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Indonesian Teachers' Perceptions Of Online Learning Technology In Mathematics Classrooms During The Covid-19 Pandemic

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Indonesian Teachers' Perceptions of Online Learning Technology in Mathematics Classrooms during the Covid-19 Pandemic

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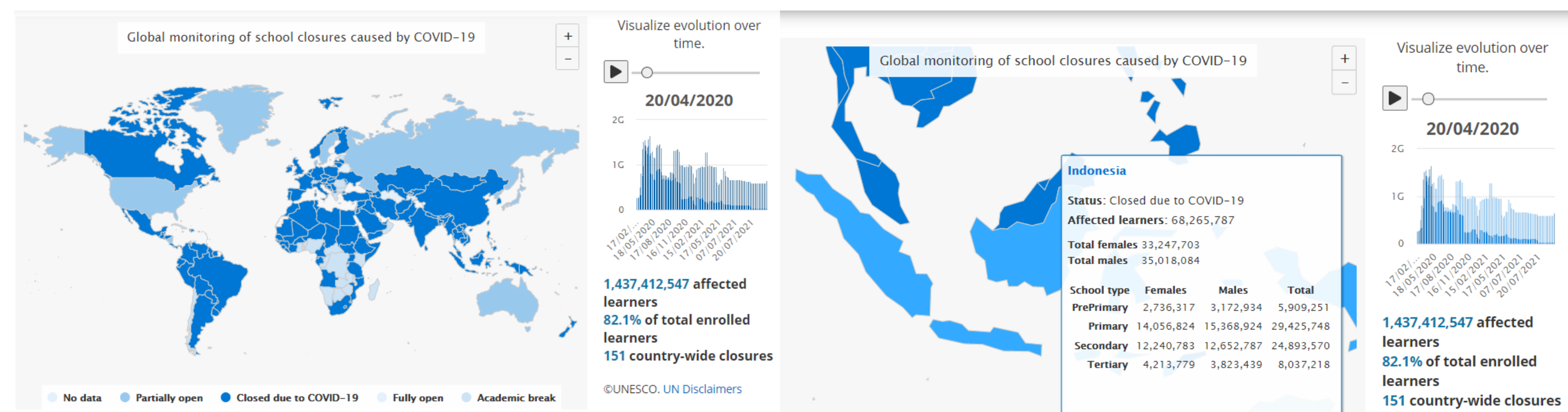
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ABSTRACT

Teachers are an important key in implementing distance learning during the pandemic, it is necessary to explore teacher perceptions in the use of distance learning technology. Questionnaire data were collected from 363 mathematics teachers in Indonesia. Furthermore, 8 mathematics teachers were interviewed using zoom and in person. The results of this study are mathematics teachers consider that distance education technology to be easy and useful during the pandemic. In addition, math teachers intend to continue using educational technology after the pandemic ends. This study suggests that the government should provide training to mathematics teachers to improve the quality of post-pandemic learning. Further research should be conducted to obtain better results.

INTRODUCTION

After more than a year of implementing distance learning, mathematics teachers in Indonesia have a positive perception of the use of distance learning technology

source: https://en.unesco.org/covid19/educationresponse

source: https://en.unesco.org/covid19/educationresponse#schoolclosures

Kebritchi, Lipschuetz, & Santiague (2017) stated that teachers have difficulty teaching virtually, including the transition from face-to-face to online, time management, and teaching styles.
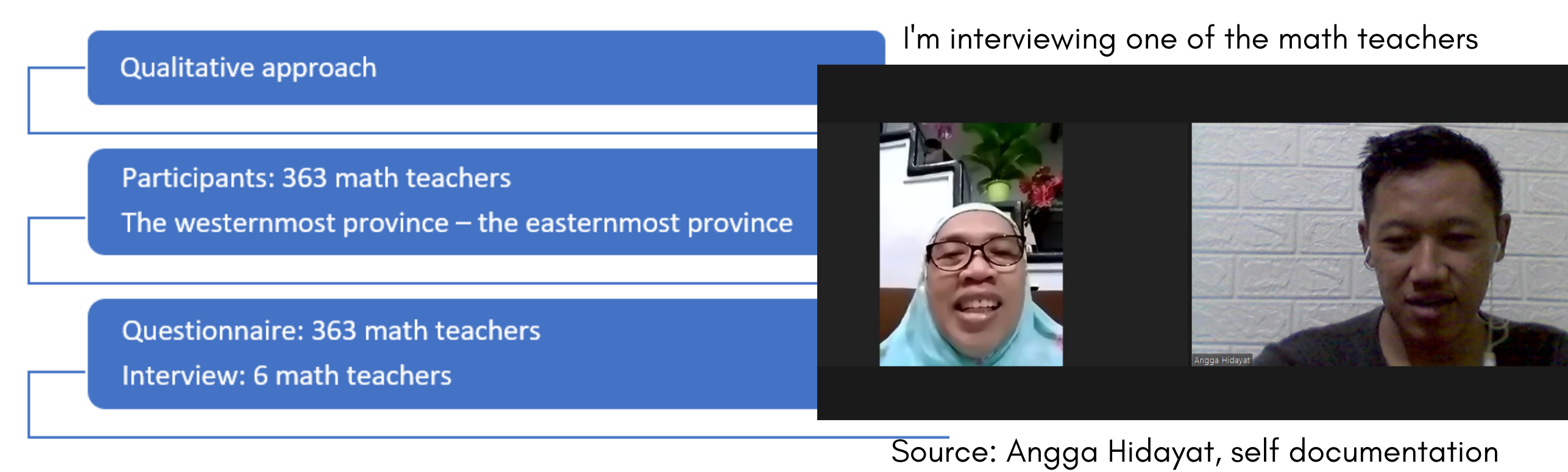
Despite experiencing many challenges, the use of online learning technology every day for more than 1 year is expected to be able to affect changes to teachers' perceptions of online learning technology. Britzman (2012) stated that practice makes teachers better at teaching.

Pleger & Villringer (2013) perceptions affect decision making. Perception of online learning can affect teachers' decision to continue online learning after the pandemic
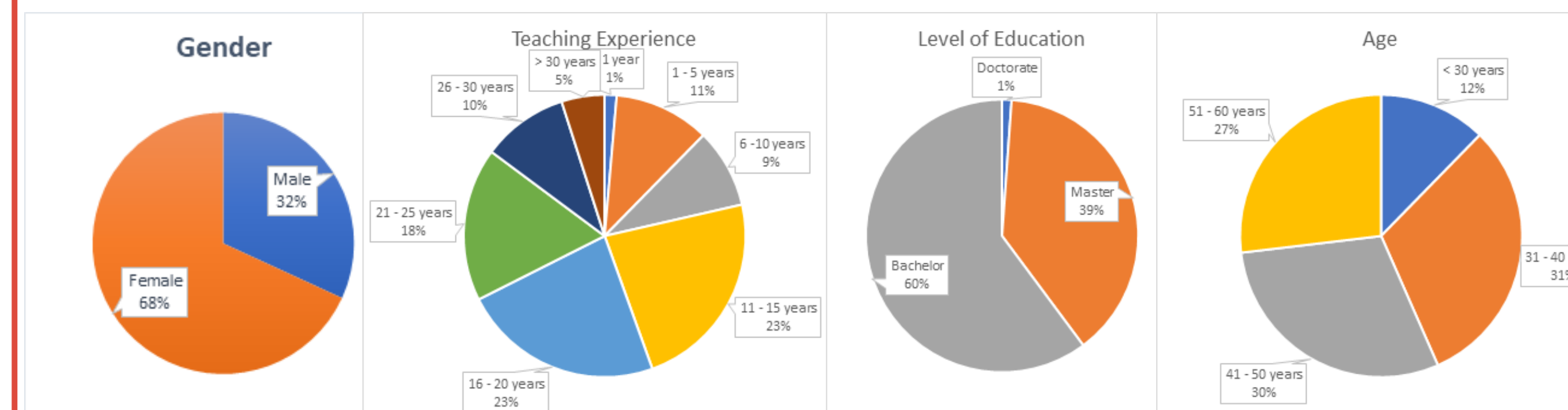
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METHODOLOGY

Qualitative approach

Participants: 363 math teachers
The westernmost province – the easternmost province

Questionnaire: 363 math teachers
Interview: 6 math teachers

I'm interviewing one of the math teachers

Source: Angga Hidayat, self documentation

## DEMOGRAPHICS

Gender

Teaching Experience

Level of Education

Age

CONCLUSIONS

- Initially mathematics teachers in Indonesia found it difficult to use technology that supports distance learning, but after more than 1 year of using technology, mathematics teachers in Indonesia are used to using technology and find it easy to use it.
- Mathematics teachers in Indonesia feel that the use of distance learning technology is very beneficial because without virtual learning the learning process will not be able to take place during the pandemic.
- Because Indonesian math teachers are now accustomed to using technology in education, mathematics teachers in Indonesia will continue to use technology after the pandemic. However, distance learning is only a secondary option, especially for a mathematics course that needs in person assistance.
- The government should provide training on the use of technology continuously to teachers, especially mathematics teachers, so that they can teach mathematics better even though the course is taught virtually
- Further research with more participants and more courses should be conducted in the future.

FINDINGS

Perceived ease of use
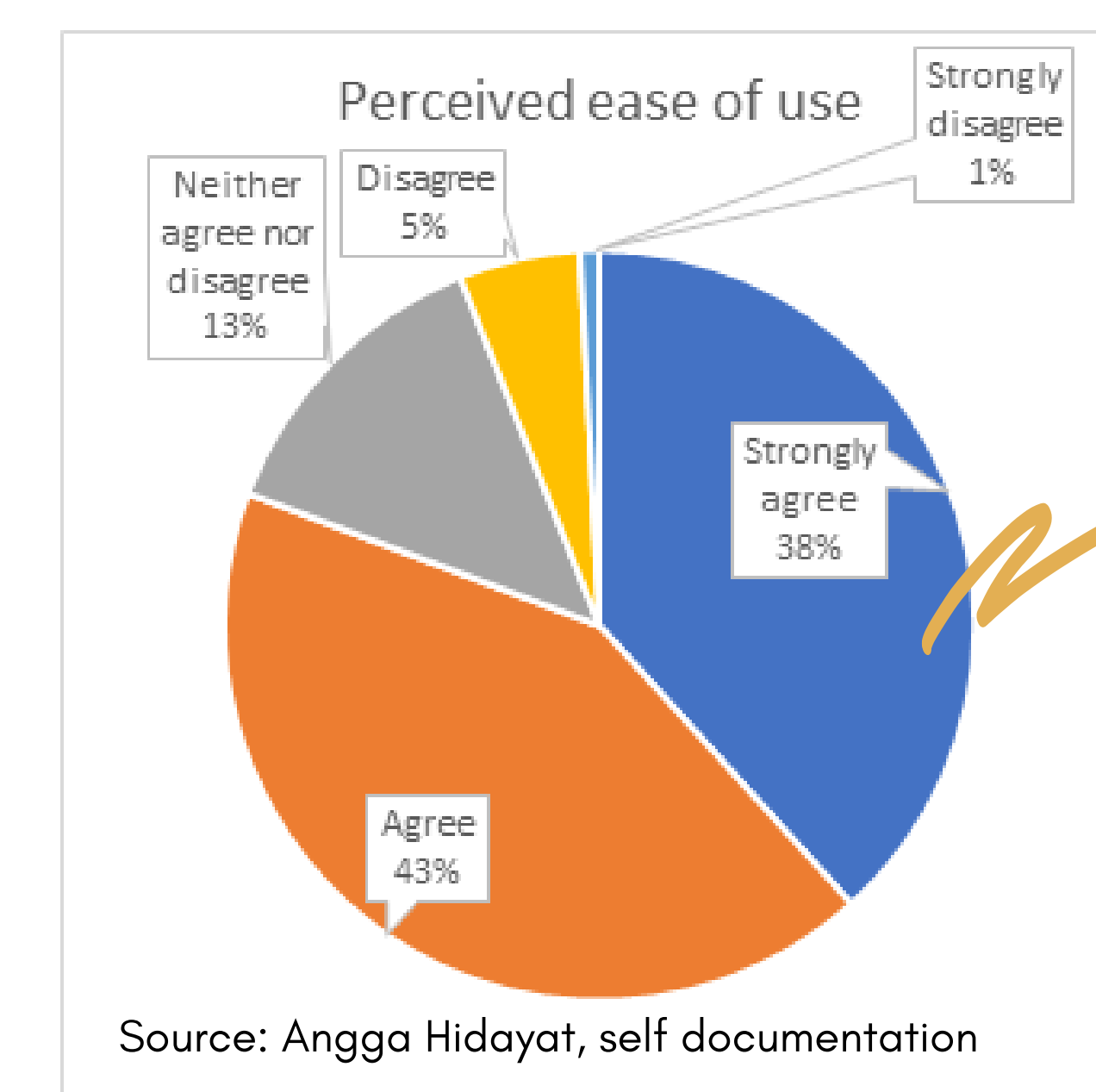
Source: Angga Hidayat, self documentation

81% of mathematics teachers think that using online learning technology is easy.

However, generally mathematics teachers found it difficult at the beginning of the pandemic because they were not used to using distance learning technology, but after one year and receiving distance learning training, teachers were able to adapt and find it easy to use distance learning technology.

This is accordance with Jensen & Tunon (2012) which mentioned that distance learning tools are easy to use because many of these applications are cloud based, little or no downloading is required to use these applications from any PC.

70% of mathematics teachers think that online learning technology is useful, especially during the pandemic.

Although it is not as good as the implementation of learning in person, but without distance learning technology, teaching and learning activities cannot be conducted during the pandemic.
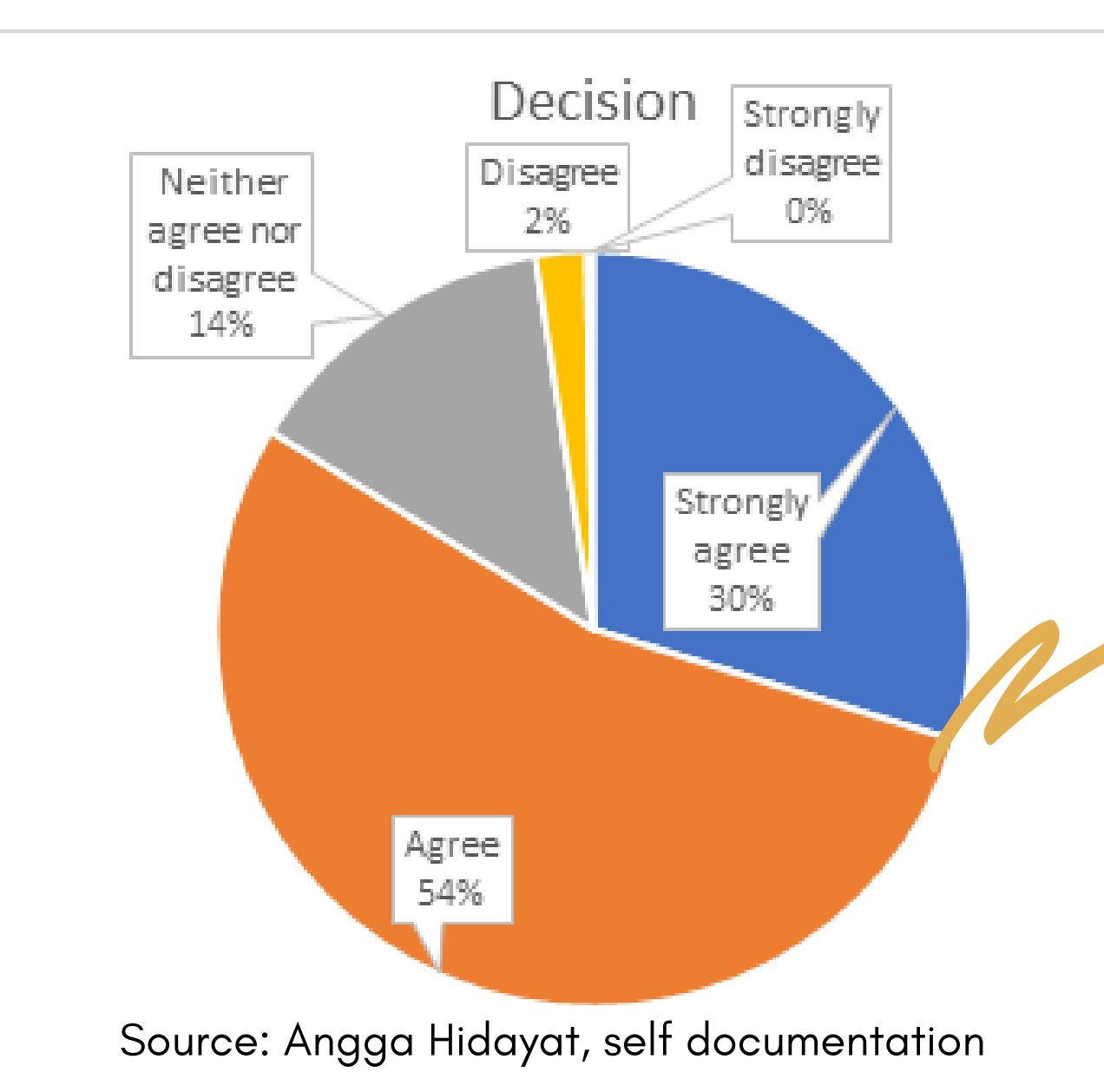
This can be contributed to the research conducted by Lamba (2011) which stated that distance learning is a very useful tool without regard to time, distance or geopolitical boundaries

Perceived of usefulness
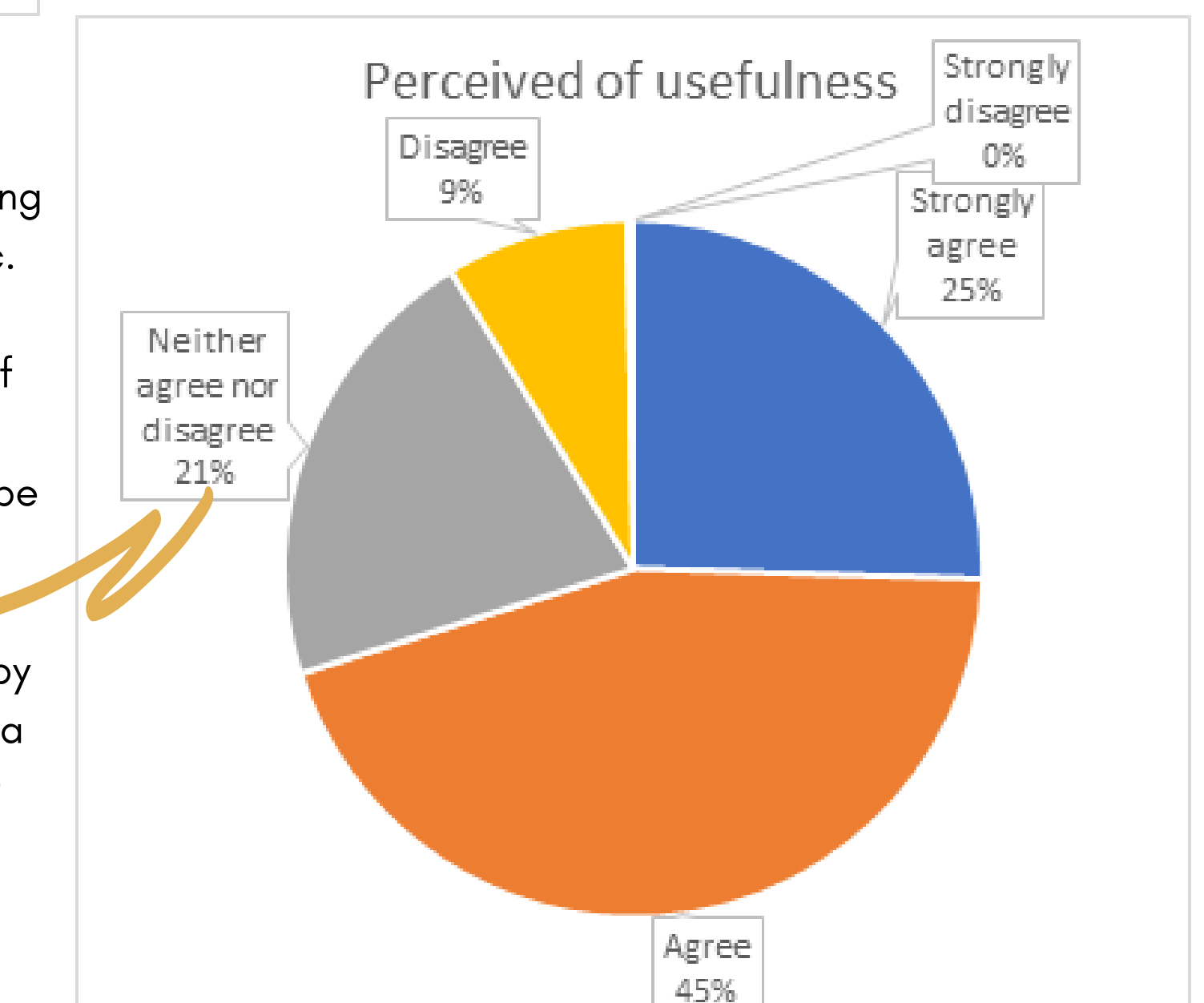
Source: Angga Hidayat, self documentation

Decision

84% of mathematics teachers decide to continue using educational technology even though the pandemic ends

In person learning is primary, but it can be supported by distance learning. For example, teachers who are on duty out of town can use Google Meet or Zoom to explain teaching materials or use Quizizz for student assignments.

Source: Angga Hidayat, self documentation