

## ABSTRAK

**Shopia Burju Situmorang, NIM 4191111049 (2023). Analisis Kesalahan Siswa Dalam Memecahkan Masalah Matematis Berdasarkan Prosedur Newman di Kelas X SMA.**

Penelitian ini bertujuan untuk mengetahui tipe-tipe kesalahan yang dilakukan siswa dalam memecahkan masalah matematika berbentuk cerita materi sistem persamaan linear tiga variabel berdasarkan prosedur Newman dan untuk mengetahui hubungan tipe kesalahan dengan hasil tipe siswa tiap kategorinya, serta faktor penyebab terjadinya kesalahan siswa dalam menyelesaikan soal cerita materi sistem persamaan linear tiga variabel berdasarkan prosedur Newman. Subjek dalam penelitian ini adalah 6 subjek yang terdiri dari 2 kelompok tinggi, 2 kelompok sedang, dan 2 kelompok rendah. Teknik pengumpulan data yang digunakan yaitu tes tertulis, wawancara, dan dokumentasi. Hasil penelitian menunjukkan bahwa: (1) subjek mengalami kesalahan pada masing-masing butir soal dengan berbagai jenis kesalahan yakni kesalahan memahami masalah sebanyak 78 kali dengan persentase 38,24%, kesalahan transformasi masalah sebanyak 17 kali dengan persentase 8,33%, kesalahan keterampilan proses sebanyak 56 kali dengan 27,45%, dan kesalahan penulisan jawaban akhir sebanyak 53 kali dengan 25,98%. (2) terdapat hubungan antara tipe kesalahan dengan hasil tipe siswa pada kategori tinggi, sedang, dan rendah. (3) beberapa faktor penyebab terjadinya kesalahan yaitu motivasi belajar, model pengajaran guru, kepercayaan diri, waktu yang dihabiskan dalam mengerjakan soal, dan lingkungan belajar.

**Kata Kunci:** Analisis Kesalahan, Masalah Matematika, Prosedur Newman

## ABSTRACT

**Shopia Burju Situmorang, NIM 4191111049 (2023). Analysis of Students' Errors in Solving Mathematical Problems Based on Newman's Procedure in Class X SMA.**

This study aims to determine the types of errors made by students in solving mathematical problems in the form of story material of the system of linear equations of three variables based on Newman's procedure and to determine the relationship between the type of error with the results of each category of students, as well as the factors that cause student errors in solving story problems of the system of linear equations of three variables based on Newman's procedure. The subjects in this study were 6 subjects consisting of 2 upper groups, 2 medium groups, and 2 low groups. The data collection techniques used were written tests, interviews, and documentation. The results showed that: (1) the subjects experienced errors in each item with various types of errors, namely understanding the problem 78 times with a percentage of 38.24%, problem transformation errors 17 times with a percentage of 8.33%, process skills errors 56 times with 27.45%, and final answer writing errors 53 times with 25.98%. (2) there is a relationship between the types of errors and the results of students in the high, medium, and low categories. (3) some factors that cause errors are learning motivation, teacher's teaching model, self-confidence, time spent in doing problems, and learning environment.

**Keywords:** Error Analysis, Math Problems, Newman Procedure

