Fluency Development in Simultaneous Interpreting Performance of Trainee Interpreters: The Perspective of Cognitive Fluency

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The importance of fluency, one of the most important criteria in interpreting quality assessment and perception, has been under-estimated in interpreting research, but constructs and contributors of fluency in interpreting output are ambiguous. This study explores the role of cognitive fluency in the fluency development of the L2(English)-L1(Chinese) simultaneous interpreting (SI) output of trainee interpreters under different conditions of cognitive load.

Cognitive fluency refers to the efficient operation of the speaker to mobilize and integrate the underlying cognitive processes responsible for utterance production. Cognitive fluency measures were operationalized as the efficiency (coefficient of variance) of lexical access, lexical retrieval, linguistic attention control (switch cost) and working memory capacity in the current study, which were elicited through behavioral experiments including semantic classification task, word translation task, category judgement task and speaking span task.

Utterance fluency refers to the set of objectively determined oral features of utterances and represents the characteristics a speech sample possesses, e.g. the temporal, hesitation and repair features. Measures of utterance fluency in SI performance were obtained through simulated SI task and it followed a 2 (training: pre/post) * 2 (input rate: low/high) multifactorial design. Twenty-eight trainee interpreters at the initial stage of SI training from an MA interpreting program were recruited as participants. The participants interpreted two speeches simultaneously, one with high input rate and the other with low input rate, at the beginning and end of an SI training period of thirteen weeks. A bilingual corpus of the SI output of participants was built and indicators of SI utterance fluency were annotated systematically in software Elan 5.2. Three dimensions of utterance fluency were explored, i.e. speed fluency (speech rate relevant), breakdown fluency (hesitation phenomenon including unfilled and filled pauses), and repair fluency (repairs, repetitions and false starts).

Multiple linear regression analyses were conducted with SPSS 24.0 to explore the impact of cognitive fluency measures on the development of utterance fluency in trainee interpreters' SI output under conditions of low and high input rate separately. Measures of cognitive fluency were treated as independent variables and measures of utterance fluency development (residuals of utterance fluency measures in the post-test minus those of the pre-test) were taken as dependent variables.

Results indicate that: 1) the explored cognitive fluency measures could explain a large extent of the variance of utterance fluency gains in the SI output of trainee interpreters over an period of thirteen weeks; 2) the impact of cognitive fluency measures on SI utterance fluency development is evidently stronger under conditions of higher cognitive load; 3) the efficiency of cognitive processes involved in the target language production stage have more significant impact on the utterance fluency development than the that of processes involved in the source language comprehension stage; 4) measures of lexical retrieval and working memory generally increase the predicting power of the model to the fluency development of trainee interpreters' SI output. The results have implications for the theoretical framework of cognitive fluency and interpreting pedagogy.

References

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