

EXPLORING MATHEMATICS METACOGNITIVE KNOWLEDGE AMONG PRESERVICE TEACHERS: BASIS FOR CURRICULAR ENHANCEMENT

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ABSTRACT

Learning Mathematics at the tertiary level is important for pre-service teachers because it provides them basic knowledge and mental discipline in teaching math and other school subjects. Various studies have shown that metacognitive knowledge can significantly influence the mathematics performance of the learner. Thus, this study sought to determine the Mathematics metacognitive knowledge level of the preservice teachers. There were four research questions and four hypotheses guided the study. This utilized descriptive survey design and data were gathered online thru Google Form. A sample of 147 preservice teachers from a selected higher education institution in Zamboanga City were randomly selected through proportionate and systematic sampling procedures. This study adapted Metacognitive Knowledge in Mathematics Questionnaire by Efklides and Vlachopoulos. This was validated by the research instructor and subject matter experts and all subscale attained acceptable reliability coefficients during the pilot testing based on the computed Cronbach's alpha. Mean, standard deviation, Pearson-r correlation, t-test and ANOVA were utilized in the analysis of the data. Findings revealed the preservice teachers have higher metacognitive strategies than the two other subscales of metacognitive knowledge. Findings also revealed that there was moderate positive correlation between the metacognitive strategy and competence- enhancing strategy subscales. This study recommends that math teachers in the tertiary must create learning activities that can nurture the metacognitive knowledge among preservice teachers.

Keywords: Metacognitive Knowledge, Mathematics and Preservice Teachers