

**DOES MEMORY AFFECT READING ACUITY MEASUREMENT WITH MNREAD-J?** ((K.Oda<sup>1</sup>, C. Fujita<sup>1</sup>, S. J. Mansfield<sup>2</sup>, G.E. Legge<sup>2</sup>)) <sup>1</sup>Tokyo Woman's Christian Univ., Dept. of Communication, Tokyo, JAPAN; <sup>2</sup>Univ. of Minnesota, Dept. of Psychology, UM, USA.

**Purpose:** Reading acuity measurements by charts with fixed sentence sets have a disadvantage that clients repeatedly read the same materials. However, easy-to-read simple sentences would eliminate memory effect on reading performance measurements. The purpose of this study is to test this wishful prediction.

**Method:** Japanese version of MNREAD reading acuity charts, named MNREAD-J (Oda et al, 1998) were used to measure reading performances. Charts were printed in print size varied 1.3 through -0.5 logMAR in 0.1 step. In two weeks of interval, two measurements were conducted to the same 36 normally sighted subjects with three charts, the same chart in two measurements and two different charts for each measurement. Maximum reading speed(MRS), reading acuity(RA), and critical print size(CPS) were calculated and compared. Subjects' judgment on the repetition of presentation was also recorded for each sentence after the second measurement.

**Result:** There was not a significant difference between the first and the second measurement in all MRS, RA, and CPS. Although subjects' memory showed large individual differences, it did not affect reading acuity measurement in any observable way.

**Conclusion:** The same chart could be used repeatedly and provide reliable reading performance measurements at least for two consecutive measurements in two-week interval. Easy-to-read simple sentences with simple words form a suitable material pool for reading acuity measurement.

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