

The Validity of B-PAD As a Measure of Problem-Solving Skills

Purpose of the Study. The purpose of this study was to evaluate the validity of B-PAD's Scale 1 (Task Orientation) in selecting police and corrections/detention officer applicants. The study utilized a construct validation strategy, contrasting the B-PAD scale scores with an independent measure of problem-solving competency. Other independent measures of validity also have been conducted and reported elsewhere (c.f. Rand, 1987; Dolan, 1989; Young, 1992). This research is a summary of a study reported in full by Corey & MacAlpine (1993).

Methodology and Subjects. This study involved 50 applicants who were administered B-PAD as a part of the psychological screening protocol. The subjects applied to one of four California police or sheriff's agencies; 40 were police applicants and the remaining ten were corrections/detention applicants. Written testing was completed first and included Cattell's Sixteen Personality Factor Questionnaire (16PF). B-PAD scoring was conducted without knowledge of the applicant's 16PF scores.

Results. All but one of Cattell's 16 factors measure personality traits, with the one exception being Factor B—a rough measure of problem-solving ability and intelligence, according to its developers. It was hypothesized that Factor B would have at least a modest correlation with B-PAD's Scale 1 (Task Orientation or problem-solving judgment). Also, since Scale 3 (Overall Effectiveness) is partly dependent on Scale 1, a modest correlation between this scale and Factor B was expected. The results of the analysis reveal the expected relationships. Scale 1 correlated significantly with Factor B only ($r = .39, p < .01$), and Scale 3 showed a modest correlation with Factor B ($r = .31, p < .05$). No significant correlations were found, as expected, between the personality trait scales and the B-PAD scales.

Conclusion. The results of this analysis confirm the correlation between Scale 1 scores and an independent measure of an applicant's problem-solving ability. Combined with data showing that Scale 1 does not correlate with personality measures, the results support the valid use of B-PAD's Scale 1 as a measure of problem-solving competence.