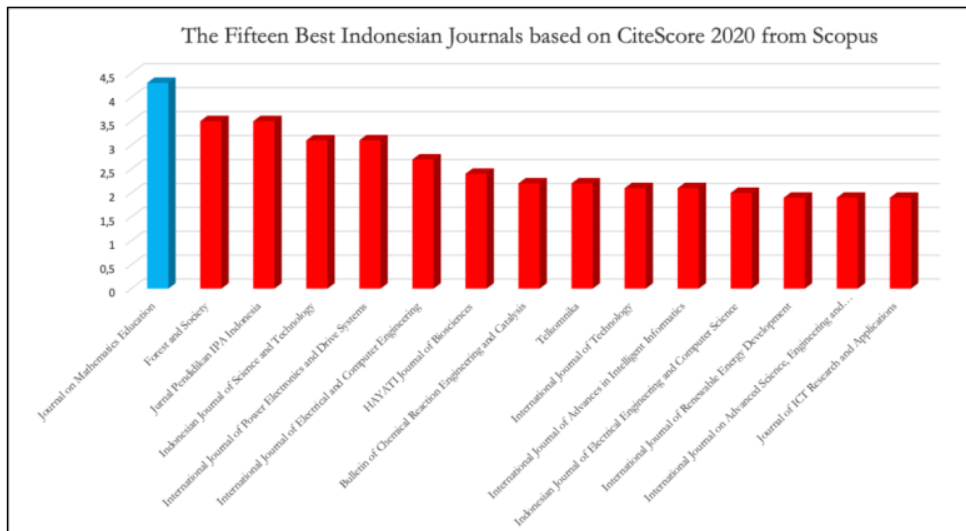
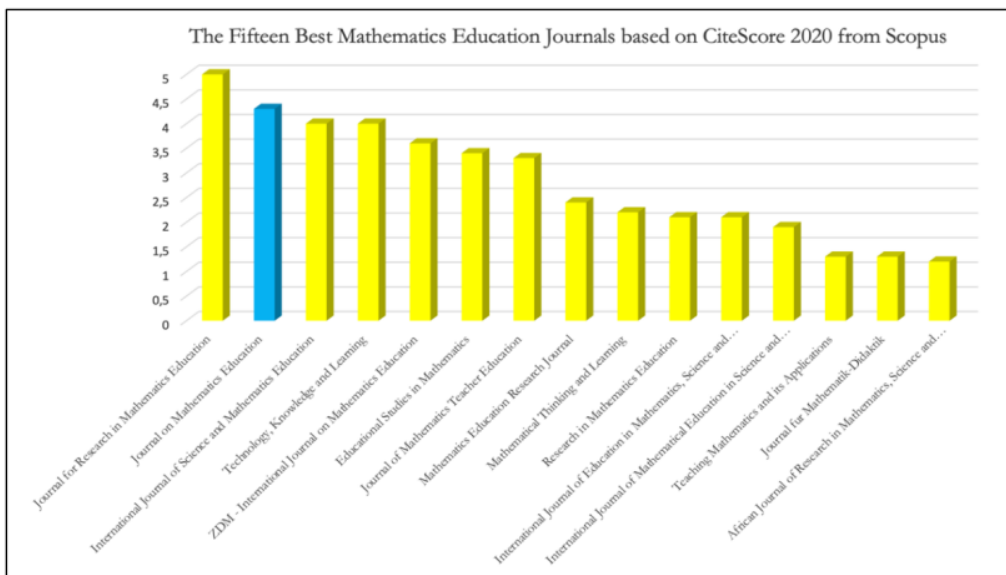


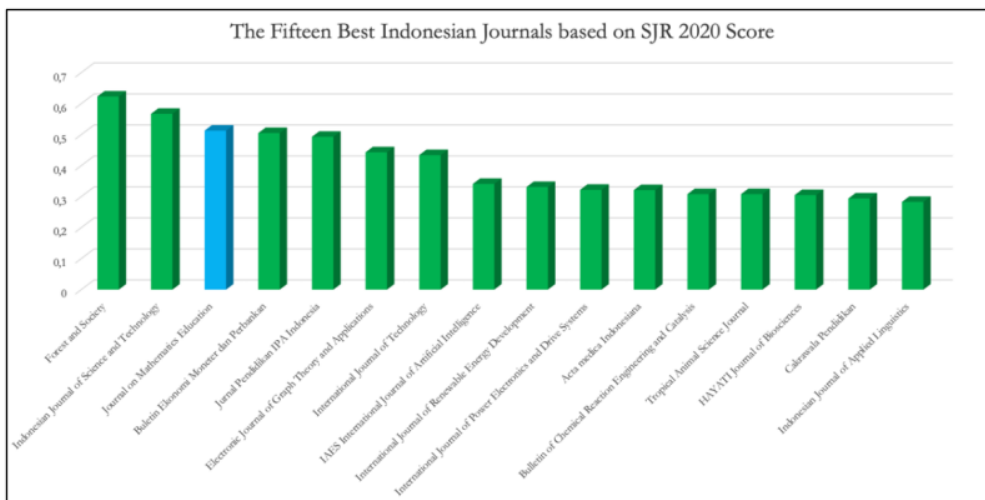
Figure 11. JME's position among the 15 best Indonesian Journals indexed by Scopus (Appendix 1)

In addition, JME's CiteScore 2020 score put JME in second place of 35 Scopus indexed journals in Mathematics (General Mathematics or Mathematics (miscellaneous)) and Education. It indicated that <sup>17</sup> JME is a journal in the field of Mathematics Education whom a Scopus indexes globally. The best 15 positions for Mathematics Education journals in the Scopus database based on CiteScore 2020 scores is provided in Figure 12.



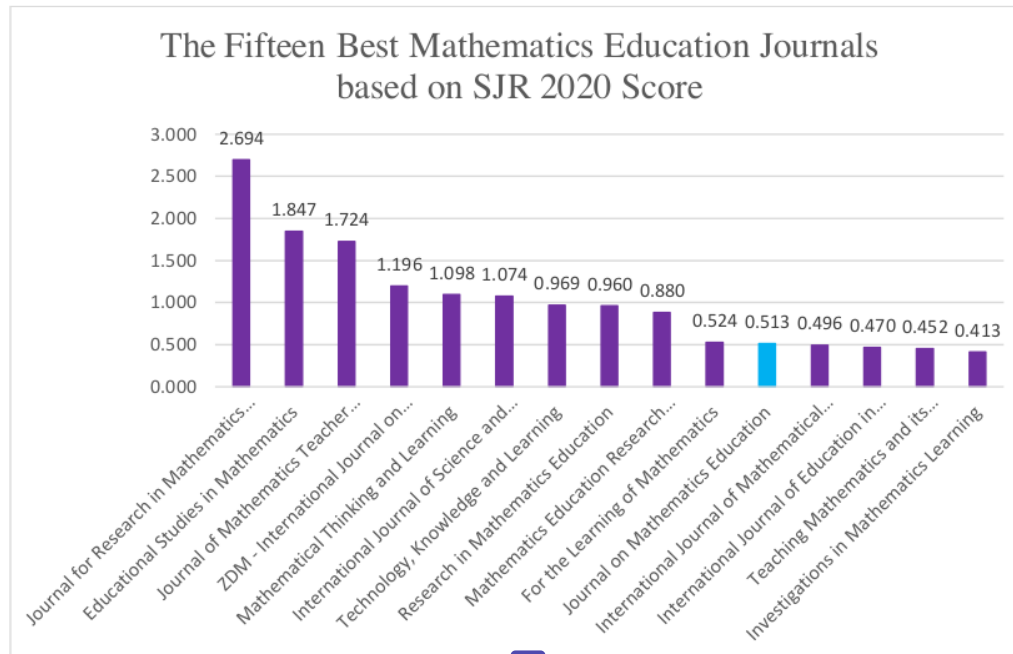
**Figure 12.** JME's position among the 15 best Mathematics Education Journals indexed by Scopus (Appendix 2)

Furthermore, if we look at the journal data <sup>21</sup> on the Scimago Journal and Country Rank website, JME is in the Q2 quartile, which is determined from the Scimago Journal Rank (SJR) score. Based on these data, JME ranked 3<sup>rd</sup> out of a total of 95 Indonesian journals indexed at ScimagoJR, as shown in Figure 13.



**Figure 13.** JME's position among the 15 best Indonesian journals indexed by ScimagoJR (Appendix 3)

In addition, JME's SJR 2020 puts the in rank 11<sup>th</sup> out of 35 journals indexed by ScimagoJR within the area of Mathematics (General Mathematics or Mathematics (miscellaneous)) and Education. It indicated that JME is a journal in the field of Mathematics Education whom a Scimago Journal Rank and Country. The complete data for the 15 best journals in the field of Mathematics Education according to the ScimagoJR version can be seen in Figure 14.

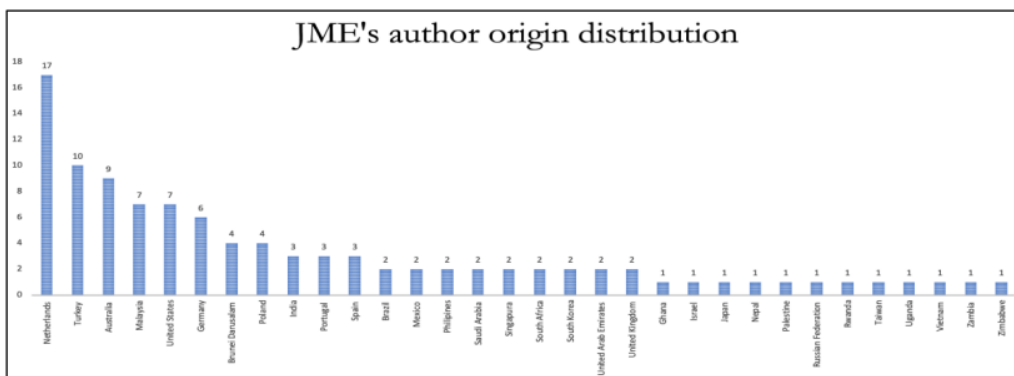


**Figure 14.** JME's position among the 15 best journals in the field of Mathematics Education, according to ScimagoJR (Appendix 4)

### Journal on Mathematics Education in the Future

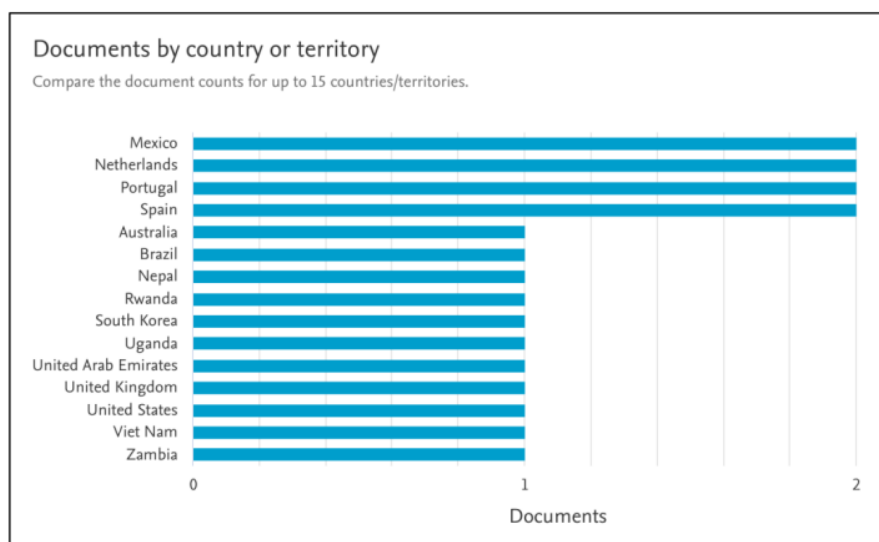
Currently, there are hundreds of researchers from dozens of countries who publish their scientific works at JME. They come from Australia, Brazil, Brunei Darusallam, Germany, Ghana, Indonesia, India, Israel, Japan, Malaysia, Mexico, Nepal, Netherlands, Palestine, Philippines, Poland, Portugal, Russian Federation, Rwanda, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Taiwan, Turkey, Uganda, United Arab Emirates, United Kingdom, United States, Vietnam, Zambia and Zimbabwe, as shown in Figure 15.

By 2021, the Journal on Mathematics Education is increasingly improving itself to publish quality articles written by world-class researchers by the focus and scope of JME and following trends in that year, including collaborative writings between researchers from Universitas Ahmad Dahlan, SEAMEO QITEP in Mathematics, Indonesia, and two world-class Ethnomathematics experts, Prof. Daniel Clark Grey and Prof. Milton Rosa from Universidade Federal de Ouro Preto, Brazil, entitled *Ethnomathematics: Pranatamangsa System and The Birth-Death Ceremonial in Yogyakarta* (Prahmana et al., 2021).



**Figure 15.** Distribution of origin of JME authors from various countries outside Indonesia (Appendix 5)

Furthermore, the article with the title <sup>29</sup> *Designing PISA-Like Mathematics Task using A COVID-19 Context (PISACOMAT)* written by researchers from Sriwijaya <sup>46</sup> University, Indonesia, is an article on the development of PISA type <sup>41</sup> questions using the context of the COVID-19 pandemic that is spreading in the world, including in Indonesia (Nusantara, Zulkardi, & Putri, 2021). Lastly, JME also has published articles written by Prof. Jan de Lange entitled <sup>2</sup> *There Is, Probably, No Need for A Design Framework* <sup>13</sup> as an invited author in this issue. He was a director of the Freudenthal Institute and chairman of The Expert Group for Mathematics of OECD's new Program for International Student Assessment (PISA). In this article, he presented his personal perspective on designing <sup>12</sup> a mathematics lesson with several examples of his work at the Freudenthal Institute, which focused on student learning and slow design derived from knowledge of mathematics and its support system in the learning process (de Lange, 2021). In addition, the distribution of authors since the beginning of 2021 has significantly varied with more than 15 countries (excluding Indonesia), as shown in Figure 16.



**Figure 16.** Distribution of the author's country of origin outside Indonesia in Vol. 12, No. 1 and 2, 2021

### Final Remarks

The JME's team continues to strive for JME at the international level. They continue to improve the quality of articles published on JME. Furthermore, they maintain the integrity of conflicts of interest with the authors. They also continue to enhance the editing and display quality of articles and the JME website, making them more interesting to read. Lastly, they facilitate authors from Indonesian researchers to exist by maintaining the research quality and authoring excellent article at the international level.

In addition, JME's team are committed to maintaining the quality of all indicators provided by internationally reputable indexing institutions. JME needs to continue to the highest level in the reputable indexing institutions in future. To do so, it starts with increasing its number of citations each year, number of international collaboration and number of articles which potentially give big impact to scientific development of mathematics education in the world. Therefore, in the future, the target of being indexed by the Web of Science (WoS) Core Collection, Social Science Citation Index (SSCI), which is one of the best indexing institutions globally, by 2025 can be achieved.

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**Appendix 1.** The Fifteen Best Indonesian Journals based on CiteScore 2020 from Scopus (<https://www.scopus.com>)

<b>Rank</b>	<b>Title</b>	<b>CiteScore 2020</b>	<b>Scopus Best Quartile</b>
1	Journal on Mathematics Education	4,3	Q1
2	Forest and Society	3,5	Q1
3	Jurnal Pendidikan IPA Indonesia	3,5	Q1
4	Indonesian Journal of Science and Technology	3,1	Q2
5	International Journal of Power Electronics and Drive Systems	3,1	Q2
6	International Journal of Electrical and Computer Engineering	2,7	Q2
7	HAYATI Journal of Biosciences	2,4	Q2
8	Bulletin of Chemical Reaction Engineering and Catalysis	2,2	Q3
9	Telkonnika	2,2	Q3
10	International Journal of Technology	2,1	Q2
11	International Journal of Advances in Intelligent Informatics	2,1	Q3
12	Indonesian Journal of Electrical Engineering and Computer Science	2,0	Q3
13	International Journal of Renewable Energy Development	1,9	Q3
14	International Journal on Advanced Science, Engineering and Information Technology	1,9	Q2
15	Journal of ICT Research and Applications	1,9	Q2

**Appendix 2.** The Fifteen Best Mathematics Education Journals based on CiteScore 2020 from Scopus (<https://www.scopus.com>)

Rank	Title	CiteScore 2020	Scopus Best Quartile
1	Journal for Research in Mathematics Education	5,0	Q1
2	Journal on Mathematics Education	4,3	Q1
3	International Journal of Science and Mathematics Education	4,0	Q1
4	Technology, Knowledge and Learning	4,0	Q1
5	ZDM - International Journal on Mathematics Education	3,6	Q1
6	Educational Studies in Mathematics	3,4	Q1
7	Journal of Mathematics Teacher Education	3,3	Q1
8	Mathematics Education Research Journal	2,4	Q1
9	Mathematical Thinking and Learning	2,2	Q1
10	Research in Mathematics Education	2,1	Q1
11	International Journal of Education in Mathematics, Science and Technology	2,1	Q1
12	International Journal of Mathematical Education in Science and Technology	1,9	Q2
13	Teaching Mathematics and its Applications	1,3	Q2
14	Journal fur Mathematik-Didaktik	1,3	Q2
15	African Journal of Research in Mathematics, Science and Technology Education	1,2	Q2

**Appendix 3.** The Fifteen Best Indonesian Journals based on SJR 2020 Score from ScimagoJR (<https://www.scimagojr.com>)

Rank	Title	SJR 2020 Score	SJR Best Quartile
1	Forest and Society	0,623	Q1
2	Indonesian Journal of Science and Technology	0,567	Q1
3	Journal on Mathematics Education	0,513	Q2
4	Buletin Ekonomi Moneter dan Perbankan	0,505	Q2
5	Jurnal Pendidikan IPA Indonesia	0,493	Q2
6	Electronic Journal of Graph Theory and Applications	0,443	Q3
7	International Journal of Technology	0,434	Q2
8	IAES International Journal of Artificial Intelligence	0,341	Q2
9	International Journal of Renewable Energy Development	0,331	Q3
10	International Journal of Power Electronics and Drive Systems	0,322	Q2
11	Acta medica Indonesiana	0,321	Q3
12	Bulletin of Chemical Reaction Engineering and Catalysis	0,308	Q3
13	Tropical Animal Science Journal	0,308	Q2
14	HAYATI Journal of Biosciences	0,305	Q2
15	Cakrawala Pendidikan	0,294	Q3

**Appendix 4.** The Fifteen Best Mathematics Education Journals based on SJR 2020 Score from ScimagoJR (<https://www.scimagojr.com>)

Rank	Title	SJR 2020 Score	SJR Best Quartile
1	Journal for Research in Mathematics Education	2,694	Q1
2	Educational Studies in Mathematics	1,847	Q1
3	Journal of Mathematics Teacher Education	1,724	Q1
4	ZDM - International Journal on Mathematics Education	1,196	Q1
5	Mathematical Thinking and Learning	1,098	Q1
6	International Journal of Science and Mathematics Education	1,074	Q1
7	Technology, Knowledge and Learning	0,969	Q1
8	Research in Mathematics Education	0,960	Q1
9	Mathematics Education Research Journal	0,880	Q1
10	For the Learning of Mathematics	0,524	Q2
11	Journal on Mathematics Education	0,513	Q2
12	International Journal of Mathematical Education in Science and Technology	0,496	Q2
13	International Journal of Education in Mathematics, Science and Technology	0,470	Q2
14	Teaching Mathematics and its Applications	0,452	Q2
15	Investigations in Mathematics Learning	0,413	Q2

**Appendix 5.** Distribution of origin of JME authors from various countries outside Indonesia

<b>Rank</b>	<b>JME's Author Origin</b>	<b>Quantity</b>
1	Netherlands	17
2	Turkey	10
3	Australia	9
4	Malaysia	7
5	United States	7
6	Germany	6
7	Brunei Darussalam	4
8	Poland	4
9	India	3
10	Portugal	3
11	Spain	3
12	Brazil	2
13	Mexico	2
14	Philippines	2
15	Saudi Arabia	2
16	Singapura	2
17	South Africa	2
18	South Korea	2
19	United Arab Emirates	2
20	United Kingdom	2
21	Ghana	1
22	Israel	1
23	Japan	1
24	Nepal	1
25	Palestine	1
26	Russian Federation	1
27	Rwanda	1
28	Taiwan	1
29	Uganda	1
30	Vietnam	1
31	Zambia	1
32	Zimbabwe	1

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