Proceeding of ICECRS, 1 (2017) 39-42
ISSN. 2548-6160
ICIGR 2017, 24-25 November 2017, Universitas Muhammadiyah Sidoarjo, Indonesia.
Available online: http://ojs.umsida.ac.id/index.php/icecrs
Article DOI: https://doi.org/10.21070/picecrs.v1i2.1432

The Anxiety of PGSD'S Student in The Teaching of Mathemathics

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ABSTRACT: Mathematics is a subject that has characteristics which different from other subjects. Mathematics subject mostly always splurging on numbers. This causes not all university students like this subject. Many university students are anxious when meeting or even more when teaching these subject. To find out more about the anxiety of students on mathematics, the researchers conducted a research to determine the anxiety that existed in the students while teaching mathematics subject. The method used in this research is qualitative, where in qualitative research is intended to explore the information that will be the basis of the design and detailed the specificity that exists in a unique context. The results of this study tells us if most PGSD student experience mathemathical anxiety when first teaching math.

Keywords: *Mathematics, and Anxiety*

INTRODUCTION

Anxiety always arises from within the person of a teacher especially when teaching mathematics. This mathematical anxiety has negative effect on student achievement[1]. This is because mathematical anxiety makes students feel sick or uncomfortable with the subject of mathematics. The discomfort that arises makes students have negative perception of mathematics. Though maths personally do not have a bad desire for someone who studied it.

Mathematical anxiety is almost happening at every level of formal education that exists. According to Khatoon & Mahmood[2] mathematical anxiety can be found starting from the level of primary education, middle to college level. The appearance of mathematical anxiety is needed an attention. Moreover mathematical anxiety has appear from the most basic level. If we're to quote a statement from Jackson & Leffingwell[3], that anxiety also increases as education level increases. This led to the need for an action to break the chain of mathematical anxiety.

Mathematical anxiety that occurs becomes a problem for prospective teachers who will teach math. This revealed by Burzal & Paznokas[4] that the percentage of many prospective teachers who have mathematical anxiety is higher than with non-prospective teachers. Looking at the data can be drawn into a conclusion that the more math anxiety experienced by prospective teachers. This happen because student prospective teachers not only learn mathematics, but also teach mathematics in a lesson in the classroom.

[1] Erdogan, A., Kesici, S., & Sahin. Prediction of High School Students‟ Mathematics Anxiety by Their Achievement Motivation and Social Comparison. *Elementary Education Online,* 10 (2), 2011. 646-652.
[2] Khatoon, T. & Mahmood, S. Mathematics Anxiety Among Secondary School Students in India and its Relationship to Achievement in Mathematics. *European Journal of Social Science,* 16 (1), 2010. 75-86.
[3] Jackson, C.D., & Leffingwell, R.J. The Role of Instructors in Creating Mathematics Anxiety from Kindergarten through College. *Mathematics Teacher,* 92 (7), 1999. 583-586.
[4] Bursal, M. & Paznokas, L. Mathematics Anxiety and Pre-service Elementary Teachers‟ Confidence to Teach Mathematics and Science. *School Science and Mathematics,* 106 (4), 2006. 173-179.

This math anxiety will have an impact to the development of students competence as a potential teacher. Choppin[5] argues that teachers with relative mathematical anxiety relied on textbook-based learning than in classroom discussion activities. This will affect indirectly into the learners condition. Anxiety on prospective teachers need to be observed further so it can be known in detailed how prospective teachers experience mathematical anxiety while teaching mathematics.

The purpose of this study is to find out more detail about the anxiety that appears in prospective teachers while teaching mathematics. The anxiety that arises is a mathematical anxiety. This happen because the anxiety that occurs in prospective teachers are always associated with mathematics subjects.

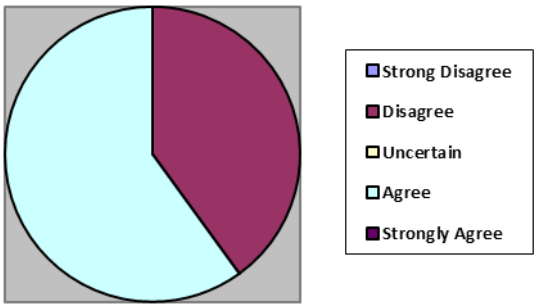
RESEARCH METHODS

The research is qualitative research with case study method which described. The case study method is applied because it sees the object of research that possesses a case of mathematical anxiety. This research was conducted on primary school prospective teachers whose carrying out field experience practice in semester 7. The choice of this research subject is because the new students carry out the practice of new field experience which feeling on how to be a real teacher. The subject of this research is 25 people from 7th semester student in academic year 2016/2017. The chosen subject in this semester is due in the 7th semester the student receives and conducts the field of Field Experience Program. In the field experience program, students interact directly with elementary school students. In this course students feel the real condition of being a teacher. This condition cause prospective teacher students anxiety, especially mathematical anxiety, when they learn mathematics subject, while becoming a teacher in elementary school.

Data collection method used in this research is survey. The survey method used will be Mathematics Anxiety-Apprehension Survey (MAAS) developed by Ikegulu[6] (1998) with some adjustments. The anxiety scale is answered with reference to the Likert scale. Qualitative descriptive data analysis was conducted to obtain the description of mathematical anxiety in prospective teacher students.

RESEARCH RESULTS AND DISCUSSION

The instruments developed by Ikegulu[7] (1998) were calculated to determine the degree of instrument credibility. Triangulation used is data triangulation. Data from the survey were compared with observations. Photos of student teaching activities are used to reinforce the authentic evidence of observations.



[5] Choppin, J. The Role of Local Theories: Teacher Knowledge and Its Impact on Engaging Students with Challenging Task. *Mathematics Education Education Research Journal,* 23 (5), 2011. 5-25.
[6] Ikegulu, T. Nelson. An Empirical Development of an Instrument to Assess Mathematics Anxiety and Apprehension. Research Associate Department of Mathematics & Computer Science. Grambling State University. 1998. 142.
[7] Ibid.

Fig. 1. Diagram about student perception student avoid mathematics courses

Looking at the table above can be seen as much as 60% Student avoid mathematics courses. The number of students who avoid mathematics due to various reasons. Among them feel their mind seems to go blank during math test. To see how many percentage the reasons are selected by students can be seen in the diagram below:

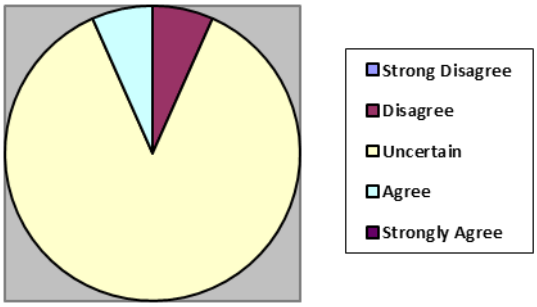


Fig. 2 Diagram about student perception students mind seems to go blank during math tests

Most students feel that they seem to go blank during math tests. Before performing a mathematical test the student's mind experiences anxiety symptoms against mathematics. The posterior insula, which is part of the brain to prepare the pain of the body into a very active part of the brain, with this very active part of this brain someone will experience feeling similar to a pain.

The cause of fear that makes their minds seems to go blank during math tests is frightening experience when taking math test. A large percentage indicates that students are afraid. They feel taking a math test is a frightening experience for them. The result about it can be seen in this table:

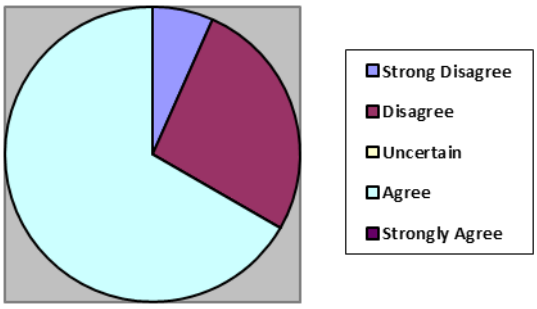


Fig. 3 Diagram about student perception taking a math test is a frightening experience for them

Being a teacher is the application of concepts to the learners. Mathematical anxiety experienced by prospective teacher students results in their appearance while teaching. This is because mathematical anxiety causes students difficulty to learn and apply the concept of mathematics.

Cooke & Hurst[8] (2012) mentions that mathematical anxiety will affects prospective teacher students in two ways. First, through the wishes of prospective teachers to develop their mathematical competence, and secondly through their desire to apply their knowledge into classroom teaching activities.

CONCLUSION

Looking at the results of research. It can be concluded that most PGSD students experience mathematical anxiety when first teaching mathematics. Such anxiety is due to their perception of mathematics.

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