

A Case Study of EFL College Students' Speaking Performance under two conditions: AI chatbot-led versus Human-led

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Abstract

This case study investigated the impact of chatbot-led versus human speaking performance of four EFL college students. Over a five-week period, the students completed speaking tasks-mock OPIc interviews under the two conditions: chatbot, *Replika*-led, and human-led. Following the last interview task, the students shared their perceptions about the two types of interview tasks. Data were collected from transcribed speaking performance and the semi-structured interviews. Quantitative analysis was conducted using a corpus readability tool, focusing on the percentage of complex words (CW), the average words per sentences (WS), and overall readability (R). With those scores, a Wilcoxon Matched-Pairs Signed-Rank test was run and revealed no statistically differences between the two English interview conditions in terms of CW, WS, and R. Qualitative data indicated that most students reported greater comfort and reduced foreign language speaking anxiety while conversing with the AI chatbot, *Replika*, although one student expressed discomfort with its frequent breakdown conversational flow. In short, students appreciated the interaction with *Replika* in spoken language, specifically, which reformulates and supports students' linguistic development. These findings suggest that AI chatbot, *Replika*, can serve as viable and plausible tools for practicing spoken English in EFL settings, calling more diverse ways to implement it into classroom activities.

Keywords: AI chatbot, *Replika*, EFL students' speaking performance, Chatbot-assisted language learning