The Inwald Personality Inventory

General Information

The Inwald Personality Inventory (IPI), published in 1980, was designed exclusively for use in public safety and security assessment. It was developed to aid public safety/law enforcement agencies in selecting new officers who would meet necessary job requirements. The IPI was developed in response to the particular requirements of the public safety/law enforcement selection process. These requirements include:

- the need to evaluate behavioral "fitness" with intent to screen out candidates whose behaviors are likely to seriously impair their ability to function as public safety officers and to identify those who are emotionally unsuitable (that is, those who demonstrate personality characteristics similar to officers who have experienced on-the-job performance difficulties)
- the need to document specific behavioral characteristics of candidates in order to defend selection decisions in court
- the need to gather a great deal of information in a short period of time, without relying upon time-consuming, detailed investigations

Due to the nature of some of the items, the IPI is not intended for use in assessing candidates for jobs other than "public safety/law enforcement officer" (including but not limited to such titles such as Police Officer, Correction Officer, Transit Officer, Court Officer, Security Officer, etc.). However, the IPI is also appropriate for other high risk occupations where job analyses and legal issues provide specific justification, such as firefighters, dispatchers, hostage negotiators, and nuclear power plant operators. Given some items may appear to aid in identifying symptoms of psychological disorders, the IPI is recommended only for use in post-conditional offer selection (Institute for Personality and Ability Testing, 2006).

Detailed information about the IPI can be found in the *Inwald Personality Inventory Technical Manual* (Institute for Personality and Ability Testing, 2006).

Instrument Description

The IPI consists of 310 "true-false" questions and is indicated for use with individuals ages 16 and above or as otherwise determined by a psychologist. The IPI can be administered paper/pencil or it can be administered "on screen" with a computer software program. In either case, a report is generated which includes narrative statements, scale scores, a critical item print-out and psychologists' prediction ratings (Institute for Personality and Ability Testing, 2006).

IPI Scales

The IPI consists of 25 content scales and one validity scale (see Table 1). It is comprised of several distinct and sometimes overlapping scales, designed to measure behaviors, attitudes, and characteristics of individual applicants. In addition, it documents combinations and patterns of historical life events which studies suggest correlate significantly with failure in law enforcement (Institute for Personality and Ability Testing, 2006).

IPI scales measure both personality characteristics and behavior patterns. They contain critical items used to identify unusual behavior patterns, as well as items which flag less severe adjustment difficulties. For example, IPI scales can identify a highly guarded but naïve individual as having hyperactive or antisocial tendencies based strictly on behavioral admissions. The scales can also differentiate between individuals who express socially deviant attitudes and those who act on them. Table 2 summarizes each of the scales on the IPI (Institute for Personality and Ability Testing, 2006).

IPI SCALE (# OF ITEMS)	DESCRIPTION
GD—Guardedness (19)	Defensiveness, lack of candor, concern for appearances, a person who has minimized shortcomings, denied faults, and may have limited insight
RTRigid Type (19)	Impatience with others for minor indiscretions, a person who may be easily irritated, who tends to keep troubles to him/herself
AL—Alcohol (13)	Admission of alcohol use
DG—Drugs (13)	Admission of drug use
SA—Substance Abuse (20)	Indicates impulsiveness, risk-taking, a person who may be a gambler or thrill-seeker
DV—Driving Violations (6)	Motor vehicle violations or difficulties

Table 1: Scales of the IPI

IPI SCALE (# OF ITEMS)	DESCRIPTION
JD—Job Difficulties (22)	Past difficulties holding jobs, spotty employment record and/or a history of interpersonal difficulties on the job
TL—Trouble with Law & Society (21)	A history of brushes with the law, anti-social behaviors and/or authority conflicts
AS-Antisocial Attitudes (27)	Skeptical and/or antisocial attitudes about the world, view that life is generally unfair and that taking risks or bending rules in order to "beat the system" is justified
HP-Hyperactivity (42)	High energy level, admitted restlessness, an individual who may be impulsive, outspoken, hyperactive, and/or impatient with others
AA-Absence Abuse (19)	An admitted history of absenteeism or lateness on past jobs
IC-Illness Concerns (14)	An admitted tendency to develop physical problems and illnesses, unusual concern about health issues and/or chronic ailments that hinder daily functioning
TP-Treatment Programs (3)	A history of counseling, rehabilitation program participation, and/or use of medication for nervous conditions
AN-Anxiety (15)	Admitted anxiety and worry, limited stress-coping skills
TA-Type "A" (21)	An easily irritated, driven, restless, and competitive individual, a "workaholic" who, in later years, may be prone to ailments due to chronic stress
PH-Phobic Personality (34)	Admission of anxiety and other symptoms characteristic of phobic individuals, a tendency to avoid situations that would not be classified as dangerous or fearful by most people
LA-Lack of Assertiveness (14)	A tendency to avoid confrontations with others, lack of assertiveness/timidity in social interactions
OB-Obsessive Personality (13)	A preference for a highly structured environment, anxiety about details, and/or feelings of anxiety when there is confusion or disorganization
DE-Depression (27)	Discouragement and depression, difficulty coping with daily stresses and/or achieving personal goals, general dissatisfaction with life
LO-Loner Type (17)	Tendency to spend time alone, have few close friends, and avoid socializing with others, limited social support network
ID-Interpersonal Difficulties (27)	A history of problems getting along with others, tendency to be moody, impatient, and demanding, with strong expectations regarding how others should behave
FC-Family Conflicts (23)	Admitted conflicts with family members, resentment towards one or both parents and/or relatives
SC-Sexual Concerns (5)	Expressed anger and/or difficulties getting along/working with members of the opposite sex
SP-Spouse/Mate Concerns (8)	Admitted difficulties in a mate/spouse relationship
US-Undue Suspiciousness (22)	A tendency to be overly and unduly suspicious of the motives and actions of others, expressed belief that few people can be trusted
UE-Unusual Experiences/Thoughts (26)	Unusual thoughts and/or experiences, endorsement of items that are rarely answered by other job applicants

Background of Author

Dr. Robin Inwald spent 14 years as the director of psychological research and assessment services for the New York City Department of Corrections. She was responsible for the psychological screening of more than 31,000 officer candidates. Since 1985, Dr. Inwald has been a forensic diplomat of the American Board of Professional Psychology. She is among only 170 psychologists worldwide whose expertise in the field of psychology and the law is recognized by the American Psychological Association's American Board of Professional Psychology and the American Board of Forensic Psychology. She is the author of six books and more than 200 professional presentations. IPAT, Inc. acquired her company, Hilson Research, in 2007 as well as the Inwald Personality Inventory (Institute for Personality and Ability Testing, 2006).

Instrument Development

The IPI was developed as an aid for assessing an individual's suitability for a job in the public safety/law enforcement field. The items were developed from over 2,500 pre-employment interviews with public safety officer candidates. These items include not only critical characteristics related to public safety officer functioning but also self-revealing statements made by applicants during actual interviews. Thus, the population for whom the instrument was designed made specific contributions to the content of the inventory (Institute for Personality and Ability Testing, 2006).

The IPI was developed using the "deductive approach". In an article comparing approaches to personality inventory construction, Burisch reviews a dozen comparative studies and argues that no approach is superior in terms of validity or predictive effectiveness (Burisch, 1984). Thus the IPI was developed using a "common sense" approach. Once general scale descriptions were constructed, items were generated by the author to fit into the scale categories. No specific guidelines were followed, only the author's "best judgment" regarding the items selected for the final version of the test (Institute for Personality and Ability Testing, 2006).

Developmental Sample

Norms, including means and standard deviations, were developed for each IPI scale separately for 2,397 male and 147 female police officer candidates. These candidates were tested between September, 1981 and October, 1982. Norms were

also developed on 329 male and 15 female police officer candidates subsequently hired by the department. Two large groups of correction officer candidates also provided normative data. The first of these two norming groups consisted of 1,884 males and 523 females tested between November, 1979 and March, 1981. The mean age of the male correction officer candidates was 25 years. Fifty-four percent were single at the testing date and 31% were married for the first time. Forty-nine percent had at least one year of college and 11% completed a college or graduate degree. The sample was composed of 35% White, 46% Black and 17% Hispanic male correction officer candidates with the remaining 2% indicated other racial group membership. The second norming group was composed of 2,007 males and 431 females tested between July, 1981 and September, 1982 (Institute for Personality and Ability Testing, 2006).

The first correction officer norming group was further subdivided by race into groups consisting of 786 male and 61 female Whites, 718 male and 399 female Blacks and 353 male and 60 female Hispanics. Means and standard deviations were developed separately for each group so that individuals of the same ethnic background could be compared to one another (Institute for Personality and Ability Testing, 2006).

Legal Issues/Test Fairness

The Civil Rights Act of 1991 prohibits the adjustment of tests scores or the use of cut scores on the basis of race, color, sex, religion or national origin. This law has a direct impact on the use of personality testing as well as cognitive testing for employment purposes. In order to comply with this law, the same norms are used for generating the IPI profile graphs and prediction equations for both male and female job applicants (Institute for Personality and Ability Testing, 2006). As described below, studies have investigated adverse impact of the IPI for both gender and race

In one study, same-sex norms and prediction equations were used in scoring the IPI for a sample of 1,512 male and 873 female public safety officer applicants. Using the most conservative cut-point, a prediction for termination and the endorsement of more than ten critical items (Journal of Applied Psychology, Inwald, 1988), it was found that 11.4% of the males and 11.5% of the females were identified as "high risk" candidates. When the two indicators were utilized independently, there was a slight increase in the spread between males and females. Using only the criterion of

more than 10 endorsed critical items, 16.3% of the males and 18.2% of the females were identified. When only the prediction of termination equation was used, 38.9% of the males and 37.1% of the females were identified as "high risk" candidates. It is clear that the same prediction equations and norms for males and females using conservative markers will not adversely affect hiring decisions for either sex (Inwald & Gebbia, 1993).

In a study analyzing predictions of job behavior by racial group, correctional officers hired by a large urban agency between 1980 and 1985 were administered the IPI and MMPI before being appointed to the job. The 3,349 white, 3,391 black, and 1,547 hispanic male officers were subsequently evaluated on their job status and histories of absence, lateness, and disciplinary interviews. Discriminant function analyses were applied to the IPI and MMPI, alone and together, to assess any race differences in their prediction accuracy for each counterproductive job behavior measure. No significant bias in prediction accuracy was detected, though Hispanic males tended to have the highest number of correct predictions. The implementation of prediction equations for these tests would have reduced negative job behaviors by as much as 13%. Analyses of the relative percentages of "good" performers rated incorrectly were also included (Knatz, Inwald, Brockwell, & Tran, 1992).

To the best of the publisher's knowledge, the IPI has never been the subject of litigation. In the event that this occurs, the publisher would offer litigation support for the test at no cost to the client.

Reliability

Test-Retest reliability was measured for 321 male and 171 female correction officer candidates who completed the IPI in 1981. Six to eight weeks after their initial testing, candidates completed the IPI for a second time. Raw scale scores for each individual were obtained on the second test and compared to their scores on the first test. Test-retest correlation coefficients on the 26 IPI scales for male correction officers ranged from .58 to .87. For females, test-retest correlations ranged from .60 to .79 (Institute for Personality and Ability Testing, 2006).

The Reliability sub program of SPSS was used to calculate internal consistency. Items responses within each scale were individually entered into separate reliability programs. For all scales with more than five items, alpha coefficients ranged from .41 to .82 for male police officer candidates and .32 to .80 for female police officer candidates. The range of alpha coefficients for male correction officer candidates was from .41 to .82, and for female correction officer candidates, the values ranged from .37 to .80 (Institute for Personality and Ability Testing, 2006).

<u>Validity</u>

Three procedures were undertaken to establish construct validity of the IPI and its scales. 1) validation on clinical populations, 2) correlations of scales with uniformed officer panel ratings of candidates, and 3) correlations of individual scales with relevant biographical data.

Some of the scales were validated by administering the IPI to previously-diagnosed phobic, depressive, and/or anxious individuals, and comparing their scores with those of public safety/law enforcement candidates. For example, in one study, 139 females and 49 males applying to an out-patient hospital phobia clinic between 1980 and 1982 completed the IPI. Mean scores for groups of phobics on the "Phobic Personality" scale ranged from 17 to 19 items endorsed in the positive direction (males and female respectively), whereas means for groups of public safety/law enforcement ranged from 6 to 8 items endorsed in this fashion. These results suggested that the "Phobic Personality" scale was able to differentiate between populations of phobic and non-phobic individuals (Institute for Personality and Ability Testing, 2006).

The second method of validation involved ratings from a panel of three experienced public safety officers who systematically interviewed 150 candidates in 1980 and rated them on overall interview performance as well as specific qualities, such as interpersonal skills. Upon completion of an interview, all panelists made individual ratings on each candidate before coming to a consensus with other panelists. The alpha coefficient of inter-rater reliability was .80. Correlations of the panel ratings with candidates' scores on the various IPI scales were significant on thirteen scales at .20 or above. Six of these scales, including "Job Difficulties", "Phobic Personality", "Loner Type", "Depression", "Family Conflicts", and "Unusual Experiences/Thoughts", had correlations with the Overall Rating of Suitability, as assigned by the panel, ranging from .20 to .32 (Institute for Personality and Ability Testing, 2006).

A third validation study involved correlating the IPI scales with information extracted from a Personal History Questionnaire completed at the time of initial testing. Significant correlations were obtained between scales such as "Job Difficulties", "Trouble with the Law", and "Driving Difficulties", and biographical data indicative of such problems. These correlations ranged from .20 to .67 (Institute for Personality and Ability Testing, 2006).

Criterion Validity

A number of studies have sought to establish the predictive validity of the IPI for use in law enforcement. A few studies are highlighted here although a more extensive list can be found in the *Inwald Personality Inventory Technical Manual* (Institute for Personality and Ability Testing, 2006).

The IPI has been shown to predict negative or problematic behaviors among law enforcement/public safety officers. A study of male correction officers found mean scores on the IPI scales indicating past adjustment difficulties and "acting out" behaviors were higher for officers exhibiting "negative" job behaviors. In addition, IPI scores were able to better able to predict incidences of absence and disciplinary interviews than did the MMPI (Shusman, Inwald, & Landa, 1984). In a study of rural police officer candidates, four scales on the IPI were able to significantly predict officers who were rated poorly by psychologists or later terminated (Mufson & Mufson, 1998).

Use of the Instrument/Cut Scores

Since the IPI norms initially were developed for police and correction officer candidates, well over 200,000 IPI tests have been administered and additional norms have been developed for numerous applicant populations including security officers, firefighters, dispatchers, special public safety teams, and emergency response units (Institute for Personality and Ability Testing, 2006).

"Critical" scores (defined by the researchers as scores falling two standard deviations above the mean) were calculated to aid in identifying those candidates who scored significantly higher than their peers on specific scales. While these norms may be relevant for other agency populations, it is suggested that professionals using this inventory eventually develop their own local norms and "Critical" scores. This may aid in avoiding testing errors due to possible differences between agencies with regard to applicant characteristics and departmental requirements (Institute for Personality and Ability Testing, 2006).

Impression Management

To counteract defensive test-taking strategies by subjects who understandably want to make the best possible impression, the IPI has a validity scale ("Guardedness") similar to the validity scales on a number of other inventories. It includes statements of minor shortcomings common to almost all people. When a candidate denies such items, a strong need to appear unusually virtuous is indicated. If an individual appears too guarded to admit minor shortcomings, his/her scores can be scrutinized accordingly. In addition, the behavioral nature of many of the items can be revealing. Even if a candidate falsifies the most threatening items (e.g. "I have been convicted of a crime"), other less obvious items tend to identify behavioral tendencies leading to difficulties in everyday life (such as incidents of fighting or other acting-out behaviors) (Institute for Personality and Ability Testing, 2006).

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