

Summary

The clinical methods most frequently in use in behavioral toxicology are performance measurements of intellectual, perceptual, motor, and memory abilities.

Most of the tests used in Scandinavia and Britain are chosen from well-known clinical test batteries for diagnosing organic brain damage, eg, the Wechsler Adult Intelligence Scale. The test batteries are also composed to fulfill criteria of ease in administration. The British battery is assembled to fulfill requirements for a short testing procedure, whereas, with Scandinavian batteries, less emphasis has been placed on time. The batteries cover a broad range of mental skills and are focused on abilities assumed to be susceptible to solvent exposure. In Finland the ability tests are frequently supplemented with the projective Rorschach test, as presented by Lindström in this section of the Proceedings.

The likelihood of detecting effects due to solvent exposure depends not only on the extent to which there are real effects to measure, but also on the degree to which relevant variables are measured and how sensitive the measurements are.

The degree to which traditional psychometric methods measure relevant variables has received little attention in the past. Most of these methods lack a theoretical basis with regard to which mental mechanisms are involved. Usually the reliability of the tests is quite good, but validity problems are seldom discussed. An exception may be the Rorschach test. External or predictive validity of performance tests is assessed clinically, the results of the psychometric investigation being compared with the history and clinical findings.