

Validity and reliability in forensic research



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Assessment Instruments and Procedures

- Reliability

Instruments of assessments must be reliable. Forensic psychologists need to be certain that the measuring tools or tests that they are using are consistent. The instruments must yield the same numerical measurement every time it measures the same thing under the same conditions.

Assessment instruments are reliable to a varying degree, yet reliability is a necessary but not sufficient element of a good test. Tests must be reliable, accurate and valid. Reliability equals consistency and dependability, yet not necessarily consistently good or bad, just simply consistent.

- Validity

Validity in assessment instruments is a judgment or estimate of how well a test measures what it is supposed to measure in a certain context. In essence, it is a judgment based on evidence about the appropriateness of inferences being drawn from test scores. Validity can be broken down into three categories: Construct validity, Content validity and Criterion-related validity. Construct validity pertains to how the test measures the psychological issues. Content validity pertains to the elements that compose the test (Raymond, 2013). Criterion-related validity measures the validity gotten from evaluating the relationship of scores obtained on the test to scores on other tests or measures. There are no universally valid tests. Tests can only be valid for the context in which they were used. The validity of tests can be diminished due to culture, or the changing times. So, tests need to be validated and proven valid time and again.

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- Norming Sample Populations

Norming sample populations is a group of people whose performance on a particular test is analyzed for reference in evaluating the performance of individuals who will be taking the test. Members of the sample population will all be similar in some characteristics of the people for whom the test was designed, for instance, the people for whom the test was designed could suffer from depression without psychosis, so the sample population would include those who suffer from severe depression without psychosis. When the test is given to the norm sample population, the test results give a distribution of scores. Those scores (data) become the norm for the test and are used as a reference source for evaluating and placing into context scores from the individual test takers. The data can be the raw scores or converted scores (Cohen, Swerdlik, & Sturman, 2013).

- Analyze the importance of these aspects for an instrument used in forensic assessment, using specific examples.

When a forensic psychologist has to conduct an assessment for the court or a defendant, judges use the Daubert Standard regarding testing. The United States Supreme Court identified the role of the trial judge as a gatekeeper regarding all scientific testimony and Daubert tests must focus on validity and reliability, and that in order for the scientific evidence to be relevant, it must relate to the issued at hand (Huss, 2009 & Daubert v. Merrell Dow Pharmaceuticals Ltd., 1993). Assessments are considered “ scientific knowledge”, and as such, are subjected to the tests/factors of the Daubert Standards. So, if a defendant is ordered to undergo an assessment such as Psychosocial Evaluation & Threat Risk Assessment, Psychosocial Evaluation

& Threat Risk Assessment, the judge will look at the test itself to see if it meets the Daubert Standard.

- Describe the reliability, validity, and norming sample populations for the assessment instrument you selected.

I selected the Hare Psychopathy Checklist: Youth Version (PCL: YV). This is an assessment given to juveniles between the ages of 12-18. The assessment looks for deviant and antisocial behaviors and patterns. The assessment measures traits in juveniles that point towards psychopathological behaviors by interpreting a juveniles emotions, social and behavioral traits. The sooner that the psychopathological behaviors can be found, the better chances that the juvenile can get the help that he/she needs to become non-psychopathological adults and it helps forensic psychologist better understand psychopathology in juveniles.

Norming Sample Populations: The development of the assessment used a standard sample of 2438 juveniles from the U. K, U. S., and Canada. The juvenile sample were incarcerated, on probation or in community outpatient treatment (Fleenor, 2003).

Validity: The validity was conducted using a modified adult PCL assessment, and it was adjusted for juveniles with something being taken out, since those items didn't pertain to juveniles. Some assessments were adjusted so that only recidivism was what was being looked at, and predictive validity was noted. Some of the assessments looked at criminal records, and was noted to be predictively valid into young adulthood (Fleenor, 2003).

Reliability: According to Fleenor (2003) who reviewed the assessment instrument, 20 items are rated on the PCL-YV test. They are: “ impression management, grandiose sense of self worth; stimulation seeking; pathological lying; manipulation for personal gain; lack of remorse; shallow affect; callous/lack of empathy; parasitic orientation; poor anger control; impersonal sexual behavior; early behavior problems; lacks goals; impulsivity; irresponsibility; failure to accept responsibility; unstable interpersonal relationships; serious criminal behavior; serious violations of conditional release; and criminal versatility” (Fleenor, 2003). The 20 items are then put into four categories, which are Behavioral, Interpersonal, Affective, and Antisocial (Fleenor, 2003). Finally, the four categories are put into three settings: Probation, Institutional, and Community (Fleenor, 2003). The mean reliability estimate are acceptable, because most are over . 70, the internal consistency estimates are between . 85 to . 94, and the inter-item correlations are between . 23 to . 43 (Fleenor, 2003). All are generally acceptable reliability instrument ranges (Fleenor, 2003).

References

Cohen, R. J., Swerdlik, M. E. & Sturman, E. D. (2013) Psychological testing and assessment: An introduction to tests and measurements. McGraw Hill Publishing, New York, NY. Part II, Chapter 3, pp. 77-116; Part II, Chapter 5, pp. 145-180; Part II, Chapter 6, pp. 181-210.

Fleenor, J. W. (2003). Review of Hare Psychopathy Checklist: Youth Version (PC-YV). Multi-Health Systems, Inc., North Tonawanda, NY.

Fradella, H. F. (2008). *Forensic psychology: The use of behavioral science in civil and criminal justice*, 2nd edition. Cengage Learning Publishing, Mason, Oh.

Huss, M. T. (2009). *Forensic psychology: Research, clinical practice and application*. West Sussex, United Kingdom: Wiley-Blackwell & Sons Publishing.

Lally, S. (2003). What tests are acceptable for use in forensic evaluations? A survey of experts. *Professional Psychology: Research and Practice*, 34 (5), 491-498.

Otto, R. K., & Heilbrun, K. (2002). The practice of forensic psychology: A look toward the future in light of the past. *American Psychologist*, 57 (1), 5-18.

Richmond, R. L. P. (1997-2013). *A guide to psychology and its practice: Psychological testing*. Retrieved from [http://www. guidetopsychology. com/testing. htm](http://www.guidetopsychology.com/testing.htm)

Walters, G. (2006). Effects of test administration set on the Psychological Inventory of Criminal Thinking Styles (PICTS). *International Journal of Offender Therapy and Comparative Criminology*, 50 (6), 661-671.

Wettstein, R. (2004). Quality and quality improvement in forensic mental health evaluations. *Journal of the American Academy of Psychiatry and the Law*, 33 (2), 158-175.