TAIS Reliability and Validity

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TAIS Test-Retest Reliability

Two week test-retest reliability coefficients on TAIS ranged from .60 to .93, with a median of .83. The median one year test-retest coefficient was .76.

Inter-rater reliability of TAIS was determined by asking trained raters to use TAIS profiles to categorize the likelihood that entering students at the Eastman School of Music would experience academic difficulties due to one or more of the following problems during their first academic year: 1) Depression; 2) Performance Anxiety; 3) Lack of self-discipline; 4) Difficulty concentrating; 5) Authority Conflicts. Inter rater reliabilites ranged from .73 to .93 with a median of .86. An analysis at the end of the academic year indicated ratings were highly reliable and accurate from a predictive standpoint.

Predictive Validity

Business- TAIS scores have been shown to predict a boss's rating of employee performance. Executives who are aware (BET), good strategic planners and problem solvers (BIT), assume leadership (CON), and are less introverted (INT), are "able to see when they are not making a point and capable of shifting gears," (taking a new approach and changing until they find one that works). Managers scoring high on BIT are rated as dealing effectively with complex situations. Executives with a narrow focus of concentration (NAR) and who have trouble making decisions (OBS) are seen as anxious and as having a tendency to jump arbitrarily from thought to thought.

An analysis of TAIS scores for comparing corporate officers with mangers within a large organization indicates officers are more strategic (BIT) less narrowly focused (NAR), have higher levels of self confidence (SES) are more in control of situations (CON), and perform better under pressure (PUP). Cross vocational comparisons of TAIS scores (e.g., comparing engineers to sales persons) are also consistent with expectations in that sales persons are more environmentally aware (BET), more extroverted and supportive (EXT, PAE), whereas engineers tend to be more focused (NAR), less capable of multi-tasking (INFP), less competitive (P/O), and more introverted (INT).

Education- At a university level, TAIS is predictive of which students will drop out of school, which will have authority conflicts, and which will become sufficiently depressed to have it interfere with performance. TAIS scores have also been found to be predictive of a student's ability to communicate effectively in a job interview. Finally, TAIS has been shown to predict which inter-collegiate swimmers will perform poorly under high pressure competitive situations (e.g., conference meets).

Military/Police- Within the military and police arenas, TAIS scores have predicted which individuals will successfully complete Basic Underwater Demolition training. TAIS has

predicted which individuals out of a highly elite group, will be chosen to compete for the US in an international military competition. TAIS scales also predict which applicants for police training will be selected by an interviewer.

Other evidence for the concurrent and predictive validity of the inventory comes from studies in the military showing differences between officers and enlisted personnel which are consistent with respective job responsibilities (e.g., officers are more strategic, enlisted personnel are more focused and single minded).

Sport- Studies of elite level performers in a broad range of sports show predictable differences in focus of attention (NAR), need for control (CON), interpersonal competitiveness (P/O), extroversion (EXT), and positive affect expression (PAE) based on whether or not athletes are competing in team sports (e.g., baseball, soccer), individual closed skill sports (e.g., shooting or diving), or individual open skill sports (e.g., tennis, boxing).

Concurrent Validity

Studies have been conducted examining the relationship between TAIS and other instruments. External distractibility (OET), internal overload (OIT), the tendency for attentional shifting to break down (RED), and difficulty making decisions (OBS) are all significantly correlated with measures of anxiety (Taylor Manifest Anxiety Scale; State Trait Anxiety Inventory). Comparisons between scores on the Wechsler Adult Intelligence Scale (WAIS) and TAIS indicate analytical skills (BIT), verbal expressiveness (IEX), and speed of decision making (OBS) are all positively correlated with intelligence.

Correlations between TAIS and the Maslach & Jackson Burn Out Inventory, and the Beck Depression Inventory indicate individuals showing signs of burn out and/or depression as measured by the respective inventories describe themselves as internally overloaded (OIT), impulsive (BCON), unable to effectively shift attention (RED), unable to make decisions (OBS), depressed (DEP) and lacking self confidence (SES) on TAIS.

TAIS scores have also been shown to correlate with marital satisfaction. On TAIS, males and females who are dissatisfied with their marriages describe themselves as distractible (OET), overloaded (OIT), impulsive (BCON), and angry (NAE).

Comparisons between TAIS and the Myers Briggs Type Indicator (MBTI) find the higher individuals score in the direction of Extroversion on MBTI, the higher they score on TAIS scales measuring extroversion (.591), and positive affect expression (.626), and the lower they score on introversion (.642). Intuitive individuals on the MBTI, describe themselves on TAIS as analytical (.521), intellectually expressive (.392), quick decision makers (.359), in control (.335), and introverted (.335). Finally, individuals scoring high on the thinking dimension of the MBTI, on TAIS describe themselves as aware (.455), analytical (.543), good information processors (.524), unlikely to have problems shifting attention (-.517), in control (.458), confident (.43), competitive (.458), intellectually

expressive (.343), and quick to make decisions (.397).

Sex and/or Race Differences at Upper Levels of Performance.

During adolescence, there are some significant differences between males and females on TAIS. Males tend to be more behaviorally impulsive (BCON), less expressive of positive affect (PAE), more expressive of negative affect (NAE), to have higher levels of self-confidence (SES), to be more competitive (P/O), and more analytical in their thinking (BIT). These differences seem to disappear with age and as the level at which the individuals are expected to perform increases.

A comparison of the TAIS scores of male and female managers in business, and male and female US athletes competing at a collegiate and/or at an international level revealed no significant differences due to sex. A similar analysis comparing the scores of Caucasian and African American applicants for police training, and comparing Caucasian and Asian managers scores in a US company indicated no significant differences due to race.