Inwald Personality Inventory-2

General Information

In 1980, Robin Inwald published the Inwald Personality Inventory (IPI®). The IPI was the first assessment designed specifically for the selection of public safety personnel to assist with "screening out" candidates that possessed personality characteristics, emotional patterns, attitudes, and behaviors that were likely to significantly impair their ability to function in a public safety role. The IPI was developed in consideration of law enforcement officers who had experienced job-relevant performance difficulties and, over time, research was collected to support its use with assessing candidates vying for other public safety positions including firefighters, correction officers, and security officers.

In 2011, The Institute for Personality and Ability Testing, Inc. (IPAT) released the Inwald Personality Inventory-2 (IPI-2™), a 202-item, true/false, self-report psychological assessment tool. Like its predecessor, the IPI-2 measures unfavorable characteristics and patterns of behavior that have been determined to be undesirable for professionals in high-risk occupations. The IPI-2 provides useful information on how an individual's scores compare with those of other public safety professionals, making it a valuable aid in predicting job-relevant behaviors and assessing an individual's suitability for a job in the public safety field. The IPI-2 is designed for individuals aged 16 and older with a minimum fifth-grade reading level. The assessment takes between 30 to 40 minutes to complete and is available in three languages - English, French, and Spanish. Administration is via paper-and-pencil or computer using IPAT's online service or OnSite Pro software.

IPI-2 Scales

The IPI-2 is comprised of 17 scales including one validity scale and 16 content scales. A T-Score is calculated for each of the 17 IPI-2 scales based upon the test-taker's endorsement of items on the test. These T-Scores enable comparisons to be made between the test-taker's performance and the normative sample. T-Scores 59 and below are considered to be common among public safety candidates, whereas T-Scores 60 and above are considered to be elevated and warrant further exploration.

The Guardedness Scale is the IPI-2 validity scale measuring social desirability and provides insight into how the candidate approached the testing process. An elevated score should prompt the professional to consider response bias.

The 16 content scales include: Substance Use, Rigidity, Passivity, Admitted Illegal Behavior, Criminal Accusations, Social Difficulties, Volatility, Anxiety, Abnormal Thoughts, Depressed Mood, Elevated Mood, Non-Conformity, Unreliability, Risk-Taking Tendencies, Irritability, and Health Concerns. Table 1 lists the 17 IPI-2 Scale names and descriptors.

Table 1: IPI-2 Scale Names and Descriptors

IPI-2 Scale	IPI-2 Scale Description
Guardedness	Evaluates the degree to which the test taker minimized shortcomings
Substance Use	Assesses the test taker's propensity toward alcohol and/or illicit drug use
Rigidity	Measures the degree to which the test taker may have difficulties adapting to change
Passivity	Assesses the test taker's tendency to be submissive and how easily he or she is intimidated by others
Admitted Illegal Behavior	Evaluates the test taker's self-reported history of involvement in illegal activities and criminal behavior
Criminal Accusations	Evaluates the history of criminal accusations leveled against the test taker (not the actual commission of a crime)
Social Difficulties	Measures the degree to which the test taker may have trouble creating and sustaining positive interpersonal relationships
Volatility	Assess the test taker's tendency to lose his or her temper and display violent outbursts
Anxiety	Measures the test taker's propensity toward worry and anxiety
Abnormal Thoughts	Assesses the degree to which the test taker may have difficulties distinguishing between reality and fantasy
Depressed Mood	Evaluates the degree to which the test taker may be experiencing depressive feelings
Elevated Mood	Evaluates the degree to which the test taker may be experiencing a pattern of abnormally elevated mood and energy
Non-Conformity	Measures the degree to which the test taker possesses antisocial attitudes
Unreliability	Assess the degree to which the test taker may have difficulties with fulfilling responsibilities and meeting expectations
Risk-Taking Tendencies	Assesses the test taker's tendency to discount potential negative consequences in favor of pursuing immediate gain
Irritability	Assesses the test taker's tendency to be emotionally tense and easily annoyed or irritated
Health Concerns	Evaluates the test taker's pattern of lifestyle choices that could contribute to poor health

Development of the Inwald Personality Inventory-2

The development of the IPI-2 included a multi-process review of the original IPI items by a team of subject matter experts. This process resulted in the removal of outdated and provocative items by current 21st century standards and the reorganization of the remaining items into new discrete scales based upon their content to eliminate the item overlap that existed on the original IPI scales. Furthermore, data was collected and analyzed to support the inclusion of a new Estimated Psychologist Recommendation prediction equation along with four new law enforcement Field Training Officer (FTO) Rating prediction equations.

Normative Group

The IPI-2 normative sample was created by rescoring 89,301 existing IPI records drawn from a wide cross-section of the geography of the United States. With regard to gender, 78.5% of the sample was male and 21.5% female. Although the sample over-represents males when compared to the 2000 United States Census, it is representative of the makeup of public safety applicants. In terms of ethnicity, the normative sample included 61.5% Caucasian, 19.4% African American, 13.3% Hispanic, 2.8% Native American, 2.3% Asian, and 0.6% other. This normative sample closely approximates the 2000 U.S. Census, with minority candidates having slightly more representation in the normative sample.

Legal Issues

Although the IPI-2 is not intended to be used as a mental health disorder diagnostic tool, some of the item content is clinically oriented and therefore is considered a "medical examination" by the Equal Employment Opportunity Commission (EEOC) standards. As a result, to remain in legal compliance with the provisions set forth by the Americans with Disabilities Act (ADA), the IPI-2 can only be administered after a conditional offer of employment has been tendered to the applicant.

Psychometrics: Reliability

The method of calculating internal consistency used in the design of the IPI-2 was Cronbach's Alpha for Internal Consistency. The IPI-2 has an overall internal consistency average of .52. The individual internal consistency estimates for each scale are presented in Table 2.

Table 2: IPI-2 Scale Reliabilities

IPI-2 Scale	Cronbach's Alpha for Internal Consistency
Guardedness (GD)	.77
Substance Use (SU)	.64
Rigidity (RG)	.50
Passivity (PS)	.39
Admitted Illegal Behavior (IB)	.50
Criminal Accusations (CA)	.63
Social Difficulties (SD)	.46
Volatility (VT)	.50
Anxiety (AX)	.69
Abnormal Thoughts (AT)	.34
Depressed Mood (DM)	.43
Elevated Mood (EM)	.44
Non-Conformity (NC)	.50
Unreliability (UR)	.53
Risk-Taking Tendencies (RT)	.45
Irritability (IR)	.64
Health Concerns (HC)	.50

Psychometrics: Construct Validity

Correlations were analyzed between the 17 IPI-2 scales and the scales on two other commonly used personality assessments that screen for pathology including the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF®) and the Personality Assessment Inventory™ (PAI®). Although the IPI-2 asks questions related to behavioral indicators of pathology rather than specific diagnostic questions, there is a similar focus on the "negative" side of personality and mood.

There were several expected significant correlations (minimum .05 level) found between the IPI-2 scales and the MMPI-2-RF and PAI scales. For example, the IPI-2 Guardedness Scale was significantly correlated with the MMPI-2-RF Uncommon Virtues (L-r) Scale and the PAI Positive Impression (PIM) Scale. Additionally, significant correlations were found between the IPI-2 Substance Use Scale and the MMPI-2-RF Substance Abuse (SUB) Scale and the PAI Alcohol Problems (ALC) Scale. Another example includes significant correlations between the IPI-2 Passivity Scale and the MMPI-2-RF Behavior-Restricting Fears (BRF) and Shyness (SHY) Scales, as well as a significant negative correlation with the PAI Dominance (DOM) Scale. These significant correlations, along with several others that were found, demonstrate the construct validity of the IPI-2. A complete analysis of the correlations between the IPI-2 and these other instruments are provided in the IPI-2 manual available directly through the publisher, IPAT Inc.

Psychometrics: Criterion-Related Validity

Discriminate function analysis conducted during the developmental research phase of the IPI-2 focused on job relevant predictions useful to public safety psychologists and led to the development of the Estimated Psychologist Recommendation and four FTO Rating prediction equations including, Control of Conflict, Public Relations, Report Writing, and the Overall FTO Rating. For the Estimated Psychologist Recommendation, a candidate is categorized as either "likely to recommend" or "not likely to recommend." For the FTO Rating prediction equations, the candidate is categorized as either "likely to meet expectations" or "not likely to meet expectations." The overall accuracy scores for each of the five prediction equations are provided in Table 3. Detailed information pertaining to the sensitivity and specificity of these prediction equations are provided in the IPI-2 manual available directly through the publisher, IPAT Inc.

Table 3: IPI-2 Prediction Equation Overall Accuracy Scores

IPI-2 Prediction Equation	Overall Accuracy Score
Estimated Psychologist Recommendation	73.0%
Control of Conflict (FTO)	88.8%
Public Relations (FTO)	79.9%
Report Writing (FTO)	76.4%
Overall FTO Rating	84.7%

References

EEOC. (1991) The Civil Rights Act of 1991, Pub L. No. 102-166, 105 Stat 1071 (codified in various sections of 42 U.S.C. (Supp. III 1992)). Retrieved August 6, 2012, from http://www.eeoc.com/policy/laws/civil-rights-act-of-1991/

IPAT Staff. (2012) *Inwald Personality Inventory-2 Manual.* Champaign, IL: Institute for Personality and Ability Testing, Inc.