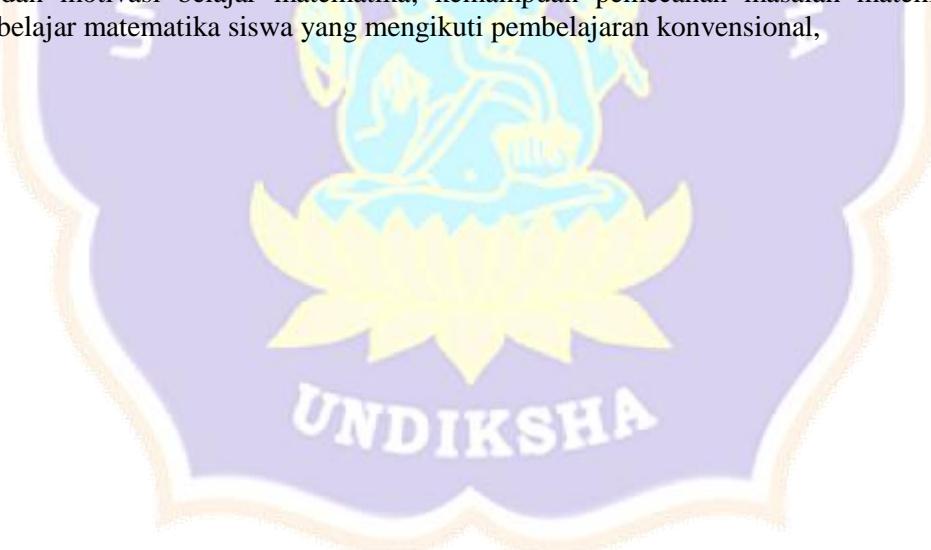# ABSTRAK

Listiari, Putu Nita. 2019. *Pengaruh Penerapan Model Pembelajaran Penalaran Dan Pemecahan Masalah Berbantuan Geogebra Terhadap Kemampuan Pemecahan Masalah Dan Motivasi Belajar Matematika Siswa Kelas VIII SMP Negeri 3 Gianyar*. Tesis (tidak diterbitkan). Singaraja: FMIPA Undiksha.

Tesis ini sudah disetujui dan diperiksa oleh Pembimbing I: Prof. Dr. I Gusti Putu Suharta, M.Si. dan Pembimbing II: Prof. Dr. I Nengah Suparta, M.Si.

Kata-kata kunci: MP3M, Geogebra, Pemecahan Masalah, Motivasi Belajar Matematika

Penelitian ini bertujuan untuk (1) mengetahui apakah MP3M berbantuan Geogebra berpengaruh positif terhadap kemampuan pemecahan masalah dan motivasi belajar matematika siswa (2) mengetahui apakah MP3M berbantuan Geogebra berpengaruh positif terhadap kemampuan pemecahan masalah matematika siswa (3) mengetahui apakah MP3M berbantuan Geogebra berpengaruh positif terhadap motivasi belajar matematika siswa. Penelitian ini berupa eksperimen dengan *post-test only control group design* pada populasi yang terdiri 10 kelas dan dipilih secara random 2 kelas sebagagi sampel penelitian. Eksperimen berupa penerapan MP3M berbantuan Geogebra dilaksanakan selama 8 kali tatap muka. Data berupa pemecahan masalah matematika yang dikumpulkan dengan tes uraian dan motivasi belajar matematika siswa yang dikumpulkan berupa angket. Data dianalisis mengunakan uji Manova dengan taraf signifikansi 5%. Hasil eksperimen menunjukkan bahwa (1) kemampuan pemecahan masalah dan motivasi belajar, kemampuan pemecahan masalah matematika siswa, dan motivasi belajar matematika siswa yang mengikuti MP3M berbantuan Geogebra lebih baik secara signifikan dari kemampuan pemecahan masalah dan motivasi belajar matematika, kemampuan pemecahan masalah matematika, dan motivasi belajar matematika siswa yang mengikuti pembelajaran konvensional,

ABSTRACT

Listiari, Putu Nita. 2019. *The Effect of Application of Geogebra Assisted Reasoning and Problem Solving Learning Model on the Problem Solving Ability and Motivation of Mathematics Learning for Class VIII Students of SMP Negeri 3 Gianyar*. Thesis (not published). Singaraja: Faculty of Mathematics and Natural Sciences Undiksha.

This thesis has been approved and examined by the Supervisor I: Prof. Dr. I Gusti Putu Suharta, M.Si. and Supervisor II: Prof. Dr. I Nengah Suparta, M.Si.

Keywords: MP3M, Geogebra, Problem Solving, Motivation for Learning Mathematics

This study aimed to (1) to investigate whether MP3M through Geogebra had positive effect toward students's problem-solving and motivation to learn mathematics (2) to investigate whether MP3M through Geogebra had positive effect towardstudents'smathematics problem solving (3) to investigate whether MP3M through Geogebra had positive effect on students motivation to learn mathematics. This research was experimental research who implemented *post-test only control group design* that the population was consisted of 10 classess and chose 2 classess radomly as sample. The experimental research was the implementation of MP3M toward Geogbra which was done for 8 meetings. The data were themathematical problem solving that was collected with the description test andthe student mathematics learning motivation that was collected in the form of a questionnaire. The data were analyzed using Manova testwith a significance level of 5%. The experimental result showed that, (1) the ability of students' problem solving and mathematics learning motivation who was taught by MP3M through Geogebra significantly better rather than the ability of students' problem-solving and mathematics learning motivation, the ability of students' mathematics problem solving, and the students mathematics learning motivation who was taught by the conventional learning.