

ABSTRAK

HAFIFAH ADITIA SARI: Pengaruh model *Problem Based learning* Bernuansa Etnomatematika Terhadap Kemampuan Komunikasi dan *Self-confidence* Siswa. Program Studi Pendidikan Matematika FKIP Universitas Malikussaleh, 2026

Rendahnya kemampuan komunikasi matematis dan *self-confidence* siswa salah satunya dipengaruhi oleh kurangnya keterlibatan aktif siswa dalam proses pembelajaran. Kondisi ini menunjukkan perlunya penerapan model pembelajaran yang mampu mendorong keaktifan siswa di kelas serta memfasilitasi munculnya ide-ide kreatif dalam menyelesaikan permasalahan matematika. Penelitian ini bertujuan untuk mengetahui pengaruh model *problem based learning* bernuansa etnomatematika terhadap kemampuan komunikasi matematis dan *self-confidence* siswa, serta untuk mengetahui hubungan antara kemampuan komunikasi matematis dan *self-confidence* siswa.

Penelitian ini menggunakan metode kuantitatif dengan jenis penelitian eksperimen semu (*quasi experimental design*) yang menerapkan desain *nonequivalent control group design*. Penelitian dilaksanakan di MTsN 1 Bireuen dengan populasi seluruh siswa kelas VII. Sampel penelitian ditentukan melalui teknik *purposive sampling*, sehingga diperoleh kelas VII-1 sebagai kelas eksperimen dan kelas VII-2 sebagai kelas kontrol. Pengumpulan data dilakukan melalui tes kemampuan komunikasi matematis dan angket *self-confidence* siswa. Instrumen penelitian berupa soal tes kemampuan komunikasi matematis dan angket *self-confidence* siswa. Analisis data menggunakan uji *Independent Sample T-Test* dan uji non-parametrik *Mann-Whitney U Test* untuk mengetahui pengaruh model *problem based learning* bernuansa etnomatematika terhadap kemampuan komunikasi matematis dan *self-confidence* siswa, serta uji korelasi *Product Moment* untuk mengetahui hubungan antara kemampuan komunikasi dan *self-confidence* siswa.

Hasil penelitian menunjukkan bahwa pada kemampuan komunikasi matematis diperoleh nilai *Asymp. Sig. (2-tailed)* sebesar 0,004. Berdasarkan kriteria pengujian hipotesis, nilai *Asymp. Sig. (2-tailed)* < 0,05 menunjukkan H_0 ditolak, sehingga terdapat pengaruh model *problem based learning* bernuansa etnomatematika terhadap kemampuan komunikasi matematis. Hasil pengujian pada *self-confidence* siswa diperoleh nilai *Sig. (2-tailed)* sebesar 0,028. Nilai tersebut lebih kecil dari 0,05 sehingga H_0 ditolak, yang berarti terdapat pengaruh model *problem based learning* bernuansa etnomatematika terhadap *self-confidence* siswa. Sementara itu, hasil uji korelasi antara kemampuan komunikasi matematis dan *self-confidence* siswa diperoleh nilai *Sig. (2-tailed)* sebesar 0,506. Nilai tersebut lebih besar dari 0,05 sehingga H_0 diterima, yang menunjukkan bahwa tidak terdapat hubungan yang signifikan antara kemampuan komunikasi matematis dan *self-confidence* siswa.

Kata Kunci: *Problem Based Learning*, Etnomatematika, Kemampuan Komunikasi Matematis, *Self-confidence* Siswa.

ABSTRACT

HAFIFAH ADITIA SARI: *The Effect of the Ethnomathematics-Based Problem Based Learning Model On Student's Mathematical Communication Skills And Self-confidence. Mathematics Education Study Program, FKIP, Malikussaleh University, 2026.*

The low level of student's mathematical communication skill and self-confidence is partly influenced by their limited active participation in the learning process. The condition indicates the need for a learning model that can encourage students, active involvement in the classroom and facilitate the development of creative ideas in solving mathematical problems. This study aimed to determine the effect of the ethnomathematics-based problem based learning model on students' mathematical communication skills and self-confidence, as well as to examine the relationship between mathematical communication skills and students' self-confidence.

This study employed a quantitative approach using a quasi-experimental method with a nonequivalent control group design. The research was conducted at MTsN 1 Bireuen, with all seventh-grade students serving as the population. The sample was selected through a purposive sampling technique, resulting in class VII-1 as the experimental group and class VII-1 as the control group. Data were collected through a mathematical communication skills test and a self-confidence questionnaire. The research instrument consisted of mathematical communication test items and a self-confidence questionnaire. Data analysis was carried out using to determine the Independent Sample T-Test and the non-parametric Mann-Whitney U Test to determine the effect of the ethnomathematics-based problem based learning model on students' mathematical communication skills and self-confidence. In addition, the Product Moment Correlations thes was used to examine the relationship between mathematical communication skills and self-confidence.

The results showed that the mathematical communication skills test obtained an Asymp. Sig. (2-tailed) value of 0,004. Based on the hypothesis testing criteria, an Asimp. Sig. (2-tailed) value $< 0,05$ indicates that H_0 was rejected, meaning that the ethnomathematics-based problem based learning model had a significant effect on students' mathematical communication skills. The result of the self-confidence questionnaire showed a Sig. (2-tailed) value of 0,028. Since this value was less than 0,05, H_0 was rejected, indicating that the ethnomathematics-based problem based learning model had a significant effect on students' self-confidence. Meanwhile, the correlation test value Of 0,506. Since this value as greater than 0,05, H_0 was accepted, indicating that there was no significant relationship between students' mathematical communication skills and self-confidence.

Keywords: *problem based learning, ethnomathematics-based, mathematical communication skills, self-confidence.*