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TEST-RETEST RELIABILITY AND THE EFFECT OF TASK INSTRUCTIONS ON LISTENING EFFORT WHEN USING A VRT PARADIGM

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Daily listening environments consist of background noises and distracting events. Listening amidst competing noise taxes one's limited cognitive resources, leading to increased listening effort. As such, there is interest in incorporating a reliable test of listening effort into the clinical test battery. One clinically promising method for measuring listening effort is Verbal Response Time (VRT) because it can be obtained using already-established clinical tasks. In order for widespread implementation of the VRT paradigm, a better understanding of the psychometric properties are needed. The purpose of this work was to improve the understanding of the reliability and sensitivity of the VRT listening task. Using within-subject study designs, we evaluated the test-retest reliability (Study 1) and the effect of task instructions and listening condition (Study 2). Results show that the VRT paradigm enjoys good to excellent test-retest reliability and that neither task instructions nor listening condition meaningfully influenced VRT once measurement error was accounted for. Future studies should account for measurement error when considering statistically significant vs. meaningful effects of experimental parameters when using listening effort tasks.