ABSTRAK

LARAS LESTARI. Pengaruh Strategi *Reciprocal Peer Tutoring* Berbantuan *GeoGebra* Terhadap Kemampuan Komunikasi Matematis dan Motivasi Belajar Siswa Ditinjau dari *Gender*. Tesis. Medan: Program Studi Pendidikan Matematika Pascasarjana Universitas Negeri Medan. 2019.

Tujuan dari penelitian ini adalah untuk: (1) mengetahui apakah strategi *Reciprocal Peer Tutoring* berbantuan *GeoGebra* lebih berpengaruh secara signifikan daripada strategi Ekspositori terhadap kemampuan komunikasi matematis siswa, (2) mengetahui apakah strategi *Reciprocal Peer Tutoring* berbantuan *GeoGebra* lebih berpengaruh secara signifikan daripada strategi Ekspositori terhadap motivasi belajar matematika siswa, (3) mengetahui apakah *gender* berpengaruh secara signifikan terhadap kemampuan komunikasi matematis siswa, (4) mengetahui apakah *gender* berpengaruh secara signifikan terhadap motivasi belajar matematika siswa, (5) mengetahui apakah terdapat interaksi antara strategi (*Reciprocal Peer Tutoring* berbantuan *GeoGebra*, Ekspositori) dan *gender* (siswa laki-laki, siswa perempuan) terhadap kemampuan komunikasi matematis siswa, (6) mengetahui apakah terdapat interaksi antara strategi (*Reciprocal Peer Tutoring* berbantuan *GeoGebra*, Ekspositori) dan *gender* (siswa laki-laki, siswa perempuan) terhadap motivasi belajar matematika siswa. Instrumen yang digunakan terdiri dari: (1) tes kemampuan komunikasi matematis, (2) skala motivasi belajar matematika. Analisis data dilakukan dengan *Analysis of Covariance* (ANCOVA). Hasil penelitiaan menunjukkan bahwa: (1) strategi *Reciprocal Peer Tutoring* berbantuan *GeoGebra* lebih berpengaruh secara signifikan daripada strategi Ekspositori terhadap kemampuan komunikasi matematis siswa, (2) strategi *Reciprocal Peer Tutoring* berbantuan *GeoGebra* lebih berpengaruh secara signifikan daripada strategi Ekspositori terhadap motivasi belajar matematika siswa, (3) *gender* tidak berpengaruh secara signifikan terhadap kemampuan komunikasi matematis siswa, (4) *gender* berpengaruh secara signifikan terhadap motivasi belajar matematika siswa, (5) tidak terdapat interaksi antara strategi (*Reciprocal Peer Tutoring* berbantuan *GeoGebra*, Ekspositori) dan *gender* (siswa laki-laki, siswa perempuan) terhadap kemampuan komunikasi matematis siswa, (6) tidak terdapat interaksi antara strategi (*Reciprocal Peer Tutoring* berbantuan *GeoGebra*, Ekspositori) dan *gender* (siswa laki-laki, siswa perempuan) terhadap motivasi belajar matematika siswa.

Kata Kunci: Strategi *Reciprocal Peer Tutoring*, *GeoGebra*, *Gender*, Kemampuan Komunikasi Matematis, Motivasi Belajar

ABSTRACT

LARAS LESTARI. The Effects of *Reciprocal Peer Tutoring* Strategy Assisted by *GeoGebra* on Mathematical Communication Ability and Students' Learning Motivation Reviewed from *Gender*. Thesis. Medan: Postgraduate Mathematics Education Study Program State University of Medan. 2019.

The purpose of this research is to: (1) find out whether the *Reciprocal Peer Tutoring* strategy assisted by *GeoGebra* more influential than Expository strategy on students' mathematical communication ability significantly, (2) find out whether the *Reciprocal Peer Tutoring* strategy assisted by *GeoGebra* more influential than Expository strategy on students' mathematics learning motivation significantly, (3) find out whether the *gender* affects students' mathematical communication ability significantly, (4) find out whether the *gender* affects students' mathematics learning motivation significantly, (5) find out whether there is interaction between strategy (*Reciprocal Peer Tutoring* assisted by *GeoGebra*, Expository) and *gender* (male students, female students) on students' mathematical communication ability, (6) find out whether there is interaction between strategy (*Reciprocal Peer Tutoring* assisted by *GeoGebra*, Expository) and *gender* (male students, female students) on students' mathematics learning motivation. This study uses a quantitative research approach with experimental research methods in the form of *factorial design*. The instruments used consist of: (1) prior mathematics knowledge test, (2) mathematical communication ability test, (3) questionnaire of mathematics learning motivation. Data analysis was performed by *Analysis of Covariance* (ANCOVA). The results of the research shows that: (1) *Reciprocal Peer Tutoring* strategy assisted by *GeoGebra* is more influential than Expository strategy on students' mathematical communication ability significantly, (2) *Reciprocal Peer Tutoring* strategy assisted by *GeoGebra* more influential than Expository strategy on students' mathematics learning motivation significantly, (3) *gender* doesn't affect students' mathematical communication ability significantly, (4) *gender* affects students' mathematics learning motivation significantly, (5) there is no interaction between strategy (*Reciprocal Peer Tutoring* assisted by *GeoGebra*, Expository) and *gender* (male students, female students) on students' mathematical communication ability, (6) there is no interaction between strategy (*Reciprocal Peer Tutoring* assisted by *GeoGebra*, Expository) and *gender* (male students, female students) on students' mathematics learning motivation.

Keywords: *Reciprocal Peer Tutoring* Strategy, *GeoGebra*, *Gender*, Mathematical Communication Ability, Learning Motivation