

## THE ASSESSMENT OF ENGLISH READING COMPREHENSION AND ITS PREDICTIVE POWER ON INDUCTIVE REASONING

P-1

**Kambeyo, Linus**

*Doctoral School of Education, University of Szeged*

*Keywords:* reading comprehension; inductive reasoning; structural equation modelling

Various models have been proposed in developed countries and tested to predict how proficiency in modern foreign languages (L2) as the medium of instruction develops and what best predicts success over time (e.g., Ellis, 2008; Mitchell, Myles & Marsden, 2013). There is a need to examine how models that work with students of different ages in one context can be applied for young language learners in other educational contexts, such as in Namibia. Language learning involves inductive processes. Language learning aptitude has been found to be the most important predictor of mastering achievement in inductive reasoning (IR) in a range of studies, including ones on Hungarian L2 learners (Kiss & Nikolov, 2005; Ottó & Nikolov, 2003; Nikolov & Csapó, 2017). This study analyzes how students' reading comprehension skills in English predicts their cognitive skills and achievements in (IR). The sample was drawn from the grade 8 students in Namibia (N=250, 89 boys, and 161 girls; age mean=15.10, SD=.58). The data was collected using paper and pencil tests of Reading comprehension (RC; Nikolov & Csapó, 2017) and IR (Pásztor, Molnár, Korom, B. Németh & Csapó, 2017). Each student had one and half hours to complete each test. The internal consistencies of the tests were good: RC: Cronbach alpha=.83 for the whole test (alpha values of its subconstructs between .65 and .84); IR: .85 Cronbach alpha (for its two sub-constructs, Figural and Number reasoning .80 each). The structural equation model was applied to analyze the relation and influential effect of reading comprehension on IR in Namibia. The model fits were acceptable ( $\chi^2=8.56$ ,  $df=4$ , CFI=.97, TLI=.92, RMSEA=.07, SRMR=.03). The model results showed that IR is explained by two dimensions, Figural reasoning:  $\beta=.68$  & Number reasoning:  $\beta=.62$ . Four dimensions of RC (D1:  $\beta=.23$ ; D2:  $\beta=.20$ ; D4:  $\beta=.22$ ; and D5:  $\beta=.42$ ;  $p<.01$ ) significantly predict the achievement of IR, and only one dimension (dimension 3:  $\beta=.12$ ,  $p>.05$ ) does not significantly predict the achievement of IR. Therefore, RC and IR proved to be highly correlated ( $r=.60$ ,  $p<.01$ ). Reading comprehension predicts the achievement of students' inductive reasoning. The present study has contributed to the field of applied linguistics in a way that reading comprehension in English strongly impact students' achievement in IR and by extension school achievements.

*The author received support for his work from the Tempus Public Foundation and the Namibian Students Financial Assistance Fund.*