

Reinstatement Review Inventory

Reinstatement Review Inventory-II

An Inventory of Scientific Findings

Provided by:

Behavior Data Systems, Ltd.
P.O. Box 44256
Phoenix, Arizona 85064-4256

Telephone: (800) 231-2401
Fax: (602) 266-8227
E-mail: bdsltd.com

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Introduction

The development of the Reinstatement Review Inventory (RRI) began at the request of the Arizona Department of Transportation, Motor Vehicle Division, Driver Improvement Unit staff for an objective assessment instrument or test that would help in deciding whether or not an applicant's driver's license should be reinstated after it was suspended or revoked. There was a staff consensus that the existing procedure of record review, character reference letters and interview would benefit from inclusion of an objective, automated (computer scored) self-report assessment instrument or test.

A Risk & Needs Assessment, Inc. psychologist individually interviewed Driver Improvement Unit staff. Staff interviews resulted in identification of areas of inquiry, which would later become measures or scales. Then two doctorate level psychologists that were familiar with each scale's definition and purpose independently developed many (hundreds) potential scale items. Subsequently these psychologists sorted potential items into scale groups. Mutual agreement items were retained and subsequent item review results in the scales included in the Reinstatement Review Inventory (RRI). The plan was to administer the RRI to 500 applicants, statistically analyze obtained test data and reconstitute RRI scales with the items having the best statistical properties. Soon after test administration was begun, after 75 applicants were tested, the Driver Improvement Unit was reorganized and data gathering stopped. The results from this study will be presented in the Reinstatement Review Inventory Research section of this document.

Information on the Reinstatement Review Inventory is available in the Reinstatement Review Inventory Orientation and Training Manual. Computer scoring information is contained in the Reinstatement Review Computer Operating Guide. Each of these manuals can be obtained upon request.

The Reinstatement Review Inventory (RRI) is a brief, easily administered and automated (computer-scored) tests that is designed for screen an applicant who has had their driver's license suspended or revoked and is applying for reinstatement of their driver's license. This test explores the questions, "Has the applicant changed since their driver's license was suspended or revoked?" Very few, if any other tests, have been designed specifically for "driver's license reinstatement." The RRI contains 124 items that comprises 6 scales: Truthfulness Scale, Alcohol Scale, Drug Scale, Road Rage Scale, Intervention Checklist, and Comparative Changes.

The RRI-II replaced the Reinstatement Review Inventory's "Road Range Scale" with the "Stress Management Scale." The RRI-II contains 128 items and 6 scales: Truthfulness Scale, Alcohol Scale, Drug Scale, Intervention Checklist, Comparative Changes, and Stress Management Scale.

Unique Features

Truth Correction: A sophisticated psychometric technique permitted by computerized technology involves "truth-corrected" scores which are calculated individually for RRI scale. Since it would naïve to assume everybody responds truthfully while completing any self-report test, the Truthfulness Scale was developed. **The Truthfulness Scale establishes how honest a person is while completing the RRI.** Correlations between the Truthfulness Scale and all other scales permit identification of error variance associated with untruthfulness. This error

variance can then be added back into scale scores, resulting in more accurate “Truth-Corrected” scores. Unidentified denial or untruthfulness produces inaccurate and distorted results. Raw scores may only reflect what the client wants you to know. Truth-Corrected scores reveal what the client is trying to hide. Truth-Corrected scores are more accurate than raw scores.

Risk Range Percentile Scores: Each RRI scale is scored independently of the other scales. RRI scale scoring equations combine client pattern of responding to scale items, Truthfulness Scale and prior history that is contained on the RRI answer sheet. The Truthfulness Scale applies a truth-correction factor so that each scale score is referred to as a Truth-Corrected scale score. These Truth-Corrected scale scores are converted to the percentile scores that are reported in the client RRI report.

RRI scale percentile scores represent “degree of severity.” Degree of severity is defined as follows: **Low Risk** (zero to 39th percentile), **Moderate Risk** (40th to 69th percentile), **Problem Risk** (70th to 89th percentile), and **Severe Problem Risk** (90th to 100th percentile). Severe problems include dependency.

Standardization data is statistically analyzed where percentile scale scores are derived from obtained scale scores from offender populations. The cumulative distributions of truth-corrected scale scores determine the cut-off scores for each of the four risk range categories. Individual scale score calculations are automatically performed and results are presented in the RRI report numerically (percentile), by attained risk category (narrative) and graphically (RRI profile).

RRI Database: Every time on RRI is scored the test data is automatically stored on the for inclusion in the RRI database. This applies to RRI diskettes used anywhere in the United States and Canada. When the preset number to tests are administered (or used up) on an RRI diskette, the diskette is returned for replacement and the test data contained on these used diskettes is input, in a confidential (no names) manner, into the RRI database for later analysis. This database is statistically analyzed annually, at which time future RRI diskettes are adjusted to reflect demographic changes or trends that might have occurred. This unique and proprietary database also enables the formulation of annual summary reports that are descriptive of the populations tested. Summary reports provide important testing information, for budgeting, planning, management and program description.

Confidentiality (Delete Client Names): Many agencies and programs are rightfully concerned about protecting their client’s confidentiality. The proprietary Delete Client Names option is provided to allow deletion of client name from test diskettes prior to their being returned to Risk & Needs Assessment. This is optional and once the names have been deleted they are gone and cannot be retrieved. Deleting client names does not delete demographic information or test data. It only deletes the client names when the option is used. The option is available at any times and can be used whether the diskette is full or not. Once the client names are deleted there can be no further editing of the client names. This ensures client confidentiality.

DESCRIPTION OF EMPIRICALLY BASED MEASURE OR SCALES

RRI scales were developed from large item pools. Initial item selection was a rational process based upon clearly understood definitions of each scale. Subsequently, items and scales were analyzed for final test selection. The original pool of potential test items as analyzed and the items with the best statistical properties were retained. **Final test and item selection was based on each item's statistically properties.** It is important that users of the RRI familiarize with the definition of each scale. For that purpose, a description of each RRI scale follows.

Truthfulness Scale: This scale is a measure of the truthfulness of the client while completed the RRI. Obtained scores are categorized in terms of percentile and risk levels, i.e., Low Risk, Moderate Risk, Problem Risk, and Severe Problem Risk.

All interview and self-report information is subject to the dangers of untrue answers due to defensiveness, guardedness or deliberate falsification. The straightforward nature of any self-report questionnaire may appear to some people as intrusive – giving rise to denial, faking and even distortion. The Truthfulness Scale identifies these self-protective, recalcitrant and guarded people who minimize or even conceal information. It is equally important to establish that the client understood the test items he or she was responding to, and the Truthfulness Scale also helps identify the reading impaired.

The Truthfulness Scale goes beyond establishing the truthfulness of the client. The correlation between the Truthfulness Scale and each other scale has been established, error variance associated with untruthfulness has been identified, and this error variance measure is added back into “truth-corrected” scale scores. **Truth-corrected scale scores are more accurate than raw scores.** A high Truthfulness Scale score (at or above the 90th percentile) invalidates all scale scores.

Alcohol Scale: This empirically based scale is a measure of a person having alcohol related problems. Obtained scores are categorized in terms of percentile and risk levels (i.e., Low Risk, Moderate Risk, Problem Risk, and Severe Problem Risk). An elevated score at or above the 90th percentile identifies dependency and severe problems.

Alcoholism is a significant problem in our society. Woolfork and Richardson note in their book, “Stress, Sanity and Survival” that alcoholism costs industry over \$15.6 billion annually due to absenteeism and medical expenses. And over two decades later these costs have increased substantially. The harm associated with alcohol-related problems are staggering.

Alcoholism has been empirically related to arrest records, hospitalizations, illicit substance (drugs) abuse, emotional problems, driving records and stress. Experienced staff are aware of alcoholics' job performance problems, impaired interpersonal relationships and poor stress coping abilities.

It is apparent that most people have been exposed to alcohol in our society. Frequency and magnitude of alcohol use or severity of abuse are important factors. It is important to assess or measure the degree of severity of alcohol abuse, including dependency. This is done with the Alcohol Scale.

Drug Scale: This empirically based scale is a measure of a person having drug abuse related problems. Obtained scores are categorized in terms of percentiles and risk levels (i.e., Low Risk, Moderate Risk, Problem Risk, and Severe Problem Risk).

A drug may be broadly defined as any chemical substance that affects living processes. This definition includes alcohol as well as marijuana, cocaine, crack, ice, heroin, opium, amphetamines, barbiturates, LSD, etc. An important distinction between these substances is legality. The major licit (or legal) drugs are caffeine, nicotine, and alcohol. They are generally socially approved and legally marketed substances.

Increased public awareness of illicit (or illegal) substance use and abuse as well as its effects on peoples' lives is a growing concern. The burgeoning awareness of marijuana and cocaine abuse is but one example of this concern about illicit substance use and abuse. Since both licit and illicit substances, as discussed herein, are defined as "drugs," correlations between alcohol and drug abuse measures have been shown to exist. To discriminate between these groups in the RRI the licit versus illicit dichotomy is emphasized.

It is apparent that many people have been exposed to drugs in our society. Frequency and magnitude of drug use or abuse are important factors. It is important to assess or measure the degree of severity of drug abuse including dependency. This is done with the Drug Scale.

Intervention Checklist Scale: This scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance.

Comparative Change Scale: This scale is an efficient way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future.

Stress Management Scale: This empirically based scale is a measure of a person's experienced stress level in comparison to that person's ability to cope with stress. Obtained scores are categorized in terms of percentiles and risk levels (i.e., Low Risk, Moderate Risk, Problem Risk, and Severe Problem (Maximum) Risk).

Stress is an increasingly significant concept in our society. The National Institute for Occupational Safety and Health (NIOSH) recently evaluated the health records of 22,000 workers in 130 organizations. **Their conclusion: stress affects workers in all types of job levels; unskilled laborers are equally susceptible, as are top-line executives.**

How effectively individuals cope with stress determines whether or not stress is a significant factor in their lives. Two concepts, stress and coping abilities dominate the literature on stress. The Stress Coping Abilities Scale includes measures of both of these concepts in its Stress Quotient (SQ) equation. The better an individual's coping skills, compared to their amount of experienced stress, the higher the SQ score. In contrast, if an individual is experiencing more stress than he or she can cope with, the lower the SQ score. **In the RRI profile, Stress Quotient (SQ) scores were inverted to conform to the established risk levels ranging from low to high risk categories.**

Stress exacerbates other symptoms of emotional, attitudinal, interpersonal and substance abuse related problems. Frequency and magnitude of impaired stress coping abilities are important factors in understanding the substance abuser. **A Stress Management Scale score at or above the 90th percentile is typically indicative of a diagnosable mental health problem.** It is important to assess or measure the degree of severity of stress coping ability problems. This is done with the Stress Management Scale.

RRI items are personal. The straightforward nature of any self-report questionnaire may appear to some people as intrusive. Although perhaps discomfoting to some, such criticism is directly related to the RRI's strength in assessing substance abuse and related problems objectively. Information deemed personal by some is necessary in an empirical (as opposed to rational) approach to assessment. A similar type to criticism (intrusiveness) has been leveled at the MMPI in the past.

Reinstatement Review Inventory Research

Stress Quotient

The Stress Quotient (SQ) or Stress Coping Abilities Scale is based upon the following mathematical equation:

$$SQ = CS/S \times k$$

The Stress Quotient (SQ) scale is a numerical value representing a person's ability to handle or cope with stress relative to their amount of experienced stress. CS (Coping Skill) refers to person's ability to cope with stress. S (Stress) refers to experienced stress. *k* (Constant) represents a constant value in the SQ equation to establish SQ score ranges. The SQ includes measures of both stress and coping skills in the derivation of the Stress Quotient (SQ) score. The better an individual's coping skills, compared to the amount of experienced stress, the higher the SQ score.

The Stress Quotient (SQ) scale equation represents empirically verifiable relationships. The SQ scale (and its individual components) lends itself to research. Nine studies were conducted to investigate the validity and reliability of the Stress Quotient or Stress Coping Abilities Scale.

Validation Study 1: This study was conducted (1980) to compare SQ scores between High Stress and Low Stress groups. The High Stress group (N=10) was comprised of 5 males and 5 females. Their average age was 39. Subjects for the High Stress group were randomly selected from outpatients seeking treatment for stress. The Low Stress group (N = 10) was comprised of 5 males and 5 females (average age 38.7) randomly selected from persons not involved in treatment for stress. High Stress SQ group scores ranged from 32 to 97, with a mean of 64.2. Low Stress group SQ scores ranged from 82 to 156, with a mean of 115.7. The t-test statistical analysis of the difference between the means of the two groups indicated that the High Stress group had significantly higher SQ scores than the Low Stress group ($t = 4.9, p < .001$). This study shows that the SQ or Stress Coping Abilities Scale is a valid measure of stress coping. The Stress Coping Abilities Scale significantly discriminates between high stress individuals and low stress individuals.

Validation Study 2: This study (1980) evaluated the relationship between the SQ scale and two criterion measures: Taylor Manifest Anxiety Scale and Cornell Index. These two measures have been shown to be valid measures of anxiety and neuroticism, respectively. If the SQ or Stress Coping Abilities Scale is a valid measure. In the Taylor Manifest Anxiety Scale, high scores indicate a high level of anxiety. Similarly, in the Cornell Index high scores indicate neuroticism. Negative correlation coefficients between the two measures and the SQ were expected because the high SQ scores indicate good stress coping abilities. The three tests were administered to forty-three ($N = 43$) subjects selected from the general population. There were 21 males and 22 females ranging in age from 15 to 64. Utilizing a product-moment correlation, SQ scores correlated $-.70$ with the Taylor Manifest Anxiety Scale, and $-.75$ with the Cornell Index. Both correlations were significant, in the predicted direction, at the $p < .01$ level. These results support the finding that the Stress Coping Abilities Scale is a valid measure of stress coping abilities. The reliability of the SQ was investigated in ten subjects (5 male and 5 female) randomly chosen from this study. A split half correlation analysis was conducted on the SQ items. The product-moment correlation coefficient r was $.85$, significant at the $p < .01$ level. This correlation indicates that a SQ or Stress Coping Abilities Scale is a reliability measure. These results support the Stress Coping Abilities Scale as a reliability and valid measure.

Validation Study 3: In this study (1981) the relationship between the SQ Scale and the Holmes Rahe Social Readjustment Rating Scale (SRRS) was investigated. The SRRS, which is comprised of a self-rating of stressful life events, has been shown to be a valid measure of stress. Three correlation analyses were done. SRRS scores were correlated with SQ scores and separately with two components of the SQ scale: Coping Skill (CS) scores and Stress (S) scores. It was hypothesized that the SQ and SRRS correlation would be negative, since subjects with lower SQ scores would be more likely to either encounter less stressful like events or experience less stress in their lives. It was also predicted that subjects with a high CS would be less likely to encounter stressful life events, hence a negative correlation was hypothesized. A positive correlation was predicted between S and SRRS, since subjects experiencing more frequent stressful like events would reflect more experienced stress. The participants in this study consisted of 30 outpatient psychotherapy patients. There were 14 males and 16 females. The average age was 35. The SA and the SRRS were administered in counterbalanced order. The results showed there was a significant positive correlation (product-moment correlation coefficient) between SQ and SRRS ($r = .4006$, $p < .01$). The correlation results between CS and SRRS was not significant ($r = .1355$, n.s.). There was a significant positive correlation between S and SRRS ($r = .6183$, $p < .001$). The correlations were in predicted directions. The significant correlations between SQ and SRRS as well as S and SRRS support the construct validity of the SQ or Stress Coping Abilities Scale.

Validation Study 4: This validation study (1982) evaluated the relationship between factor C (Ego Strength) in the 16 PF Test as a criterion measure and the SQ in a sample of juveniles. High scores on factor C indicate high ego strength and emotional stability, whereas high SQ scores reflect good coping skills. A positive correlation was predicted because emotional stability and coping skills reflect similar attributes. The participants were 34 adjudicated delinquent adolescents. They ranged in age from 15 to 18 years with an average age of 16.2. There were 30 males and 4 females. The Cattell 16 PF Test and the SQ scale were administered in counterbalanced order. All subjects had a least a 6.0 grade equivalent reading level. The correlation (product-moment correlation coefficient) results indicated that Factor C scores were significantly correlated with SQ scores (r

= .695, $p < .01$). Results were significant correlated with SQ scores ($r = .695$, $p < .01$). Results were significant and in the predicted direction. These results support the SQ or Stress Coping Abilities Scale as a valid measure of stress coping abilities in juvenile offenders.

In a subsequent study the relationship between factor Q4 (Free Floating Anxiety) on the 16 PF Test and S (Stress) on the SQ scale was investigated. High Q4 scores reflect free floating anxiety and tension, whereas high S scores measure experienced stress. A high positive correlation between SQ and S was predicted. There were 22 of the original 34 subjects included in this analysis since the remainders of the original files were unavailable. All 22 subjects were male. The results indicated that Factor Q4 scores were significantly correlated (product-moment correlation coefficient) with S scores ($r = .584$, $p < .05$). Results were significant and in predicted directions. The significant correlation's between factor C and SQ scores as well as factor Q4 and S scores support the construct validity of the SQ scale.

Validation Study 5: Psychotherapy outpatient clients were used in the validation study (1982) that evaluated the relationship between selected Wiggin's MMPI (Minnesota Multiphasic Personality Inventory) supplementary content scales (ES & MAS) as criterion measures and the SQ scale. ES measures ego strength and MAS measures manifest anxiety. It was predicted that the ES and SC correlation would be positive, since people with high ego strength would be more likely to possess good coping skills. Similarly, it was predicted that MAS and S correlations would be positive, since people experiencing high levels of manifest anxiety would also likely experience high levels of stress. The subjects were 51 psychotherapy outpatients ranging in age from 22 to 56 years with an average age of 34. There were 23 males and 28 females. The MMPI and the SQ were administered in counterbalanced order. The correlation (product-moment correlation coefficient) results indicated that ES and CS were positively significant correlated ($r = .29$, $p < .001$). MAS and S comparisons resulted in an r of .54, significant at the $p < .001$ level. All results were significant and in predicted directions.

In a related study (1982) utilizing the same population data ($N = 51$) the relationship between the Psychasthenia (Pt) scale in the MMPI and the S component of the SQ scale was evaluated. The Pt scale in the MMPI reflects neurotic anxiety, whereas the S component of the SQ scale measures stress. Positive Pt and S correlations were predicted. The correlation (product-moment correlation coefficient) results indicated that the Pt scale and the S component of the SQ scale were significantly correlated ($r = .58$, $p < .001$). Results were significant and in the predicted direction. The significant correlation's between MMPI scales (ES, MAS, Pt) and the SQ scale components (CS, S) support the construct validity of the SQ or Stress Coping Abilities Scale.

Reliability Study 6: The reliability of the Stress Quotient (SQ) or Stress Coping Abilities Scale was investigated (1984) in a population of outpatient psychotherapy patients. There were 100 participants, 41 males and 59 females. The average age was 37. The SQ was administered soon after intake. The most common procedure for reporting inter-item (within test) reliability is with Coefficient Alpha. The reliability analysis indicated that the Coefficient Alpha of 0.81 was highly significant ($F = 46.74$, $p < .001$). Highly significant inter-item scale consistency was demonstrated.

Reliability Study 7: The reliability of the Stress Quotient (SQ) or Stress Coping Abilities Scale was investigated (1985) in a sample of 189 job applicants. There were 120 males and 69 females

with an average age of 31. The SQ was administered at the time of pre-employment screening. The reliability analysis indicated that the Coefficient Alpha of .73 was highly significant ($F = 195.86, p < .001$). Highly significant Cronbach Coefficient Alpha reveals that all SQ scale items are significantly ($p < .001$) related and measure one factor or trait.

Reliability Study 8: Chemical dependency inpatients were used in a validation study (1985) to determine the relation between MMPI scales as criterion measures and the Stress Quotient (SQ) Scale or Stress Coping Abilities Scale. The SQ is inversely related to other MMPI scales, consequently, negative correlations were predicted. The participants were 100 chemical dependency inpatients. There were 62 males and 38 females with an average age of 41. The SQ and the MMPI were administered in counterbalanced order. The reliability analysis results indicated that the Coefficient Alpha of 0.84 was highly significant ($F = 16.20, p < .001$). Highly significant inter-item scale consistency was demonstrated.

The correlation (product-moment correlation coefficient) results between the Stress Quotient (SQ) and selected MMPI scales were significant at the $p < .001$ level and in predicted directions. The SQ correlation results were as follows: Psychopathic Deviate (-0.59), Psychasthenia (-0.068), Social Maladjustment (-0.54), Authority Conflict (-0.46), Taylor Manifest Anxiety Scale (-0.78), Authority Problems (-0.22), and Social Alienation (-0.67). The most significant SQ correlation was with the Taylor Manifest Anxiety Scale. As discussed earlier, stress exacerbates symptoms of impaired adjustment as well as emotional and attitudinal problems. These results support the Stress Quotient or Stress Coping Abilities Scale as a valid measure of stress coping abilities.

Validity Study 9: In a replication of earlier research, a study (1986) was conducted to further evaluate the reliability and validity of the Stress Quotient (SQ). The participants were 212 inpatients in chemical dependency programs. There were 122 males and 90 females with an average age of 44. The SQ and Coefficient Alpha of 0.986 ($F = 27.77, p < .001$). Highly significant inter-item scale consistency was again demonstrated. Rounded off, **the Coefficient Alpha for the SQ was 0.99.**

In the same study (1986, inpatients), product-moment correlations were calculated between the Stress Quotient (SQ) and selected MMPI scales. The SQ correlated significantly (.001 level) with the following MMPI scales: Psychopathic Deviate (Pd), Psychasthenia (Pt), Anxiety (A), Manifest Anxiety (MAS), Ego Strength (ES), Social Responsibility (RE), Social Alienation (PD4A), Social Alienation (SC1A), Social Maladjustment (SOC), Authority Conflict (AUT), Manifest Hostility (HOS), Suspiciousness/ Mistrust (TSC-II), Resentment/Aggression (TSC-V) and Tension/Worry (TSC-VII). **All SQ correlations with selected MMPI scales were significant (at the .001 level of significant) and in predicted directions.** These results support the SQ scale or Stress Coping Abilities Scale as a valid measure of stress coping abilities.

The studies cited above demonstrate empirical relationships between the SQ scale (Stress Coping Abilities Scale) and other established measures of stress, anxiety and coping skills. This research demonstrated that the Stress Quotient (SQ) or Stress Coping Abilities Scale is a reliability and valid measure of stress coping abilities. The SQ has high inter-item scale reliability. The SQ also has high concurrent (criterion-related) validity with other recognized and accepted tests. The SQ scale permits objective (rather than subjective) analysis of the interaction of these important

variables. In the research that follows, the **Stress Quotient** or **SQ** is also referred to as the **Stress Coping Abilities Scale**.

RRI Development

The development of the Reinstatement Review Inventory (RRI) began at the request of the Arizona Department of Transportation, Motor Vehicle Division, Driver Improvement Unit staff, for an objective assessment instrument or test that would help in deciding whether or not an applicant's driver's license should be reinstated, after it was suspended or revoked. There was staff consensus that the existing procedure of record review, character reference letters, and interview would benefit from inclusion of an objective, automated, (computer scored) self-report assessment instrument or test.

A Risk & Needs Assessment, Inc. psychologist individually interviewed Driver Improvement Unit staff. Staff interviews resulted in identification of areas of inquiry that would later become measures or scales. Then, two doctorate level psychologists, who were familiar with each scales definition and purpose, independently developed many (hundreds) of the potential scale items. Subsequently, these psychologists sorted potential items into scale groups. Mutual agreement items were retained and subsequent, item review resulted in the scales included in the Reinstatement Review Inventory (RRI). The plan was to administer the RRI to 500 applicants, statistically analyze obtained test data, and reconstitute RRI scales, with the items having the best statistical properties. Soon after test administration was begun, (after 75 applicants were tested) the Driver Improvement Unit was reorganized, and data gathering stopped.

The original 75 applicants' RRI test data was gathered and subsequently analyzed. This sample consisted of 65 (86.7%) males and 10 (13.3%) females. Their age is summarized as follows: 21 to 25 (7); 26 to 30 (15); 31 to 35 (19); 36 to 40 (19); 41 to 45 (4); 46 to 50 (7); 51 to 55 (3); and over 55 (1). Ethnicity: Caucasian (55, 73.3%); Black (1, 1.3%); Hispanic (17, 22.7%); Native American (2, 2.7%). Education: 8th grade or less (4, 5.3%); Some High School (14, 18.7%); GED (3, 4.0%); High School Graduate (32, 42.7%); Some College (15, 20.0%); Technical School (1, 1.3%); College Graduate (3, 4.0%); Professional School (1, 1.3%); and Missing (2, 2.7%). Marital Status: Single (36; 48.0%); Married (18, 24.0%); Divorced (12, 16.0%); Separated (2, 2.7%); and Missing (7, 9.3%). Employment Status: Employed (64, 85.3%), Unemployed (9, 12.0%); and Missing (2, 2.7%).

Other, self-reported, court- related history is summarized as follows: Total number of arrests in last 10 years: One (3, 4.0%); two (27, 36.0%); three (19, 25.3%); four (12, 16.0%); five (6, 8.0%); six or more (6, 8.0%); Missing (2, 2.7%). Total number of DUI/DWI arrests in lifetime: None (1, 1.3%), One (3, 4.0%); two (39, 52.0%); three (18, 24.0%); four (6, 8.0%); five (4, 5.3%); and six or more (4, 5.3%). Number of DUI arrests in last 5 years: None (17, 22.7%), one (22, 29.3%); two (34, 45.3%); and three or more (2, 2.7%). Alcohol-related arrests in lifetime: None (2, 2.7%); one or two (34, 45.3%); three (16, 21.3%); four (8, 10.7%); five or more (15, 20%). Drug-related arrests in lifetime: None (55, 73.3%); one (11, 14.7%); two (5, 6.7%); four (1, 1.3%); five or more (2, 2.7%); and Missing (1, 1.3%). Number of moving violations (tickets) in last five years: None (17, 22.7%); one (10, 13.3%); two (19, 25.3%); three (6, 8.0%); four (13, 17.3%); five or more (6, 8.0%), and Missing (4, 5.3%). Attended traffic survival school in last 10 years: Yes

(55, 73.3%), No (20, 26.7%). Attended defensive driving school in last ten years: Yes (39, 52.0%), No (33, 44.0%); and Missing (3, 4.0%). Number of times on probation in lifetime: None (28, 37.3%); once (33, 44.0%); twice (8, 10.7%); three times (5, 6.7%); and Missing (1, 1.3%). Number of times on parole in lifetime: None (65, 86.7%); once (7, 9.3%); twice (1, 1.3%); and Missing (2, 2.7%). Number of times driver's license suspended in lifetime: None (2, 2.7%); once (18, 24.0%); twice (26, 34.7%); three times (11, 14.7%); four times (3, 4.0%); five times (7, 9.3%); six or more times (3, 4.0%); and Missing (5, 6.7%). Number of times driver's license revoked in lifetime: None (1, 1.3%); once (50, 66.7%); twice (14, 18.7%); three times (4, 5.3%); four times (2, 2.7%); five or more times (4, 5.3%); and Missing (1, 1.3%). Total number of misdemeanor convictions in lifetime: None (8, 10.7%); one (7, 9.3%); two (24, 32.0%); three (8, 10.7%); four (6, 8.0%); five or more (15, 20%); and Missing (7, 9.3%). Total number of felonies in lifetime: None (45, 60.0%); one (13, 17.3%); two (10, 13.3%); three (1, 1.3%); four (1, 1.3%); five (1, 1.3%); and Missing (4, 5.3%). Missing refers to information that was not included (missing) on the applicant's RRI answer sheet. Internal consistency Chronbach's Alpha coefficients for this sample are presented in Table A.

**Table A. Reinstatement Review Inventory (N = 75)
Applicants for Reinstatement of their Driver's License**

<u>RRI Scale</u>	<u>Chronbach's Alpha</u>	<u>Significance Level</u>
Truthfulness Scale	.92	p<.001
Alcohol Scale	.90	p<.001
Drug Scale	.85	p<.001
Comparative Change	.86	p<.001
Attitude Scale	.59	n.s.
Intervention Checklist	.89	p<.001

This sample represents the first opportunity to review the Reinstatement Review Inventory's (RRI) statistical properties. All scales, except the Attitude Scale, demonstrated very, impressive internal consistency (reliability). Eight Attitude Scale items were replaced and five were reworded. These changes in the Attitude Scale were to improve its Chronbach's Alpha coefficient. This improved RRI will be used in subsequent RRI studies.

A Reinstatement Review Inventory (RRI) field test (1998) involved 90 RRIs, being administered to applicants applying for reinstatement of a revoked or suspended driver's license. This sample included 73 (81.1%) males and 17 (18.9%) females. Age is summarized as follows: 20 to 29 (15, 16.7%); 30 to 39 (32, 35.6%); 40 to 49 (32, 35.6%); 50 to 59 (5, 5.6%); and 60+ (6, 6.7%). Ethnicity: Caucasian (81, 90%); Black (6, 6.7%); and Hispanic (3, 3.3%). Education: 8th Grade or less (5, 5.6%); Some High School (18, 20%); GED (3, 3.3%); High School Graduate (38, 42.2%); Some College (16, 17.8%); Technical/Business School (1, 1.1%); College Graduate (5, 5.6%); and Missing (4, 4.4%). Marital Status: Single (30, 33.3%); Married (38, 42.2%); Divorced (17, 18.9%); Separated (2, 2.2%); and Widowed (3, 3.3%). Employment: Employed (75, 83.3%); Unemployed (14, 15.6%); and Missing (1, 1.1%). DUI convictions: One (4, 4.4%); two (42, 46.7%); three (12, 13.3%); four (7, 7.8%); five (1, 1.1%); 6+ (3, 3.3%); and Missing (21, 23.3%). Driver's License Suspended: Zero (7, 7.8%); once (16, 17.8%); twice (22, 24.4%); three times (10, 11.1%); four times (4, 4.4%); five times (1, 1.1%); six times (1, 1.1%); and Missing (29, 32.2%).

Driver's License Revoked: Once (16, 17.8%); twice (33, 36.7%); three times (11, 12.2%); four times (4, 4.4%); five times (1, 1.1%); six times (3, 3.3%); and Missing (22, 24.4%). Missing refers to information that was not included (missing) on an applicant's RRI answer sheet. Internal consistency Chronbach's Alpha coefficients for this sample are presented in Table B.

**Table B. Reinstatement Review Inventory (N = 90)
Applicants for Reinstatement of their Driver's License**

RRI Scale	Chronbach's Alpha	Significance Level
Truthfulness Scale	.87	p<.001
Alcohol Scale	.90	p<.001
Drug Scale	.88	p<.001
Comparative Change	.94	p<.001
Attitude Scale	.70	n.s.
Intervention Checklist	.92	p<.001

This RRI field test (1998) was the second opportunity to evaluate statistical properties of the RRI. RRI scales (the only exception being the Attitude Scale) have very, impressive reliability coefficients. With the exception of the Attitude Scale, **all RRI scales have impressive internal consistency (reliability)**. Chronbach's alpha coefficients are presented in parentheses, after each scale, as follows: Truthfulness Scale (.87, p<.001), Alcohol Scale (.90, p<.001), Drug Scale (.88, p<.001), Change Scale (.94, p<.001), and RRI Checklist (.92, p<.001).

The Attitude Scale was originally thought of as a cooperation or resistance measure, to assess an individual's attitude or willingness to participate in court requirements for driver's license reinstatement. After the preliminary results, it was questioned whether or not the Attitude Scale was appropriate in this court-ordered setting. Why would anyone want to jeopardize their chances of getting their driver's license back? Review of the percentages of responses to the Attitude Scale items revealed that a very low percentage of participants gave deviant answers. It was felt that this was the reason the scale had such poor, statistical reliability properties. Nevertheless, scale items were modified and changed, in the hope of improving the scale, statistically. However, the second study also showed the Attitude Scale had low reliability statistics.

The Attitude Scale, simply, did not work out. Rather than carry forward a weak scale, it was decided to replace the Attitude Scale. Selection of a replacement scale had to meet two conditions: **1.** The scale must add relevant information to the RRI protocol, and **2.** The scale must have acceptable, (.85 or better Cronbach's Alpha) statistical properties. Based on these criteria, the Aggressivity or Aggressiveness Scale was selected. Consequently, Attitude Scale items were replaced with Aggressiveness Scale items. The Aggressivity or Aggressiveness Scale has been studied in a variety of tests, including the Substance Abuse Questionnaire, SAQ-Adult Probation, SAQ-Adult Probation II, and the Domestic Violence Inventory. The Aggressivity Scale's Cronbach Alpha varies between .85, to .91, in these studies. With this scale substitution, the Reinstatement Review Inventory (RRI) continues to have six measures (scales), and these scales include: **1. Truthfulness Scale, 2. Alcohol Scale, 3. Drug Scale, 4. Comparative Change Scale,**

5. Aggressiveness Scale, and 6. The Intervention Checklist. The RRI report remains, essentially, the same, with the Aggressiveness Scale replacing the Attitude Scale.

Reinstatement Review Inventory Research

10. A Study of the Reliability of Reinstatement Review Inventory Scales

This study (1997) analyses the Reliability of Reinstatement Review Inventory Scales. Scale reliability coefficients demonstrate the extent to which offenders follow a definite pattern of responding as opposed to random answering. If offender One is more at-risk than offender Two, he will consistently answer more scale items deviantly than offender Two. Perfect reliability has a coefficient of 1.0 and the professional standard for test reliability is 0.75.

Methods and Results

The original 75 applicants Reinstatement Review Inventory test data was gathered and subsequently analyzed. This sample consisted of 65 (86.7%) males and 10 (13.3%) females. Their age is summarized as follows: 21 to 25 (N = 7, 9.3%); 26 to 30 (N = 15, 20.0%); 31 to 35 (N = 19, 25.3%); 36 to 40 (N = 19, 25.3%); 41 to 45 (N = 4, 5.3%); 46 to 50 (N = 7, 9.3%); 51 to 55 (N = 3, 4.0%); and over 55 (N = 1, 1.3%). Ethnicity: Caucasian (N = 55, 73.3%); African American (N = 1, 1.3%); Hispanic (N = 17, 22.7%); and Native American (N = 2, 2.7%). Education: 8th grade or less (N = 4, 5.3%); Some High School (N = 14, 18.7%); GED (N = 3, 4.0%); High School Graduate (N = 32, 42.7%); Some College (N = 15, 20.0%); Technical School (N = 1, 1.3%); and Missing (N = 2, 2.7%). Marital Status: Single (N = 36, 48.0%); Married (N = 18, 24.0%); Divorced (N = 12, 16.0%); Separated (N = 2, 2.7%); and Missing (N = 7, 9.3%). Employment Status: Employed (N = 64, 85.3%), Unemployed (N = 9, 12.0%) and Missing (N = 2, 2.7%).

Other self-reported court related history is summarized as follows: Total number of arrest in last 10 years: One (N = 3, 4.0%); two (N = 27, 36.0%); three (N = 19, 25.3%); four (N = 12, 16.0%); five (N = 6, 8.0%); six or more (N = 6, 8.0%); and Missing (N = 2, 2.7%). Total number of DUI/DWI arrests in lifetime: None (N = 1, 1.3%); One (N = 3, 4.0%); two (N = 39, 52.0%); three (N = 18, 24.0%); four (N = 6, 8.0%); five (N = 4, 5.3%); six or more (N = 4, 5.3%). Number of DUI arrests in last 5 years: None (N = 17, 22.7%); one (N = 22, 29.3%); two (N = 34, 45.3%); and three or more (N = 2, 2.7%). Alcohol-related arrests in lifetime: None (N = 2, 2.7%); one or two (N = 34, 45.3%); three (N = 16, 21.3%); four (N = 8, 10.7%); and five or more (N = 15, 20%). Drug-related arrests in lifetime: None (N = 55, 73.3%); one (N = 11, 14.7%); two (N = 5, 6.7%); four (N = 1, 1.3%); five or more (N = 2, 2.7%); and Missing (N = 1, 1.3%). Number of moving violations (tickets) in last five years: None (N = 17, 22.7%); one (N = 16, 13.3%); two (N = 19, 25.3%); three (N = 6, 8.0%); four (N = 13, 17.3%); five or more (N = 6, 8.0%); and Missing (N = 4, 5.3%). Attended traffic survival school in last 10 years: Yes (N = 55, 73.3%), No (N = 20, 26.7%). Attended defensive driving school in last ten years: Yes (N = 39, 52.0%), No (N = 33, 44.0%), and Missing (N = 3, 4.0%). Number of times on probation in lifetime: None (N = 28, 37.3%); once (N = 33, 44.0%); twice (N = 8, 10.7%); three times (N = 5, 6.7%); and Missing (N = 1, 1.3%). Number of times on parole in lifetime: None (N = 65, 86.7%); once (N = 7, 9.3%);

twice (N = 1, 1.3%); and Missing (N = 2, 2.7%). Number of times driver's license suspended in lifetime: None (N = 2, 2.7%); once (N = 18, 24.0%); twice (N = 26, 34.7%); three times (N = 11, 14.7%); four times (N = 3, 4.0%); five times (N = 7, 9.3%); six or more times (N = 3, 4.0%); and Missing (N = 5, 6.7%). Number of times driver's license revoked in lifetime: None (N = 1, 1.3%); once (N = 50, 66.7%); twice (N = 14, 18.7%); three times (N = 4, 5.3%); four times (N = 2, 2.7%); five or more times (N = 4, 5.3%); and Missing (N = 1, 1.3%). Total number of misdemeanor convictions in lifetime: None (N = 8, 10.7%); one (N = 7, 9.3%); two (N = 24, 32.0%); three (N = 8, 10.7%); four (N = 6, 8.0%); five or more (N = 15, 20%); and Missing (N = 7, 9.3%). Total number of felonies in lifetime: None (N = 45, 60.0%), one (N = 13, 17.3%); two (N = 10, 13.3%); three (N = 1, 1.3%); four (N = 1, 1.3%); five (N = 1, 1.3%); and Missing (N = 4, 5.3%). Missing refers to information that was not included (missing) on the applicant's Reinstatement Review Inventory answer sheet. Internal consistency Cronbach's Alpha coefficients for this sample are presented in Table 1.

**Table 1. Reinstatement Review Inventory (N = 75)
Applicants for Reinstatement of their Driver's License**

RRI Scale	Cronbach Alpha	Significance Level
Truthfulness Scale	.92	p < .001
Alcohol Scale	.90	p < .001
Drug Scale	.85	p < .001
Comparative Change	.86	p < .001
Attitude Scale	.59	n.s.
Intervention Checklist	.89	p < .001

This sample represents the first opportunity to review the Reinstatement Review Inventory (RRI) statistical properties. All scales, except the Attitude Scale, demonstrated very impressive internal consistency (reliability). Eight Attitude Scale items were replaced and five were reworded. These changes in the Attitude Scale were to improve its Cronbach Alpha coefficient. This improved Reinstatement Review Inventory will be used in subsequent studies.

11. Field Test of Reinstatement Review Inventory

A Reinstatement Review Inventory (RRI) field test (1998) involved ninety Reinstatement Review Inventories being administered to applicants applying for reinstatement of their revoked or suspended driver's licenses. This sample included 73 (81.1%) males and 17 (18.9%) females. Age is summarized as follows: 20 to 29 (N = 15, 16.7%); 30 to 39 (N = 32, 35.6%); 40 to 49 (N = 32, 35.6%); 50 to 59 (N = 5, 5.6%); and 60 and over (N = 6, 6.7%). Ethnicity: Caucasian (N = 81, 90%); African American (N = 6, 6.7%); and Hispanic (N = 3, 3.3%). Education: 8th Grade or less (N = 5, 5.6%); Some High School (N = 18, 20%); GED (N = 3, 3.3%); High School Graduate (N = 38, 42.2%); Some College (N = 16, 17.8%); Technical/Business School (N = 1, 1.1%); College Graduate (N = 5, 5.6%); and Missing (N = 4, 4.4%). Marital Status: Single (N = 30, 33.3%); Married (N = 38, 42.2%); Divorced (N = 17, 18.9%); Separated (N = 2, 2.2%); and Widowed (N = 3, 3.3%). Employment: Employed (N = 75, 83.3%); Unemployed (N = 14, 15.6%); and Missing (N = 1, 1.1%). DUI convictions: One (N = 4, 4.4%); two (N = 42, 46.7%); three (N = 12, 13.3%); four (N = 7, 7.8%); five (N = 1, 1.1%); six or more (N = 3, 3.3%); Missing (N = 21, 23.3%).

Driver's License Suspended: Zero (N = 7, 7.8%); once (N = 16, 17.8%); twice (N = 22, 24.4%); three times (N = 10, 11.1%); four times (N = 4, 4.4%); five times (N = 1, 1.1%); six times (N = 1, 1.1%); and Missing (N = 29, 32.2%). Driver's License Revoked: Once (N = 16, 17.8%); twice (N = 33, 36.7%); three times (N = 11, 12.2%); four times (N = 4, 4.4%); five times (N = 1, 1.1%); six times (N = 3, 3.3%); and Missing (N = 22, 24.4%). Missing refers to information that was not included (missing) on an applicant's Reinstatement Review Inventory answer sheet. Internal consistency Cronbach Alpha coefficients for this sample are presented in Table 2.

**Table 2. Reinstatement Review Inventory (N = 90)
Applicants for Reinstatement of their Driver's License**

RRI	Cronbach	Significance
Scale	Alpha	Level
Truthfulness Scale	.87	p < .001
Alcohol Scale	.90	p < .001
Drug Scale	.88	p < .001
Comparative Change	.94	p < .001
Attitude Scale	.70	n.s.
Intervention Checklist	.92	p < .001

This Reinstatement Review Inventory field test (1998) was the second opportunity to evaluate statistical properties of the Reinstatement Review Inventory. With the exception of the Attitude Scale, **all Reinstatement Review Inventory scales have impressive internal consistency (reliability)**. Cronbach alpha coefficients are presented in parentheses after each scale. Truthfulness Scale (**0.87, p < .001**), Alcohol Scale (**0.90, p < .001**), Drug Scale (**0.88, p < 0.001**), Change Scale (**0.94, p < .001**), and RRI Checklist (**0.92, p < .001**). Other than the Attitude Scale, all other RRI scales had very impressive reliability.

The Attitude Scale was originally thought of as a cooperation or resistance measure to assess an individual's attitude or willingness to participate in court requirements for driver's license reinstatement. After the preliminary results, it was questioned whether or not the Attitude Scale was appropriate in this court-ordered setting. Why would anyone want to jeopardize their chances of getting their driver's license back? Review of the percentages of responses to the Attitude Scale items revealed that a very low percentage of participants gave deviant answers. It was felt that this was the reason the scale had such poor statistical reliability properties. Nevertheless, scale items were modified and changed in the hope of improving the scale statistically. However, the second study also showed the Attitude Scale had low reliability statistics.

The Attitude Scale simply did not work out. Rather than carry forward a weak scale, it was decided to replace the Attitude Scale. Selection of a replacement scale had to meet two conditions: **1.** The scale must add relevant information to the Reinstatement Review Inventory protocol, and **2.** The scale must have acceptable (0.85 or better Cronbach Alpha) statistical properties. Based on these criteria the Aggressivity or Aggressiveness Scale was selected. **Consequently, Attitude Scale items were replaced with Aggressiveness Scale items.** The Aggressivity or Aggressiveness Scale has been studied in a variety of tests, including the Substance Abuse Questionnaire, SAQ-Adult Probation, SAQ-Adult Probation II and the Domestic Violence Inventory. The Aggressivity Scale's Cronbach Alpha varies between 0.85 and 0.91 in these studies.

With this scale substitution the Reinstatement Review Inventory (RRI) continues to have six measures (scales), and these scales include: **1. Truthfulness Scale, 2. Alcohol Scale, 3. Drug Scale, 4. Comparative Change Scale, 5. Aggressiveness Scale, and 6. The Intervention Checklist.** The Reinstatement Review Inventory report remains essentially the same with the Aggressiveness Scale replacing the Attitude Scale.

Future Reinstatement Review Inventory research will use the improved Reinstatement Review Inventory with the Aggressiveness Scale. Validation research on several Reinstatement Review Inventory scales have been completed and reported in the DRI: An Inventory of Scientific Findings. This 100-page document contains test data from over one million DUI/DWI offenders. This includes the Truthfulness Scale, Alcohol Scale, and Drugs Scale. The Aggressiveness Scale has been studied in several studies involving other tests, e.g., Domestic Violence Inventory (DVI) and this research is reported in the DVI: An Inventory of Scientific Findings. Over 50,000 offenders test data are included in this document. Additional research will involve the improved Reinstatement Review Inventory which has the Aggressiveness Scale.

12. Validation Study of the Reinstatement Review Inventory (RRI)

The validity of the Reinstatement Review Inventory (RRI) was investigated in a sample of 757 applicants in this study (2002). Many drivers have their driver's license suspended or revoked for driving-related offenses, not just DUI/DWI offenses. In recent years there has been an increase in the number of instances of driver aggressiveness and even road rage. The Reinstatement Review Inventory has six scales for measuring applicant risk of substance (alcohol and drugs) abuse, aggressive driver problems, applicant attitudinal and behavioral change, as well as applicants meeting requirements for reinstatement of their driver's license.

The desire to shorten the original Reinstatement Review Inventory test and include the Road Rage Scale resulted in the revised Reinstatement Review Inventory. Reinstatement Review Inventory scales measure alcohol and drug abuse severity (Alcohol & Drugs Scale), aggressive driver problems (Road Rage Scale), attitude and behavioral change (Comparative Change Scale) and compliance to requirements for driver's reinstatement (Intervention Checklist). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

The participants were applicants who were assessed for reinstatement of their driver's license after it was suspended or revoked. The data for this study was obtained from agencies that used the Reinstatement Review Inventory. Two validation methods were used in this study. The first method (discriminant validity) compared scale scores between two participant groups. Group 1 consisted of applicants who had one or no DUI/DWI arrest. Group 2 consisted of applicants who had two or more DUI/DWI arrests. It was hypothesized that multiple offenders (Group 2) would score significantly higher than participants who had 0 or 1 arrest (Group 1). Multiple offenders would be expected to score higher because having a second arrest is indicative of a more serious problem.

The second validation method (predictive validity) examined the accuracy at which the Reinstatement Review Inventory identified problem drinkers, drug abusers and seriously

aggressive drivers. In the Reinstatement Review Inventory, alcohol, drug and aggressive driver (road rage) problem information is obtained from the participants' responses to test items. Participants who admitted to drinking, drug or road rage problems would be expected to score in the corresponding scale's problem range. For criteria the following test items were used, "I have a drinking problem." "I have a drug problem." "I have threatened or physically hurt another driver."

For predictive validity analyses, applicants were separated into two groups, those who admitted to a problem and those who did not admit to a problem. Then, applicant scores on the relevant Reinstatement Review Inventory scales were compared. It was predicted that applicants with an alcohol, drug or road rage problem would score in the problem risk range (70th percentile and above) on the Alcohol, Drugs or Road Rage Scales. Non-problem was defined in terms of low risk scores (39th percentile and below). The percentage of applicants who admitted to a problem and also scored in the 70th percentile range and above was a correct identification of problems. High percentages of applicants with problems and elevated problem risk scores would indicate the scales are valid.

Method

The participants in this study were 757 applicants for reinstatement of their drivers' licenses. Both court service providers and professional community service agencies provided data for this study. Test data was collected during the year 2002. There were 676 (89.3%) males and 81 (10.7%) females. The ages of most of the participants ranged from 20 through 50 as follows: 20 to 29 (8.9%); 30 to 39 (46.6%); 40 to 49 (31.2%); 50 to 59 (8.9%); and 60 & over (4.5%). Demographic composition of the participants was the following. Race/ethnicity: Caucasian (66.2%), African American (30.6%); Hispanic (1.9%); and other (1.4%). Education: 8th grade or less (3.4%); Some high school (19.6%); high school graduate (47.9%); some college (16.5%); college graduate (6.9%); and missing (5.8%). Marital Status: Single (45.2%); Married (31.3%); Divorced (17.0%); Separated (4.2%); and Widowed (2.3%).

The applicants' court histories were obtained from their Reinstatement Review Inventory answer sheets. Participants reported this information and staff verified the information provided. One percent of the applicants had no DUI/DWI arrest, 14.2% had one arrest, 27.7% had two arrests, 40.5% had three arrests and 16.7% had four or more DUI/DWI arrests. The applicants who had one or no arrests were designated as Group1. Participants who had two or more arrests (multiple offenders) were designated Group2. There were 120 (15.1%) participants in Group 1 and 637 (84.9%) participants in Group 2.

Seventy-five percent of the participants had one or more alcohol arrest and 28.9 percent had one or more drug arrest. Twenty percent of the participants had their driver's license suspended one or more times and 12.2% had two or more suspensions. Eighteen percent of the participants had their driver's license revoked one or more times and 1.4% had two or more revocations

Results and Discussion

The inter-item reliability coefficients (alpha) for the six Reinstatement Review Inventory scales are presented in Table 3. All scales were highly reliable. Reliability coefficient alphas for all

Reinstatement Review Inventory scales were at or above 0.85. These results demonstrate that the RRI is a reliable test for applicants applying for their driver’s license reinstatement. All coefficient alphas exceed the professionally accepted standard of 0.75 and all are significant at the $p < .001$ level.

Table 3. Reliability of the Reinstatement Review Inventory

RRI Scale	Coefficient Alpha	Significance Level
Truthfulness Scale	.89	$p < .001$
Alcohol Scale	.91	$p < .001$
Drugs Scale	.91	$p < .001$
Road Rage Scale	.85	$p < .001$
Intervention Checklist	.90	$p < .001$
Comparative Change	.95	$p < .001$

Discriminant validity results are presented in Table 4. Group 1 (one or no DUI/DWI arrest) consisted of 120 applicants and Group 2 (multiple offenders) consisted of 637 applicants. In the comparisons of Reinstatement Review Inventory scale scores, Group 2 applicants scored significantly higher than Group 1 applicants on the Alcohol Scale and Drugs Scale. Higher scores on these Reinstatement Review Inventory scales are associated with more severe problems. The Truthfulness Scale showed that Group 1 scored significantly higher than Group 2. This means that Group 1 applicants minimized their problems more than did applicants in Group 2. The Road Rage Scale scores showed that there was no significant difference between the two groups. This may be due to the large number of DUI/DWI offenders in this sample. The Intervention Checklist and Comparative Change Scales were not included in this analysis because these scales are not measurement scales.

Table 4. Comparisons between Group 1 (1 or no DUI/DWI arrest) and Group 2 (2 or more DUI/DWI arrests).

RRI Scale	Group 1			Group 2			T-value
	Mean	SD	Max	Mean	SD	Max	
Truthfulness Scale	11.23	5.45	21	9.84	5.41	21	$t = 2.57^*$
Alcohol Scale	9.27	11.48	44	18.63	12.61	45	$t = 8.07^{**}$
Drugs Scale ^	5.09	8.77	44	14.16	13.12	44	$t = 6.13^{**}$
Road Rage	4.25	5.01	24	4.39	5.81	40	$t = 0.25$

^ Offender status defined by drug arrests. Significance levels: * $p < .01$, ** $p < .001$.

The Truthfulness Scale showed that Group 1 scored significantly higher than Group 2. Truthfulness Scale results indicate that both groups tended to minimize their problems but that first offenders did so more often than multiple offenders. The results of the Road Rage Scale indicate that applicants did not differ in their severity of road rage problems. This result may only be due to the composition of the applicant sample, which were mostly DUI/DWI offenders.

As expected, multiple offenders scored significantly higher on the Alcohol Scale and Drugs Scale than did applicants with one or no DUI/DWI arrest. The Alcohol and Drugs Scales results support the discriminant validity of the Reinstatement Review Inventory Alcohol and Drugs Scales. The applicants who were believed to have more severe problems (multiple offenders) scored significantly higher on these scales than Applicants with one or no arrest.

Predictive validity results for the correct identification of problems (aggressive driver, drinking and drug abuse) are presented in Table 5. Table 5 shows the percentage of applicants who admitted to having problems. They also scored in the problem risk range on the Road Rage, Alcohol and Drugs scales. “Problem behavior” meant the applicant admitted to having a road rage, drinking or drug problem. Other Reinstatement Review Inventory scales are not included in this analysis because of a lack of criterion items.

For the Alcohol Scale comparisons between problem risk and low risk participants, there were 200 applicants who admitted to drinking problems. These applicants were considered problem drinkers. Indeed, 199 of these 200 participants, or 99.5 percent, had Alcohol Scale scores at or above the 70th percentile. The Alcohol Scale correctly identified nearly all (99.5%) of the applicants classified as problem drinkers. These results support the validity of the Alcohol Scale.

Table 5. Predictive Validity of the Reinstatement Review Inventory

<u>RRI Scale</u>	<u>Correct Identification of Problem Behavior</u>
Alcohol	99.5%
Drugs	100%
Road Rage	100%

The Drugs Scale accurately identified applicants having drug problems. There were 127 applicants who admitted to drug problems. All 127 of these applicants, or 100 percent, had Drugs Scale scores at or above the 70th percentile. This result supports the validity of the Drug Scale. The Road Rage Scale correctly identified all of the applicants who admitted having road rage problems. There were 42 applicants who admitted threatening or hurting another driver. All 42 applicants scored in the problem range on the Road Rage Scale. This result supports the validity of the Road Rage Scale.

For ease in interpreting applicant risk, Reinstatement Review Inventory scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of applicants scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify applicants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified 95 percent or more of problem

applicants. The low risk level of 39 percent avoids putting a large percentage of applicants into a “moderate” range.

Risk range percentile scores were derived by adding points for test items and court history and then converting them to percentages. These results are presented in Table 6. Risk range percentile scores represent “degree of severity.” Analysis of the Reinstatement Review Inventory risk range percentile scores involved comparing the applicant’s obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 6. The actual percentage of applicants scoring in each of the four risk ranges was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

Table 6. Accuracy of Reinstatement Review Inventory Risk Range Percentile Scores

Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness Scale	41.1	(2.1)	29.4	(0.6)	19.5	(0.5)	10.0	(1.0)
Alcohol Scale	38.4	(0.6)	31.0	(1.0)	19.8	(0.2)	10.8	(0.2)
Drugs Scale	38.0	(1.0)	31.2	(1.2)	20.8	(0.8)	10.0	(1.0)
Road Rage Scale	40.7	(1.7)	28.8	(1.2)	20.1	(0.1)	10.4	(0.6)
Intervention Checklist	40.2	(1.2)	29.1	(0.9)	19.5	(0.5)	11.2	(0.2)
Comparative Change	39.8	(0.8)	29.8	(0.2)	19.4	(0.6)	11.0	(0.0)

As shown in Table 6, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages for each risk category. All of the obtained risk range percentages were within 2.1 percentage points of the expected percentages and many (19 of 24 possible) were within one percentage point. Only one obtained percentage was two percent or more from the expected percentages and that was the Truthfulness Scale low risk (2.1%). These results demonstrate that risk range percentile scores are very accurate.

Conclusion

This study demonstrated that the Reinstatement Review Inventory is a reliable and valid assessment instrument or test for applicants trying to get their driver’s license reinstated. Reliability results showed that all six Reinstatement Review Inventory scales are highly reliable. Reliability is necessary for accurate measurement of applicant risk. This study supports the reliability, validity and accuracy of the Reinstatement Review Inventory.

Discriminant validity analyses demonstrated that multiple offenders (had two or more DUI/DWI arrests) scored significantly higher than participants with one or no arrests. Predictive validity analyses demonstrated that the Reinstatement Review Inventory identified applicants having substance abuse and road rage problems. The Alcohol, Drugs, and Road Rage Scales correctly identified applicants who admitted drinking, drug or road rage problems. Furthermore, obtained risk range percentages on all Reinstatement Review Inventory scales very closely approximated

predicted percentages. These results further support the validity of the Reinstatement Review Inventory.

The Reinstatement Review Inventory provides objective assessment for applicant risk of substance (alcohol and other drugs) abuse, aggressive driver problems and readiness for reinstatement of their driver's license. The Intervention Checklist Scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance. The Comparative Change Scale is an efficient way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future. The Reinstatement Review Inventory provides a wealth of information toward answering these questions.

13. A Validation Study of the Reinstatement Review Inventory–II

The validity of the Reinstatement Review Inventory–II (RRI-II) was investigated in a sample of 249 applicants for this study (2002). The desire to shorten the original Reinstatement Review Inventory test and include the Stress Coping Abilities Scale resulted in the revised Reinstatement Review Inventory or Reinstatement Review Inventory-II. Reinstatement Review Inventory-II scales measure alcohol and drug abuse severity (Alcohol & Drugs Scales), emotional or mental health problems (Stress Coping Abilities Scale), attitude and behavioral change (Comparative Change Scale) and compliance to requirements for driver's license reinstatement (Intervention Checklist). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

The participants were applicants who were assessed for reinstatement of their driver's license after it was suspended or revoked. The data for this study was obtained from agencies that used the Reinstatement Review Inventory-II. Two validation methods were used in this study. The first method (discriminant validity) compared scale scores between two participant groups. Group 1 consisted of applicants who had one or no DUI/DWI arrest. Group 2 consisted of applicants who had two or more DUI/DWI arrests. It was hypothesized that multiple offenders (Group 2) would score significantly higher than participants who had 0 or 1 arrest (Group 1). Multiple offenders would be expected to score higher because having a second arrest is indicative of a serious problem.

The second validation method (predictive validity) examined the accuracy at which the Reinstatement Review Inventory-II identified problem drinkers and problem drug abusers. In the Reinstatement Review Inventory-II, alcohol and drug problem information is obtained from the participants' responses to test items. Participants who admitted to drinking or drug problems would be expected to score in the corresponding scale's problem range. For criteria the following test items were used, "I have a drinking problem." "I have a drug problem."

Method

There were 249 applicants tested with the Reinstatement Review Inventory-II. Data for this study was provided by both court service providers and professional community service agencies

that use the Reinstatement Review Inventory-II. Test data was collected during the year 2002. There were 201 males (80.7%) and 48 females (19.3%). The ages of most of the participants ranged from 20 through 50 as follows: 19 & Under (1.2%); 20 through 29; (18.1%); 30 through 39 (34.5%); 40 through 49 (32.9%); 50 through 59 (10.8%); 60 & Over (2.4%). Demographic composition of the participants was as follows. Race/Ethnicity: Caucasian (83.9%), African American (1.6%); Hispanic (13.3%) and Other (1.2%). Education: 8th grade or less (4.0%); Some high school (12.4%); High school graduate/GED 53.4%); Some College (16.5%); and College graduate (4.4%). Marital Status: Single (45.5%); Married (33.6%); Divorced (19.3%) and Widowed (1.6%).

The applicants' court histories were obtained from their Reinstatement Review Inventory-II answer sheets. Participants reported this information and staff verified the information provided. Nearly one-fourth of the applicants had one or no DUI/DWI arrests, 20.6% had one arrest, 49.8% had two arrests, 22.6% had three arrests and 5.4% had four or more DUI/DWI arrests. The applicants who had one or no arrests were designated as Group 1. Participants who had two or more arrests (multiple offenders) were designated as Group 2. There were 60 (24.1%) participants in Group 1 and 189 (75.9%) participants in Group 2.

Eighty-five percent of the participants had one or more alcohol arrest and 16.4 percent had one or more drug arrest. One-third (67.7%) of the participants had their driver's license suspended one or more times and 52.1% had two or more suspensions. Over half (58.7%) of the participants had their driver's license revoked one or more times and 33% had two or more revocations.

Results and Discussion

The inter-item reliability coefficients (alpha) for all six Reinstatement Review Inventory-II scales are presented in Table 7. All scales were highly reliable. Reliability coefficient alphas for all Reinstatement Review Inventory-II scales were at or above 0.85. These results demonstrate that the Reinstatement Review Inventory-II is a reliable test for applicants applying for their driver's license reinstatement. All coefficient alphas exceed the professionally accepted standard of 0.75 and all are significant at the $p < .001$ level.

Table 7. Reliability of the Reinstatement Review Inventory-II

RRI-II Scale	Coefficient Alpha	Significance Level
Truthfulness Scale	.89	$p < .001$
Alcohol Scale	.86	$p < .001$
Drugs Scale	.86	$p < .001$
Intervention Checklist	.88	$p < .001$
Comparative Change	.85	$p < .001$
Stress Coping Abilities	.89	$p < .001$

Discriminant validity results are presented in Table 2. Group 1 (one or no DUI/DWI arrest) consisted of 60 applicants and Group 2 (multiple offenders) consisted of 189 applicants. In the comparisons of Reinstatement Review Inventory-II scale scores, Group 2 applicants score

significantly higher than Group 1 applicants on the Alcohol and Drugs Scale. Higher scores on these Reinstatement Review Inventory-II scales are associated with more severe problems. The Truthfulness Scale and Stress Coping Abilities Scale showed that there were no significant differences between Group 1 and Group 2. This means that both groups (1 & 2) were equally honest when tested. And both groups found the application process equally stressful. The Intervention Checklist and Comparative Change Scales were not included in this analysis because these scales are not measurement scales.

Table 8. Comparisons between Group 1 (1 or no DUI/DWI arrest) and Group 2 (2 or more DUI/DWI arrests).

RRI-II Scale	Group 1			Group 2			T-value
	Mean	SD	Max	Mean	SD	Max	
Truthfulness Scale	9.95	5.30	18	9.60	8.31	18	t = 0.30
Alcohol Scale	12.35	8.54	37	19.12	10.33	40	t = 5.07**
Drugs Scale *	4.81	6.76	30	10.83	7.66	36	t = 2.99**
Stress Coping Abilities	154.73	44.86	240	150.02	46.54	240	t = 0.69

* Offender status defined by drug arrests. ** Significant at the $p < .001$ level.

Note: The Stress Coping Abilities Scale is reversed in that the higher the score the better one copes with stress.

The Truthfulness Scale and Stress Coping Abilities Scale showed that Group 1 and Group 2 were not significantly different in their scale scores. Truthfulness Scale results indicate that both groups tended to minimize their problems. Perhaps the applicants were aware that their driving records would be checked. The results of the Stress Coping Abilities Scale indicate that applicants, whether first offender or multiple offender, demonstrate similar stress reactions. Stress exacerbates emotional and mental health symptomatology. Both groups tended to handle stress at similar levels.

As expected, multiple offenders scored significantly higher on the Alcohol Scale and Drugs Scale than did applicants with one or no DUI/DWI arrest. The Alcohol and Drugs Scales results support the discriminant validity of the Reinstatement Review Inventory-II Alcohol and Drugs Scales. The applicants who were believed to have more severe problems (multiple offenders) scored significantly higher on these scales than applicants with one or no arrest.

Predictive validity results for the correct identification of problems (drinking and drug abuse) are presented in Table 9. Table 9 shows the percentage of applicants who admitted to having problems. They also scored in the problem risk range on the Alcohol and Drugs scales. “Problem behavior” meant the applicant admitted to having a drinking or drug problem. Other Reinstatement Review Inventory-II scales are not included in this analysis because of a lack of criterion items.

For the Alcohol Scale comparisons between problem risk and low risk participants, there were 69 applicants who admitted to drinking problems. These applicants were considered problem drinkers. Indeed, 68 of these 69 participants, or 98.6 percent, had Alcohol Scale scores at or above

the 70th percentile. The Alcohol Scale correctly identified nearly all (98.6%) of the applicants classified as problem drinkers. These results support the validity of the Alcohol Scale.

Table 9. Predictive Validity of the Reinstatement Review Inventory-II

<u>RRI-II Scale</u>	<u>Correct Identification of Problem Behavior</u>
Alcohol	98.6%
Drugs	100%

The Drugs Scale accurately identified applicants having drug problems. There were 16 applicants who admitted to drug problems. All 16 of these applicants, or 100 percent, had Drugs Scale scores at or above the 70th percentile. These results support the validity of the Drugs Scale.

For ease in interpreting applicant risk, Reinstatement Review Inventory-II scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of applicants scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify applicants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified 98 percent or more of problem applicants. The low risk level of 39 percent avoids putting a large percentage of applicants into a “moderate” range.

Risk range percentile scores were derived by adding points for test items and court history and then converting them to percentages. These results are presented in Table 10. Risk range percentile scores represent “degree of severity.” Analysis of the Reinstatement Review Inventory-II risk range percentile scores involved comparing the applicant’s obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 10. The actual percentage of applicants scoring in each of the four risk ranges was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

Table 10. Accuracy of Reinstatement Review Inventory-II Risk Range Percentile Scores

Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness Scale	39.0	(0.0)	28.1	(1.9)	22.1	(2.1)	10.8	(0.2)
Alcohol Scale	37.8	(1.2)	30.1	(0.1)	20.1	(0.1)	12.0	(1.0)
Drugs Scale	38.7	(0.3)	30.5	(0.5)	20.4	(0.4)	10.4	(0.6)
Intervention Checklist	40.2	(1.2)	29.1	(0.9)	19.5	(0.5)	11.2	(0.2)
Comparative Change	38.7	(0.3)	32.0	(2.0)	18.1	(1.9)	11.2	(0.2)
Stress Coping Abilities	39.0	(0.0)	30.9	(0.9)	19.3	(0.7)	10.8	(0.2)

As shown in Table 10, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages for each risk category. All of the obtained risk range percentiles were within 2.1 percentage points of the expected percentages and many (18 of 24 possible) were within one percentage point. Only two obtained percentages were two percent or more from the expected percentages and they were the Truthfulness Scale problem risk (2.1%) and the Comparative Change Scale medium risk classification (2.0%). These results demonstrate that risk range percentile scores are very accurate.

Relationships between Reinstatement Review Inventory and Reinstatement Review Inventory-II Scales

The Reinstatement Review Inventory-II is a revised version of the Reinstatement Review Inventory but some of the scales remained the same or changed very little. These scales are Alcohol, Drugs, Comparative Change and Intervention Checklist. For the Reinstatement Review Inventory-II the Truthfulness Scale was redone, the Road Rage Scale was dropped, and the Stress Coping Abilities Scale was added. Pearson Product-Moment correlation coefficients between Reinstatement Review Inventory scale scores and Reinstatement Review Inventory-II scale scores for the four similar scales are presented in the table below.

Scales	Alcohol Scale	Drugs Scale	Comparative Change	Intervention Checklist
Correlation Coefficient	r = .99	r = .99	r = .97	r = .83

Two different samples of applicants were used in this correlation analysis and each applicant took only the Reinstatement Review Inventory or the Reinstatement Review Inventory-II. To test the correlation between scale scores, the data for each scale was sorted in ascending order. There were 498 applicants included in this analysis (249 for each test). Such high correlation coefficients demonstrate that Reinstatement Review Inventory and Reinstatement Review Inventory-II scales are reliable and valid.

Conclusions

This study demonstrated that the Reinstatement Review Inventory-II is a reliable and valid assessment instrument or test for applicants trying to get their driver's licenses reinstated. Reliability results showed that all six Reinstatement Review Inventory-II scales are highly reliable. Reliable is necessary for accurate measurement of applicant risk. This study supports the reliability, validity and accuracy of the Reinstatement Review Inventory-II.

Discriminant validity analyses demonstrated that multiple offenders (had two or more DUI/DWI arrests) scored significantly higher than participants with one or no arrest. Predictive validity analyses demonstrated that the Reinstatement Review Inventory-II identified applicants having substance abuse or drug problems. Furthermore, obtained risk range percentages on all Reinstatement Review Inventory-II scales very closely approximated predicted percentages. These results further support the validity of the Reinstatement Review Inventory-II.

The Reinstatement Review Inventory-II provides objective assessment for applicant risk of substance (alcohol and other drugs) abuse, emotional or mental health problems and readiness for reinstatement of their driver's license. The Intervention Checklist Scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance. The Comparative Change Scale is an effective way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future. The Reinstatement Review Inventory-II provides a wealth of information toward answering these questions.

14. Accuracy, Reliability and Validity Study of the Reinstatement Review Inventory

The accuracy, reliability and validity of the Reinstatement Review Inventory were investigated in a sample of 408 applicants for this study (2004). **Although the Reinstatement Review Inventory-II had been developed already, some agencies continue to use the revised Reinstatement Review Inventory.** Reinstatement Review Inventory scales measure alcohol and drug abuse severity (Alcohol & Drugs Scale), attitude or behavioral change (Comparative Change), aggressive driver problems (Road Rage Scale) and compliance to requirements for driver's license reinstatement (Intervention Checklist). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

The participants were applicants who were assessed for reinstatement of their driver's license after it was suspended or revoked. The data for this study was obtained from agencies that used the revised Reinstatement Review Inventory. Two validation methods were used in this study. The first method (discriminant validity) compared scale scores between two participant groups. Group 1 consisted of applicants who had one or no DUI/DWI arrest. Group 2 consisted of applicants who had two or more DUI/DWI arrests. It was hypothesized that multiple offenders (Group 2) would score significantly higher than participants who had 0 or 1 arrest (Group 1). Multiple offenders would be expected to score higher because having a second arrest is indicative of a serious problem.

The second validation method (predictive validity) examined the accuracy at which the Reinstatement Review Inventory identified problem drinkers and problem drug abusers. In the Reinstatement Review Inventory, alcohol and drug problem information is obtained from the participants' responses to test items. Participants who admitted to drinking or drug problems would be expected to score in the corresponding scale's problem range. For criteria the following test items were used, "I have a drinking problem." "I have a drug problem."

Method

There were 408 applicants tested with the revised Reinstatement Review Inventory. Data for this study was provided by both court service providers and professional community agencies that use the revised Reinstatement Review Inventory. Test data was collected between the years 2002 and 2004. There were 367 males (90.0%) and 41 females (10.0%). The ages of the participants ranged from 25 to 73 as follows: 20 through 29 (6.1%); 30 through 39 (33.8%); 40 through 49 (43.4%); 50 through 59 (11.5%) and over 60 (5.1%). Demographic composition of the participants was as follows, Race/Ethnicity: Caucasian (56.9%); African American (40.9%); Hispanic (1.5%); Native American (0.2%) and Other (0.5%). Education: 8th grade or less (2.5%); Partial High School (24.5%); GED (6.6%); High School Graduate (44.6%); Partial College (16.2%); Technical School (0.2%); College Graduate (3.9%) and Professional School (1.5%). Marital Status: Single (45.1%); Married (32.1%); Divorced (17.6%); Separated (3.7%) and Widowed (1.5%).

The applicants' court histories were obtained from their Reinstatement Review Inventory answer sheets. Participants reported this information and staff verified the information provided. Nearly forty percent of the applicants had one or no DUI/DWI arrests, 19.1% had one arrest, 16.9% had two arrests, 19.6% had three arrests and 24.5% had four or more DUI/DWI arrests. The applicants who had one or no arrests were designated as Group 1. Participants who had two or more arrests (multiple offenders) were designated as Group 2. There were 79 (19.4%) participants in Group 1 and 329 (80.6%) participants in Group2.

Results and Discussion

The inter-item reliability coefficients (alpha) for five of the six Reinstatement Review Inventory scales are presented in Table 11. All scales, excluding the Road Rage Scale, were highly reliable. Reliability coefficient alphas for all Reinstatement Review Inventory scales, excluding the Road Rage Scale were above 0.89. These results demonstrate that the RRI is a reliable test for applicants applying for their driver's license reinstatement. All coefficient alphas exceed the professionally accepted standard of 0.75 and all are significant at the $p < .001$ level.

Table 11. Reliability of the Reinstatement Review Inventory

RRI-II Scale	Coefficient Alpha	Significance Level
Truthfulness Scale	.89	$p < .001$
Alcohol Scale	.92	$p < .001$
Drugs Scale	.91	$p < .001$
Intervention Checklist	.93	$p < .001$
Comparative Change	.94	$p < .001$

Discriminant validity results are presented in Table 12. Group 1 (one or no DUI/DWI arrest) consisted of 79 applicants and Group 2 (multiple offenders) consisted of 329 applicants. In the comparisons of Reinstatement Review Inventory scale scores, Group 2 applicants scored significantly higher than Group 1 applicants on the Alcohol and Drugs Scale. Higher scores on these Reinstatement Review Inventory scales are associated with more severe problems. Group 1 scored significantly higher on the Truthfulness Scale than did Group 2. Higher scores mean the applicant tried to fake good or was guarded when answering the questions. The Road Rage Scale showed that there were no significant differences between Group 1 and Group 2. This means that both groups (Group 1 & 2) experience the same amount of anger and aggression while driving. The Intervention Checklist and Comparative Change Scales were not included in this analysis because these scales are not measurement scales.

Table 12. Comparisons between Group 1 (1 or no DUI/DWI arrest) and Group 2 (2 or more DUI/DWI arrests).

RRI-II Scale	Group 1		Group 2		T-value
	Mean	SD	Mean	SD	
Truthfulness Scale	10.8	5.5	9.1	5.5	t = 2.38
Alcohol Scale	8.8	10.5	19.9	13.1	t = 6.97**
Drugs Scale *	5.6	7.8	16.2	12.9	t = 7.99**
Road Rage	5.0	6.3	4.7	5.3	t = 0.28

* Offender status defined by drug arrests. ** Significant at the $p < .001$ level.

Predictive validity results for the correct identification of problems (drinking and drug abuse) are presented in Table 13. Table 13 shows the percentage of applicants who admitted to having problems. They also scored in the problem risk range on the Alcohol, Drugs and Road Rage Scales. “Problem behavior” meant the applicant admitted to having a drinking or drug problem. Other Reinstatement Review Inventory scales are not included in this analysis because of lack of criterion items.

For the Alcohol Scale comparisons between problem risk and low risk participants, there were 120 applicants who admitted to drinking problems. These participants were considered problem drinkers. Indeed, 118 of these 120 participants, or 98.3 percent, had Alcohol Scale scores at or above the 70th percentile. The Alcohol Scale score correctly identified nearly all (98.3%) of the applicants classified as problem drinkers. These results support the validity of the Alcohol Scale.

Table 13. Predictive Validity of the Reinstatement Review Inventory

<u>RRI-II Scale</u>	<u>Correct Identification of Problem Behavior</u>
Alcohol	98.3%
Drugs	100%
Road Rage	100%

The Drugs Scale accurately identified applicants having drug problems. There were 45 applicants who admitted to drug problems. All 45 of these applicants, or 100 percent, had Drug Scale scores at or above the 70th percentile. These results support the validity of the Drugs Scale.

The Road Rage Scale accurately identified applicants who are aggressive drivers. There were 22 applicants who admitted to road rage problems. These participants were considered road rage problems. All 22 of these applicants, or 100 percent, had Road Rage Scale scores at or above the 70th percentile. These results support the validity of the Road Rage Scale.

For ease in interpreting applicant risk, Reinstatement Review Inventory scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile), problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of applicants scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify applicants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified 99 percent or more of problem applicants. The low risk level of 39 percent avoids putting a large percentage of applicants into a “moderate” range.

Risk range percentile scores were derived by adding points for test items and court history and then converting them to percentages. These results are presented in Table 14. Risk range percentile scores represent “degree of severity.” Analysis of the Reinstatement Review Inventory risk range percentile scores involved comparing the applicant’s obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 14. The actual percentage of applicants scoring in each of the four risk ranges was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

Table 14. Accuracy of Reinstatement Review Inventory-Risk Range Percentile Scores

Scale	Low Risk (39%)	Medium Risk (30%)	Problem Risk (20%)	Severe Problem (11%)
Truthfulness Scale	39.5 (0.5)	28.6 (1.4)	20.1 (0.1)	11.8 (0.8)
Alcohol Scale	40.2 (1.2)	28.9 (1.1)	19.4 (0.6)	11.5 (0.5)
Drugs Scale	37.5 (1.5)	28.9 (1.1)	20.6 (0.6)	13.0 (2.0)
Comparative Change	40.0 (1.0)	29.4 (0.6)	20.3 (0.3)	10.3 (0.7)
Road Rage	37.5 (1.5)	29.2 (0.8)	20.3 (0.3)	13.0 (2.0)

As shown in Table 14, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages of each risk category. All of the obtained risk range percentiles were within 2.0 percentage points of the expected percentages and many (16 of 20 possible) were within one percentage point.

Conclusions

This study demonstrated that the revised Reinstatement Review Inventory is a reliable and valid measurement instrument or test for applicants trying to get their driver's licenses reinstated. Reliability is necessary for accurate measurement of applicant risk. This study supports the reliability, validity and accuracy of the Reinstatement Review Inventory.

Discriminant validity analyses demonstrated that multiple offenders (had two or more DUI/DWI arrests) scored significantly higher than participants with one or no arrest. Predictive validity analyses demonstrated that the Reinstatement Review Inventory identified applicants having substance abuse or drug problems. Furthermore, obtained risk range percentages on all Reinstatement Review Inventory scales are closely approximated predicted percentages. These results further support the validity of the Reinstatement Review Inventory.

The Reinstatement Review Inventory provides objective assessment for applicant risk of substance (alcohol and other drugs) abuse, emotional or mental health problems and readiness for reinstatement of their driver's license. The Intervention Checklist Scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance. The Comparative Change Scale is an effective way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future. The RRI provides a wealth of information toward answering these questions.

15. Accuracy, Reliability and Validity Study of the Reinstatement Review Inventory-II

The accuracy, reliability and validity of the Reinstatement Review Inventory-II (RRI-II) were investigated in a sample of 95 applicants for this study (2004). Reinstatement Review Inventory-II scales measure alcohol and drug abuse severity (Alcohol & Drugs Scale), attitude or behavioral change (Comparative Change), emotional or mental health problems (Stress Coping Abilities Scale) and compliance to requirements for driver's license reinstatement (Intervention Checklist). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

The participants were applicants who were assessed for reinstatement of their driver's license after it was suspended or revoked. The data for this study was obtained from agencies that used the Reinstatement Review Inventory-II. Two validation methods were used in this study. The first method (discriminant validity) compared scale scores between two participant groups. Group 1 consisted of applicants who had one or no DUI/DWI arrest. Group 2 consisted of applicants who had two or more DUI/DWI arrests. It was hypothesized that multiple offenders (Group 2) would score significantly higher than participants who had 0 or 1 arrest (Group 1). Multiple offenders would be expected to score higher because having a second arrest is indicative of a serious problem.

The second validation method (predictive validity) examined the accuracy at which the Reinstatement Review Inventory-II identified problem drinkers and problem drug abusers. In the

Reinstatement Review Inventory-II, alcohol and drug problem information is obtained from the participants' responses to test items. Participants who admitted to drinking or drug problems would be expected to score in the corresponding scale's problem range. For criteria the following test items were used, "I have a drinking problem." "I have a drug problem."

Method

There were 95 applicants tested with the Reinstatement Review Inventory-II. Data for this study was provided by both court service providers and professional community agencies that use the Reinstatement Review Inventory-II. Test data was collected between the years 2002 and 2004. There were 81 males (85.3%) and 14 females (14.7%). The ages of the participants ranged from 18 to 75 as follows: Under 20 (2.1%); 20 through 29 (25.5%); 30 through 39 (31.9%); 40 through 49 (24.5%); 50 through 59 (11.7%) and 60 and above (4.3%). Demographic composition of the participants was as follows, Race/Ethnicity: Caucasian (90.5%) and Hispanic (9.5%). Education: 8th grade or less (7.4%); Partial High School (13.8%); G.E.D. (5.3%); High School Graduate (46.8%); Partial College (17.0%); College Graduate (7.4%); Professional School (2.1%). Marital Status: Single (45.3%); Married (29.5%); Divorced (22.1%); Separated (2.1%) and Widowed (1.1%).

The applicants' court histories were obtained from their Reinstatement Review Inventory-II answer sheets. Participants reported this information and staff verified the information provided. Nearly fifteen percent of the applicants had one or no DUI/DWI arrests, 62.5% had two arrests, 21.6% had three arrests and 1.1% had five or more DUI/DWI arrests. The applicants who had one or no arrests were designated as Group 1. Participants who had two or more arrests (multiple offenders) were designated as Group 2. There were 15 (15.8%) participants in Group 1 and 80 (84.2%) participants in Group 2.

Results and Discussion

The inter-item reliability coefficients (alpha) for all six Reinstatement Review Inventory-II scales are presented in Table 15. All scales were highly reliable. Reliability coefficient alphas for all Reinstatement Review Inventory-II scales were at or above 0.84. These results demonstrate that the Reinstatement Review Inventory-II is a reliable test for applicants applying for their driver's license reinstatement. All coefficient alphas exceed the professionally accepted standard of 0.75 and all are significant at the $p < .001$ level.

Table 15. Reliability of the Reinstatement Review Inventory-II

RRI-II Scale	Coefficient Alpha	Significance Level
Truthfulness Scale	.90	$p < .001$
Alcohol Scale	.88	$p < .001$
Drugs Scale	.90	$p < .001$
Intervention Checklist	.84	$p < .001$
Comparative Change	.84	$p < .001$
Stress Coping Abilities	.92	$p < .001$

Discriminant validity results are presented in Table 16. Group 1 (one or no DUI/DWI arrest) consisted of 15 applicants and Group 2 (multiple offenders) consisted of 80 applicants. In the comparisons of Reinstatement Review Inventory-II scale scores, Group 2 applicants scored significantly higher than Group 1 applicants on the Alcohol and Drugs Scales. Higher scores on these Reinstatement Review Inventory-II scales are associated with more severe problems. Although Group 1 consistently had lower scale scores than Group 2 there were not found to be significant. The Intervention Checklist and Comparative Change Scales were not included in this analysis because these scales are measurement scales.

Table 16. Comparisons between Group 1 (1 or no DUI/DWI arrest) and Group 2 (2 or more DUI/DWI arrests).

RRI-II Scale	Group 1		Group 2		T-value
	Mean	SD	Mean	SD	
Truthfulness Scale	10.7	4.9	9.7	5.4	t = 0.71
Alcohol Scale	11.3	9.3	21.5	10.8	t = 3.78**
Drugs Scale *	4.5	6.6	20.1	9.3	t = 4.92**
Stress Coping Abilities	151.7	31.7	155.3	45.2	t = 0.37

* Offender status defined by drug arrests. ** Significant at the p < .001 level.

Predictive validity results for the correct identification of problems (drinking and drug abuse) are presented in Table 17. Table 17 shows the percentage of applicants who admitted to having problems. They also scored in the problem risk range on the Alcohol and Drugs Scales. “Problem behavior” meant the applicant admitted to having a drinking or drug problem. Other Reinstatement Review Inventory-II scales are not included in this analysis because of lack of criterion items.

For the Alcohol Scale comparisons between problem risk and low risk participants, there were 28 applicants who admitted to drinking problems. These participants were considered problem drinkers. Indeed, all 28 participants, or 100 percent, had Alcohol Scale scores at or above the 70th percentile. The Alcohol Scale score correctly identified all (100%) of the applicants classified as problem drinkers. These results support the validity of the Alcohol Scale.

Table 17. Predictive Validity of the Reinstatement Review Inventory-II

RRI-II Scale	Correct Identification of Problem Behavior
Alcohol	100%
Drugs	100%

The Drugs Scale accurately identified applicants having drug problems. There were 10 applicants who admitted to drug problems. All 10 of these applicants, or 100 percent, had Drugs Scale scores at or above the 70th percentile. These results support the validity of the Drugs Scale.

For ease in interpreting applicant risk, Reinstatement Review Inventory-II scale scores were divided into four risk ranges: low risk (zero to 39th percentile), medium risk (40 to 69th percentile),

problem risk (70 to 89th percentile), and severe problem risk (90 to 100th percentile). By definition the expected percentages of applicants scoring in each risk range (for each scale) is: low risk (39%), medium risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify applicants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified 100 percent of problem applicants. The low risk level of 30 percent avoids putting a large percentage of applicants into a “moderate” range.

Risk range percentile scores were derived by adding points for test items and court history and then converting them to percentages. These results are presented in Table 18. Risk range percentile scores represent “degree of severity.” Analysis of the Reinstatement Review Inventory-II risk range percentile scores involved comparing the applicant’s obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 18. The actual percentage of applicants scoring in each of the four risk ranges was compared to these predicted percentages. The differences between predicted and obtained are shown in parentheses.

Table 18. Accuracy of Reinstatement Review Inventory-II Risk Range Percentile Scores

Scale	Low (39%)	Risk	Medium Risk (30%)	Risk	Problem Risk (20%)	Risk	Severe Problem (11%)	Problem
Truthfulness Scale	41.1	(2.1)	33.6	(3.6)	19.0	(1.0)	6.3	(4.7)
Alcohol Scale	38.9	(0.1)	29.5	(0.5)	19.0	(1.0)	12.6	(1.6)
Drugs Scale	35.8	(3.2)	29.5	(0.5)	20.0	(0.0)	14.7	(3.7)
Intervention Checklist	35.8	(3.2)	28.4	(1.6)	20.0	(0.0)	15.8	(4.8)
Comparative Change	38.9	(0.1)	29.5	(0.5)	20.0	(0.0)	11.6	(0.6)
Stress Coping Abilities	38.9	(0.1)	29.5	(0.5)	20.0	(0.0)	11.6	(0.6)

As shown in Table 18, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages of each risk category. Of the possible 24 obtained risk ranges 21 were within 3.2% of the predicted percentage. The Reinstatement Review Inventory-II can be considered 97% accurate.

Conclusion

This study demonstrated that the Reinstatement Review Inventory-II is a reliable and valid measurement instrument or test for applicants trying to get their driver’s license reinstated. Reliability results showed that all six Reinstatement Review Inventory-II scales are highly reliable. Reliable is necessary for accurate measurement of applicant risk. This study supports the reliability, validity and accuracy of the Reinstatement Review Inventory-II.

Discriminant validity analyses demonstrated that multiple offenders (had two or more DUI/DWI arrests) scored significantly higher than participants with one or no arrest. Predictive validity analyses demonstrated that the Reinstatement Review Inventory-II identified applicants having substance abuse or drug problems. Furthermore, obtained risk range percentages on all Reinstatement Review Inventory-II scales are closely approximated predicted percentages. These results further support the validity of the Reinstatement Review Inventory-II.

The Reinstatement Review Inventory-II provides objective assessment for applicant risk of substance (alcohol and other drugs) abuse, emotional or mental health problems and readiness for reinstatement of their driver's license. The Intervention Checklist Scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance. The Comparative Change Scale is an effective way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future. The Reinstatement Review Inventory-II provides a wealth of information toward answering these questions.

16. Reliability Study of the Reinstatement Review Inventory II

The accuracy, reliability, and validity of the Reinstatement Review Inventory were investigated in a sample of 3,018 applicants for this study (2010). Reinstatement Review Inventory II scales measure alcohol and drug abuse severity (Alcohol & Drugs Scale), stress coping and management abilities (Stress Management Scale). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

Method

There were 3,018 applicants tested with the revised Reinstatement Review Inventory II. Data for this study was provided by both court service providers and professional community agencies that use the revised Reinstatement Review Inventory II. Test data was collected between the years 2009 and 2019. There were 2,330 males (72.2%) and 688 females (22.8%). The ages of the participants ranged from 12 to 79 as follows: 20 or younger (0.3%); 21 to 30 (25.7%); 31 to 40 (27.9%); 41 to 50 (28.4%); 51 to 60 (13.5%); and 61 or older (3.9%). Demographic composition of the participants was as follows, Race/Ethnicity: Caucasian (75.1%); African American (6.0%); Hispanic (14.3%); Asian (0.9%); Native American (0.6%); and responded other (1.0%). Education: 8th grade or less (2.1%); Some High School (6.7%); GED (4.9%); Graduated High School (35.4%); Trade/Technical School (1.5%); Some College (22.5%); Graduated College (15.8%); and Advanced Degree (2.4%). Marital Status: Single (49.5%); Married (21.4%); Divorced (21.8%); Separated (2.7%); and Widowed (1.6%).

The applicants' court histories were obtained from their Reinstatement Review Inventory II answer sheets. Participants reported this information and staff verified the information provided. Nearly one percent of the applicants had one or no DUI/DWI arrests, 0.5% had one arrest, 32.4% had two arrests, and 18.9% had 3 or more DUI/DWI arrests. The applicants who had one or no arrests were designated as Group 1. Participants who had two or more arrests (multiple offenders) were

designated as Group 2. There were 20 (0.7%) participants in Group 1 and 1,548 (51.3%) were in Group 2. DUI/DWI arrest history was missing for 48.0% of offenders.

Results and Discussion

The inter-item reliability coefficients (alpha) for five of the six Reinstatement Review Inventory II scales are presented in Table. All scales, excluding the Alcohol Scale, were highly reliable. These results demonstrate that the RRI-II is a reliable test for applicants applying for their driver’s license reinstatement. All coefficient alphas exceed the professionally accepted standard of .70 and all are significant at the $p < .001$ level.

Table 19. Reliability of the Reinstatement Review Inventory

RRI-II Scale	Coefficient Alpha	Significance Level
Truthfulness Scale	.87	$p < .001$
Alcohol Scale	.74	$p < .001$
Drugs Scale	.71	$p < .001$
Intervention Checklist	.82	$p < .001$
Comparative Change	.89	$p < .001$

17. Validity and Accuracy Study of the Reinstatement Review Inventory II

The validity of the Reinstatement Review Inventory-II was investigated in a sample of 130 applicants for this study (2019). Reinstatement Review Inventory II scales measure alcohol and drug abuse severity (Alcohol & Drugs Scale), stress coping and management abilities (Stress Management Scale). In addition, the Truthfulness Scale measures applicant truthfulness, denial and problem minimization while completing the test. Truthfulness Scale scores are used for truth-correcting other scale scores.

The participants were applicants who were assessed for reinstatement of their driver’s license after it was suspended or revoked. The data for this study was obtained from agencies that used the Reinstatement Review Inventory II. Two validation methods were used in the study. The first method (discriminant validity) compared scale scores between two participant groups. Group 1 consisted of applicants who had one or no DUI/DWI arrest. Group 2 consisted of applicants who had two or more DUI/DWI arrests. It was hypothesized that multiple offenders (Group 2) would score significantly higher than participants who had 0 or 1 arrest (Group 1). Multiple offenders would be expected to score higher because having a second arrest is indicative of a serious problem.

The second validation method (predictive validity) examined the accuracy at which the Reinstatement Review Inventory II identified problem drinkers and problem drug abusers. In the Reinstatement Review Inventory II, alcohol and drug problem information is obtained from the participants’ responses to test items. Participants who admitted to drinking or drug problems would

be expected to score in the corresponding scale’s problem range. For criteria the follow test items were used, “I have a drinking problem.” “I have a drug problem.”

Method

There were 130 applicants tested with the revised Reinstatement Review Inventory II. Data for this study was provided by both court service providers and professional community agencies that use the RRI-II. Test data was collected between the years 2010 and 2019. There were 103 males (79.2%) and 27 females (20.8%). The ages of the participants ranged from 20 to 65 as follows: 20 or younger (0.8%); 21 to 30 (31.5%); 31 to 40 (26.9%); 41 to 50 (20.8%); 51 to 60 (15.4%); and 61 or older (4.6%). Demographic composition of the participants was as follows, Race/Ethnicity: Caucasian (54.6%); African American (3.8%); Hispanic (17.7%); Native American (3.1%); and Other (2.3%). Education: 8th grade or less (1.5%); Some High School (10.0%); GED (4.6%); Graduated High School (34.6%); Trade/Technical School (1.5%); Some College (10.8%); Graduated College (11.5%); and Advanced Degree (4.6%). Marital Status: Single (45.4%); Married (20.0%); Divorced (9.2%); Separated (2.3%); and Widowed (2.3%).

The applicants’ court histories were obtained from their Reinstatement Review Inventory answer sheets. Participants reported this information and staff verified the information provided. Nearly forty percent of the applicants had one or no DUI/DWI arrests, 26.1% had one arrest, 30.8% had two arrest, and 16.2% had three or more arrests. The applicants who had one or no arrests were designed as Group 1. Participants who had two or more arrests (multiple offenders) were designed as Group 2. There were 50 (38.5) participants in Group 1 and 61 (47.0%) participants in Group 2.

Results and Discussion

Discriminant validity results are presented in Table 20. Group 1 (one or no DUI/DWI arrests) consisted of 50 applicants and Group 2 (multiple offenders) consisted of 61 applicants. In the comparisons of Reinstatement Review Inventory II scale scores, Group 2 applicants scored significantly higher than Group 1 applicants on the Drug Scale. Higher scores on these RRI-II scales are associated with more severe problems. No mean Group 1 scores were higher than mean Group 2 scores at a statistically significant level. The Intervention Checklist and Comparative Change Scales were not included in the analysis because these scales are not measurement scales.

Table 20. Comparisons between Group 1 (1 or no DUI/DWI arrest) and Group 2 (2 or more DUI/DWI arrests)

RRI-II	Group 1		Group 2		T-value
Scale	Mean	SD	Mean	SD	
Truthfulness Scale	8.22	5.38	7.87	4.42	t = .370
Alcohol Scale	15.72	11.63	16.85	10.43	t = -.534
Drugs Scale	10.80	10.47	6.23	9.07	t = 2.076
Stress Management	56.22	76.13	34.44	57.84	t = 1.712

For ease in interpreting applicant risk, Reinstatement Review Inventory scale scores were divided into four risk ranges: low risk (0 to 39th percentile), moderate risk (40th to 69th percentile), problem risk (70th to 89th percentile), and severe problem risk (90th to 100th percentile). By definition the expected percentages of applicants scoring in each risk range (for each scale) is: low risk (39%), moderate risk (30%), problem risk (20%), and severe problem risk (11%). Scores at or above the 70th percentile would identify applicants as having problems.

The above predictive validity results lend support for using these particular percentages. The 70th percentile cut off for problem identification correctly classified 99 percent or more of problem applicants. The low risk level of 39 percent avoids putting a large percentage of applicants into a “moderate” range.

Risk range percentile scores were derived by adding points for test items and court history and then converting them to percentages. These results are presented in Tables 21. Risk range percentile scores represent “degree of severity.” Analysis of the Reinstatement Review Inventory II Risk Range percentile scores involved comparing the applicant’s obtained risk range percentile scores to predicted risk range percentages as defined above. These percentages are shown in parentheses in the top row of Table 21. The actual percentage of applicants scoring in each of the risk ranges was compared to these predicted percentages. The differences between predicted and obtained are shown in parenthesis.

Table 21. Accuracy of Reinstatement Review Inventory Risk Range Percentile Scores

Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness Scale	40.0	(1.0)	29.2	(0.8)	20.8	(0.8)	10.0	(1.0)
Alcohol Scale	40.0	(1.0)	30.0	(0.0)	29.2	(9.2)	0.8	(10.2)
Drugs Scale	40.0	(1.0)	29.2	(0.8)	20.0	(0.0)	10.8	(0.2)
Stress Management	40.0	(1.0)	29.2	(0.8)	20.0	(0.0)	10.8	(0.2)

As shown in Table 21, the objectively obtained percentages of participants falling in each risk range were very close to the expected percentages of each risk category. All of the obtained risk range percentiles, with the exception on the Problem Risk and Severe Problem ranges on the Alcohol Scale, were within 1.0 percentage points of the expected percentages. The Problem Risk and Severe Problem ranges Alcohol Scale were about 10 percentage points off the expected percent of offenders. In this sample, a greater percentage of offenders scored in the Problem Risk range than expected, resulting in fewer offenders on the Severe Problem range.

Conclusions

This study demonstrated that the revised Reinstatement Review Inventory is a reliable and valid measurement instrument or test for applicants trying to get their driver’s licenses reinstated. Reliability is necessary for accurate measurement of applicant risk. This study supports the reliability, validity and accuracy of the Reinstatement Review Inventory.

Discriminant validity analyses demonstrated that multiple offenders (had two or more DUI/DWI arrests) scored significantly higher than participants with one or no arrests. Predictive validity analyses demonstrated that the Reinstatement Review Inventory identified applicants having substance abuse or drug problems. Furthermore, obtained risk range percentages on all Reinstatement Review Inventory scales are closely approximated predicted percentages. These results further support the validity of the Reinstatement Review Inventory.

The Reinstatement Review Inventory provides objective assessment for applicant risk of substance (alcohol and other drugs) abuse, emotional or mental health problems and readiness for reinstatement of their driver's license. The Intervention Checklist Scale gives information regarding applicant compliance to reinstatement requirements. Applicants completing requirements are in compliance. The Comparative Change Scale is an effective way of assessing applicant attitude and behavior change. Evaluators often want to know if applicants have changed their bad habits and if they will refrain from problem behavior in the future. The RRI provides a wealth of information toward answering these questions.

SUMMARY

In conclusion, this document is not intended as an exhaustive compilation of Reinstatement Review Inventory research. Yet, it does summarize many studies and statistics that support the reliability and validity of the Reinstatement Review Inventory. Based on this research, the Reinstatement Review Inventory presents an increasingly accurate picture of *counseling clients and the risk they represent*. The Reinstatement Review Inventory provides a sound empirical foundation for responsible decision making.

Summarized research demonstrates that the Reinstatement Review Inventory is a reliable, valid and accurate instrument for *client assessment*. It is reasonable to conclude that the Reinstatement Review Inventory does what it purports to do. The Reinstatement Review Inventory acquires a vast amount of relevant information for staff review prior to decision making. Empirically based scales are objective and accurate. Assessment has shifted from subjective opinions to objective accountability.

The Reinstatement Review Inventory is not a personality test, nor is it a clinical diagnostic instrument. Yet, it is much more than just another assessment test. The Reinstatement Review Inventory (RII) is designed specifically for screening applicants that are applying for reinstatement of their suspended or revoked driver's license. We are not aware of any other test that was designed for this purpose; i.e., to screen applicants applying for reinstatement of their suspended or revoked driver's license. Many state agencies are aware of the limitations of interviews, obtaining a few references and a brief driver record review.

The Reinstatement Review Inventory (RRI) provides an objective applicant profile. The RRI identifies the truthfulness of the applicant while taking the RRI. It also objectively explores alcohol and drug use and quantifies abuse. The RRI helps answer questions like, "Has the applicant changed since his or her driver's license was suspended or revoked?" The RRI also determines how well the applicant copes with stress. The Stress Coping Abilities Scale is a non-invasive way for screening emotional and mental health problems.

For more information on the Reinstatement Review Inventory (RRI), interested parties are referred to www.bdsltd.com. Upon entering www.bdsltd.com there are navigational links in the left margin of each webpage. Click on the test name and you go directly to its webpage, which contains descriptive information, an example report and some test related research.