

ABSTRAK

Khairani Hanum: Pengaruh Model Pembelajaran *Thinking Aloud Pair Problem Solving* (TAPPS) terhadap Kemampuan Berpikir Kritis Matematis dan *Self Confidence* Siswa. **Program Studi Pendidikan Matematika FKIP Universitas Malikussaleh, 2026.**

Rendahnya kemampuan berpikir kritis matematis siswa disebabkan oleh pembelajaran yang masih berpusat pada guru sehingga siswa mengalami kesulitan dalam mengidentifikasi permasalahan dan mengubah soal cerita ke dalam model matematika. Selain itu, *self confidence* siswa masih rendah yang ditunjukkan oleh kurangnya keberanian dalam mengemukakan pendapat, mempresentasikan hasil kerja, dan belajar secara mandiri. Salah satu alternatif yang dapat diterapkan untuk mengatasi permasalahan tersebut adalah model pembelajaran TAPPS. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran TAPPS terhadap kemampuan berpikir kritis matematis dan *self confidence* siswa, serta hubungan antara kemampuan berpikir kritis matematis dan *self confidence*. Penelitian quasi experiment dengan desain *nonequivalent control group design*. Populasi penelitian adalah seluruh siswa kelas VII SMP Negeri 1 Dewantara. Sampel dipilih menggunakan teknik *purposive sampling*, yaitu kelas VII A sebagai kelas eksperimen dan VII C sebagai kelas kontrol. Instrumen penelitian yang digunakan berupa tes kemampuan berpikir kritis matematis, angket *self confidence*, serta lembar observasi guru dan siswa. Pengujian hipotesis dilakukan menggunakan uji nonparametrik *Mann-Whitney* dan uji *Rank Spearman* berbantuan *software* SPSS versi 25 pada taraf signifikansi 0,05. Hasil penelitian menunjukkan bahwa model pembelajaran TAPPS berpengaruh terhadap kemampuan berpikir kritis matematis siswa dengan nilai signifikansi 0,000. Sementara itu, model pembelajaran TAPPS tidak berpengaruh terhadap *self confidence* siswa dengan nilai signifikansi 0,569. Selain itu, tidak terdapat hubungan yang signifikan antara kemampuan berpikir kritis matematis dan *self confidence* siswa dengan nilai signifikansi 0,910.

Kata kunci: *Thinking Aloud Pair Problem Solving* (TAPPS), kemampuan berpikir kritis matematis, *self confidence*.

ABSTRACT

Khairani Hanum: *The Effect of the Thinking Aloud Pair Problem Solving (TAPPS) Learning Model on Students' Mathematical Critical Thinking Skills and Self-Confidence. Mathematics Education Study Program, Faculty of Teacher Training and Education, Universitas Malikussaleh, 2026.*

Students' low mathematical critical thinking skills are attributed to teacher-centered learning, which causes difficulties in identifying problems and translating word problems into mathematical models. In addition, students' self-confidence remains low, as indicated by their lack of confidence in expressing opinions, presenting their work, and learning independently. One alternative learning model that can be implemented to address these issues is the Thinking Aloud Pair Problem Solving (TAPPS) learning model. This study aimed to examine the effect of the TAPPS learning model on students' mathematical critical thinking skills and self-confidence, as well as the relationship between mathematical critical thinking skills and self-confidence. This study employed a quasi-experimental design using a nonequivalent control group design. The population consisted of all seventh-grade students at SMP Negeri 1 Dewantara. The sample was selected through purposive sampling, with Class VII A serving as the experimental group and Class VII C as the control group. The research instruments included a mathematical critical thinking skills test, a self-confidence questionnaire, and teacher and student observation checklists. Hypothesis testing was conducted using the nonparametric Mann–Whitney test and Spearman's Rank correlation test with the assistance of SPSS version 25 at a significance level of 0.05. The results indicated that the TAPPS learning model had a significant effect on students' mathematical critical thinking skills ($p = 0.000$). Meanwhile, the TAPPS learning model did not have a significant effect on students' self-confidence ($p = 0.569$). Furthermore, no significant relationship was found between students' mathematical critical thinking skills and self-confidence ($p = 0.910$).

Keywords: *Thinking Aloud Pair Problem Solving (TAPPS), mathematical critical thinking skills, self-confidence.*