

ABSTRAK

Indah Pertiwi. (2026). Analisis Kesalahan Siswa SMA Berdasarkan Prosedur Newman dalam Menyelesaikan Soal Kontekstual Materi SPLTV Ditinjau dari *Self-Confidence*. Tanjungpinang: Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Maritim Raja Ali Haji. Pembimbing I: Assist. Prof. Rezky Ramadhona, S.Pd., M.Pd. Pembimbing II: Assist. Prof. Mariyanti Elvi, S.Pd., M.Pd.

Kata Kunci: analisis kesalahan, prosedur Newman, *self-confidence*, SPLTV.

Penelitian ini bertujuan untuk mendeskripsikan kesalahan siswa berdasarkan prosedur Newman dalam menyelesaikan soal kontekstual materi Sistem Persamaan Linear Tiga Variabel (SPLTV) ditinjau dari *self-confidence*. Penelitian ini menggunakan pendekatan kualitatif dengan metode deskriptif. Penelitian dilaksanakan di SMA Negeri 1 Bintan Timur dengan subjek penelitian terdiri atas dua siswa dengan *self-confidence* tinggi, dua siswa dengan *self-confidence* sedang, dan dua siswa dengan *self-confidence* rendah. Teknik pengumpulan data meliputi angket *self-confidence*, tes soal kontekstual SPLTV, dan wawancara. Data dianalisis menggunakan model Miles dan Huberman melalui tahap reduksi data, penyajian data, dan penarikan kesimpulan. Data dianalisis menggunakan model Miles dan Huberman melalui tahap reduksi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian menunjukkan bahwa siswa dengan *self-confidence* tinggi melakukan kesalahan pada tahap keterampilan proses dan penulisan jawaban akhir. Siswa dengan *self-confidence* sedang melakukan kesalahan pada tahap memahami, keterampilan proses, dan penulisan jawaban akhir. Sementara itu, siswa dengan *self-confidence* rendah melakukan kesalahan yang lebih banyak dan beragam, yaitu pada tahap memahami, keterampilan proses, dan penulisan jawaban akhir. Tidak ditemukan kesalahan pada tahap membaca maupun transformasi pada seluruh kategori *self-confidence*. Temuan penelitian menunjukkan bahwa semakin tinggi *self-confidence* siswa, semakin sedikit kesalahan yang dilakukan dalam menyelesaikan soal kontekstual SPLTV. Sebaliknya, rendahnya *self-confidence* menyebabkan siswa lebih mudah mengalami keraguan, kurang teliti, dan kesulitan menyelesaikan masalah secara tepat.

ABSTRACT

Indah Pertiwi. (2026). Analysis of Senior High School Students' Errors Based on Newman's Procedure in Solving Contextual Problems on Three-Variable Linear Equation Systems (SPLTV) in Terms of Self-Confidence. Tanjungpinang: Mathematics Education Study Program, Faculty of Teacher Training and Education, Universitas Maritim Raja Ali Haji Maritime University . Advisor I: Assist. Prof. Rezky Ramadhona, S.Pd., M.Pd. Advisor II: Assist. Prof. Mariyanti Elvi, S.Pd., M.Pd.

Keywords: error analysis, Newman's procedure, self-confidence, Three Variable Linear Equation System (TVLES).

This study aimed to describe senior high school student's errors based on Newman's procedure in solving contextual problems on the topic of Three Variable Three Variable Linear Equation System (TVLES) in terms of their self-confidence. This research employed a qualitative approach using a descriptive method. The study was conducted at SMA Negeri 1 Bintan Timur. The research subjects consisted of two students with high self-confidence, two students with moderate self-confidence, and two students with low self-confidence. Data were collected through a self-confidence questionnaire, a contextual TVLES problem-solving test, and interviews. The data were analyzed using the Miles and Huberman model, which includes the stages of data reduction, data display, and conclusion drawing. The results showed that students with high self-confidence made errors at the process skills stage and the encoding (final answer) stage. Students with moderate self-confidence made errors at the comprehension, process skills, and encoding stages. Meanwhile, students with low self-confidence made more numerous and varied errors, namely at the comprehension, process skills, and encoding stages. No errors were found at the reading or transformation stages across all self-confidence categories. The findings indicate that the higher the students' self-confidence, the fewer errors they made in solving contextual TVLES problems. Conversely, low self-confidence caused students to be more prone to doubt, less careful, and more likely to experience difficulties in solving problems accurately.