

Zuckerman M & Lubin B. *Manual for the Multiple Affect Adjective Check List*. San Diego, CA: Educational and Industrial Testing Service, 1965. 24 p.

This manual describes the development of trait and state scales for the measurement of three affects: anxiety, depression, and hostility. Reliability and validity studies are described, showing the usefulness of the state scales in the quick measurement of mood states and traits in clinical and experimental research on diagnosis and stress reactions. Norms are provided for trait and state forms for normal (college student and job applicant) and abnormal (psychiatric patient) populations. [The SSC7® indicates that this book has been cited in over 645 publications.]

induced by behavioral, cognitive, and dynamic therapies, as well as in specific techniques like sensitivity training, encounter groups, relaxation training, meditation, biofeedback, nursing treatments, and drug therapy. MAACL state scales were widely used in studies of stress induced by ego threat, frustration, failure, examinations, sensory deprivation, overstimulation, movies, threat of pain, military training and combat, surgery, pregnancy, and childbirth. The depression subscale was particularly useful in the first human studies of learned helplessness.

A Useful Measure for State Affects

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Lubin was more assiduous than I in tracking the expanding literature on the MAACL. In 1985 he collected the citations, and we published them in an MAACL bibliography⁴ listing 716 published articles and doctoral dissertations that used the MAACL, sorting them by areas of research. A more recent compilation through 1989 shows more than 1,200 citations to the MAACL.

Although the MAACL was making our publisher rich, and providing us with handy pocket money every year, he rightly felt that the test needed revision after 15 years. Although the three state scales were remarkably sensitive to the effects of experimental or natural conditions and showed excellent convergent validity, high correlations between the scales due to a response set problem (the influence of the number of items checked) reduced their discriminant validity. Also there were no scales for the measurement of positive affect. Perhaps due to the clinical-Calvinistic ethos of the times, psychologists had largely ignored the fact that joy is something more than the absence of anxiety or depression. Because we had developed the old scales by making item response comparisons between psychiatric patients and controls, positive affect items emerged as reverse indicators of the negative affects. Most patients suffer from both the presence of negative affect and the absence of positive affect, as cluster and factor analyses showed. By a series of factor analyses, we used the original items to build new scales for the revised version (the MAACL-R⁵), which now contains positive affect scales as well as purer scales for anxiety, depression, and hostility. The new version is more psychometrically sound, and the combined use of positive and negative affect scales shows even more powerful clinical discriminations.⁶

Measurement methods are often developed to meet the needs of specific research projects where existing methods are inadequate for the job. An earlier test, the Affect Adjective Check List (AACL)¹ (a previous Citation Classic) for the measurement of anxiety trait and state, was proving extremely useful in many types of clinical and personality research. When we were at the Indiana University Medical Center, Bernard Lubin decided to extend the AACL trait-state model to the measurement of depression and began developing the Depression Adjective Check Lists, to be described in a future Citation Classic. We joined forces and constructed a multiple-scale method, adding items from his preliminary depression scales and developing a third scale for the measurement of hostility.^{2,3}

The growing popularity of these scales testified to the need for this kind of trait-state measure, and in 1965 we published the Multiple Affect Adjective Check List (MAACL). By this time we had taken new jobs at different locations but continued our collaboration on the MAACL. My own interests turned from assessment to the study of sensory deprivation and the trait of sensation seeking, but I continued to use the MAACL in my new research. It was used extensively by others in studies of change

Studies now being published show excellent validity for the state scales in measuring experimental and natural stress and for the trait scales for differential diagnosis of mood disorders, but many users continue to use the old scales. There is a curious lag when new and better versions of methods are developed. We strongly urge researchers to try the new scales. All they need is a new set of scoring keys.

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2. Zuckerman M & Lubin B. Normative data for the Multiple Affect Adjective Check List. *Psychol. Rep.* 16:438, 1965. (Cited 15 times.)
3. ———. Validation of the Multiple Affect Adjective Check List in clinical situations. *J. Consult. Psychol.* 29:594, 1965. (Cited 45 times.)
4. Lubin B, Zuckerman M & Woodward L. *Bibliography for the Multiple Affect Adjective Check List*. San Diego, CA: Educational and Industrial Testing Service, 1985. 29 p. (Cited 5 times.)
5. Zuckerman M & Lubin B. *Manual for the MAACL-R: the Multiple Affect Adjective Check List-Revised*. San Diego, CA: Educational and Industrial Testing Service, 1985. 24 p. (Cited 15 times.)
6. Zuckerman M, Lubin B, Rinck C M, Soliday S M, Abbott W L & Carlson K. Discriminant validity of the Multiple Affect Adjective Check List-Revised. *J. Psychopathol. Behav. Assess.* 8:119-28, 1986.