

ABSTRACT

Anismaulidi, Mohammad (2026): The Relationship between Cognitive Load and English Reading Comprehension Difficulties in Digital Contexts among Indonesian EFL Learners

This study investigates the relationship between Cognitive Load (CL) and English reading comprehension difficulties in digital contexts among Indonesian English as a Foreign Language (EFL) learners. Guided by Cognitive Load Theory (CLT) and the Cognitive Theory of Multimedia Learning (CTML), the research examines how intrinsic and extraneous mental demands influence students' perceived comprehension challenges across digital platforms. Employing a quantitative correlational design, the study sampled 39 eleventh-grade EFL students at Senior High School UPI Labschool Cibiru using purposive sampling. Data were collected using two validated, 5-point Likert scale questionnaires—the Cognitive Load Questionnaire (CLQ) and the Reading Comprehension Difficulties Questionnaire (RCDQ)—administered immediately after screen-based reading tasks. Descriptive statistical analysis revealed that the majority of students experienced a moderate level of cognitive load (71.8%, $M = 34.72$, $SD = 7.05$). Similarly, 53.8% of students reported moderate reading comprehension difficulties ($M = 28.79$, $SD = 7.42$), with the remaining 46.2% experiencing low difficulties. Due to non-normal distribution in the cognitive load dataset ($p = 0.000$), Pearson correlation was used to test the hypothesis. The analysis yielded a statistically significant, moderate positive correlation between cognitive load and reading comprehension difficulties ($r = 0.693$, $p = 0.000$), leading to the rejection of the null hypothesis. These findings demonstrate that higher cognitive strain—resulting from foreign language vocabulary limits, syntactic processing, and screen interface navigation—corresponds with increased reading difficulties in digital environments. Ultimately, the study highlights the need for educators to design streamlined digital reading materials and pre-teach core language structures to optimize working memory capacity.

Keywords: Cognitive Load; Reading Comprehension Difficulties; Digital Reading; EFL Learners; Correlational Study