

## **Origins of the Predictive Index®**

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## ORIGINS

The Predictive Index (PI) was developed and administered experimentally by Arnold S. Daniels during the period 1953 and 1954. It was made available for industrial use, and the Predictive Index Management Training Course first conducted for a management group by Mr. Daniels, in July, 1955. Since 1955 the acceptance of PI has been worldwide. Thousands of managers and executives have attended the PI Management Workshop. The checklist, which is currently available in 60 languages plus braille, has been administered millions of times.

The Predictive Index is one of a class of objective assessment techniques based on certain fundamental assumptions of behavioral psychology - the first being that work/social behavior is primarily an expression in activity of a variety of responses to environmental stimuli, recognizable as consistently expressed personality traits. The Predictive Index adjective checklist is essentially a symbolic environment composed of a variety of stimuli associated with four primary and two resultant personality traits. Confronted with the stimuli in the Predictive Index Survey Form, the individual will respond to them, either positively or negatively, in a manner consistent with the ways in which he/she responds to the actual environmental stimuli that the words in the checklist symbolize.

The concept of measuring response to symbolic stimuli as a means of assessing and predicting behavior probably originated with the publication of Rorschach's "Psychodiagnostics" in 1921, and was developed in a variety of forms thereafter. Those first "projective" techniques employed abstract or realistic pictures as the symbolic stimuli to which the subject was directed to respond.

The first use of words as symbolic stimuli in a projective format was made by Louis L. Thurstone, who reported his work with the technique in an article entitled "The Vectors Of The Mind" in 1934. What Thurstone had discovered was that various people will respond positively to certain descriptive words by checking them, and negatively to others by not checking them. Whether or not the words checked accurately or truly describe the person is of no significance, and has no bearing on analysis of the results. Statistically and pragmatically, Thurstone then developed what he called "clusters" of words to which persons with certain predominant personality traits will consistently respond. Thurstone's work was refined and advanced by numerous psychologists, among them Raymond B. Cattell, Donald Fiske, M.E. Baehr, J.P. and R.B. Guilford and H.C. Gough.

The words used in the Predictive Index checklist are derived primarily from Thurstone's clusters, and later analyses and refinements of them by Cattell and Fiske. Classification and description of the six personality traits measured by the Predictive Index is based upon the work of the psychologists named above, and others referred to in the following paragraphs.

To understand the measurements made by the Predictive Index it is necessary to think of each of the measured traits as a drive developing in magnitude along a continuum, from and to the extremes of each trait, which may be described in such terms as "submissiveness - dominance", for example. The drive being measured is a drive to behave in particular ways, or, more accurately, to respond in particular ways and with particular intensity to the situations presented by and perceived in the real environment. The measurements made by the Predictive Index establish for each individual the location or magnitude on the continuums of the six drives, which when integrated provide specific description and prediction of the individual's work-related behavior.

Each of the traits is measured over a range of at least 30 fifths of sigma variation from norm. The meaning of those variations has been highly structured to make possible specific and uniform analysis of the Predictive Index Pattern,

which means specific description and prediction of the individual's behavior in any particular situation - jobs being the particular situations which are the concern of the Predictive Index.

The measurements of relative response magnitude made by the Predictive Index are scored on the norms which have been compiled from a large number of subject responses to the checklist; those norms, which are provided on the Predictive Index Data Sheets, were first established tentatively in 1954, using a sample of 360 persons in business organizations. They have been refined with three further compilations, the third utilizing a sample of 3660 persons at all levels of business organization. The present norms are based on a total N of over 8000 persons in the industrial/commercial population.

*“A Normative Reliability Investigation of The Predictive Index Organization Survey Checklist”* (N = 2546), reporting the results of a statistical analysis completed in April, 1996, again confirms the soundness of the measurements of individual behavior and potential provided by the Predictive Index.

The descriptive analysis had its origins in the literature of trait classification developed by such early behaviorists as R.B. Cattell, G.W. Allport and J.B. Watson, and later expanded and refined by modern behaviorists such as B.F. Skinner and sociologists such as David Riesman. Analysis of interrelationships between the traits draws on those same sources, and also owes much to the observations and experiences reported by our clients, who daily make practical use of the Predictive Index in the work environment. Their constant study of the relationships between various Predictive Index Patterns and the drives, interests and aptitudes involved in the performance of a great many different kinds of work has been invaluable in developing the meanings of the traits measured by Predictive Index.

In addition to measuring actual behavior in the work environment, Predictive Index also provides unique measurements of the effect of that environment on the individual, utilizing concepts of role-playing and value-rating developed by Prescott Lecky, Hadley Cantril, Carl Rogers and others. These insights into the effects of organizational style and communications on individual attitude are valuable aids to management in developing and stimulating the productivity of their organizations.

In 1983, an exhaustive study of the Internal consistency, Stability, Reliability, Accuracy, and Validity of the Predictive Index was independently designed and executed by Drs. J. Christopher Perry and Philip W. Lavori of the Harvard Medical School. This study again confirmed the soundness of the instrument, as well as its freedom from sexual bias. (N = 260)

Numerous studies of the criterion-related validity of the Predictive Index have consistently confirmed its work-relatedness and accuracy. Studies conducted in the U.S. (where the guidelines of the Equal Employment Opportunities Commission demand vigorously proven statistical significance from tools such as PI) and in other countries where PI validation studies are also regularly conducted, show that Predictive Index has continually exceeded accepted validation standards by a considerable margin. Validation studies to establish specific hiring criteria for key jobs are available as a client service.

To facilitate the application of the Predictive Index to specific jobs, a number of techniques are incorporated into the program for analysis of job demands in terms of the same traits which are measured by the Predictive Index. It is thus possible to use the Predictive Index to objectively assess and describe individual behavior and job demands in the same terms.