

## Understanding Factors that Affect the Prior Knowledge of Deaf and Hard of Hearing Students and their Relation to Reading Comprehension

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**Abstract :** The reading comprehension levels of students who are deaf or hard of hearing (DHH) are low compared to those of their hearing peers. One possible reason for this low reading levels is related to the students' prior knowledge. This study investigated the potential factors that might affected DHH students' prior knowledge, including their degree of hearing loss, the presence or absence of family members with a hearing loss, and educational stage (elementary-middle school). The study also examined the contribution of prior knowledge in predicting DHH students' reading comprehension levels, and investigated the differences in the students' scores based on the type of questions, including text-explicit (TE), text-implicit (TI), and script-implicit (SI) questions. Thirty-one elementary and middle-school students completed a demographic form and assessment, and descriptive statistics and multiple and simple linear regressions were used to answer the research questions. The findings indicated that the independent variables—degree of hearing loss, presence or absence of family members with hearing loss, and educational stage—explained little of the variance in DHH students' prior knowledge. Further, the results showed that the DHH students' prior knowledge affected their reading comprehension. Finally, the result demonstrated that the participants were able to answer more of the TI questions correctly than the TE and SI questions. The study concluded that prior knowledge is important in these students' reading comprehension, and it is also important for teachers and parents of DHH children to use effective ways to increase their students' and children's prior knowledge.

**Keywords :** reading comprehension, prior knowledge, metacognition, elementary, self-contained classrooms

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