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Computer programs for the semantic differential: An update and expansion

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Description. The semantic differential technique of Osgood, Suci, and Tannenbaum (1957) has been widely used, but published computer programs seem to be few. The Lawson, Golden, and Chmura (1972) programs are now dated by capacity and function; those of Rovinelli and Hambleton (1973) are no longer available (Hambleton, Note 1). Lawson's (1978) program is for analysis of a single case.

The Lawson et al. (1972) programs have been greatly refined, expanded, and augmented to perform more functions with a much larger amount of data. This note outlines the updated version.

Input. The initial program reads data in the form of scale responses by concept for each respondent. Concepts may be presented to respondents in randomized order and polarity, thus avoiding position effects.

Output. The programs yield (1) means, standard deviations, and standard errors for each subscale on each concept, (2) evaluation, potency, and activity (EPA) means, standard deviations, and standard errors, based upon averaging selected subscales, (3) Osgood D values for all concepts, (4) the correlation of distance measures obtained with EPA scores with D values, (5) tests of significance of D values with key reference concepts (good-bad, strong-weak, and active-passive), and (6) tests of significance for D values on each concept between two samples.

Capacity. The programs are written in standard FORTRAN IV for use on a Burroughs 4700 with 109K. With another computer, adjustments will depend on the compiler used. The programs handle up to 109 concepts on nine subscales. The number of cases is limited by the size of the file in one of the programs (SDINDD). In the Fredonia programs, up to 50 cases are handled without difficulty.

Availability. A write-up and listing of the program, with samples of data analysis, may be obtained without charge from Barbara Metivier, Computer Center, State University of New York, College at Fredonia, Fredonia, New York 14063.

REFERENCE NOTE

1. Hambleton, R. Personal communication, May 1979.

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