



## Exposure to English as a foreign language through subtitled videos: the impact of subtitles and modality on comprehension, vocabulary acquisition, and cognitive load

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Recently, there has been an upsurge of publications revolving around the effects of watching foreign language (FL) movies in different subtitling conditions – without subtitles, with L1, L2, or reversed subtitles, on the development of different language skills (e.g. Charles and Trenkic 2015, Peters 2018, Cintrón-Valentín et al. 2019, Wiśniewska and Mora 2020). However, little is known about the interaction of vocabulary learning, comprehension, and cognitive load. What seems to be a neglected aspect in studies on the impact of watching movies on FL learning is also comprehension since researchers often fail to acknowledge that comprehension can be investigated at different levels. Further, even though previous research indicates that combining visual and auditory input seems to be more effective than delivering the same information via a single modality, the results of previous studies are somewhat inconclusive, which necessities further research.

The major aim of my PhD project was to investigate the impact of different subtitling conditions (L1, L2, no subtitles), and modality (audio-only, video-only, audiovisual) on comprehension, vocabulary learning, and cognitive load. The participants of the study were 196 Polish upper-intermediate (B1+/B2) learners of English. First, they completed an online test of proficiency, and a pre-test on vocabulary. Then, each participant watched a video clip, and simultaneously their reaction time to each sound stimulus occurring throughout the video was measured as a direct measurement of cognitive load (dual task methodology). After the viewing session, each participant completed a post-test on comprehension, vocabulary, and a self-report on cognitive load. A month later, I administered a delayed post-test on vocabulary. The results demonstrate, inter alia, that subtitles do not lead to cognitive overload, and that they in fact reinforce comprehension and learning. Moreover, the results challenge Dual Coding Theory (Paivio 1986) in that dual modality input did not prove to be superior to single modality input.

## References:

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