
OKLAHOMA DEPARTMENT OF MENTAL HEALTH AND SUBSTANCE ABUSE SERVICES

2018 SUMMARY REPORT *DRIVER RISK INVENTORY 2 (DRI-2)* *DEFENDANT QUESTIONNAIRE (DQ)*

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Oklahoma Department of Mental Health and Substance Abuse Services

Executive Summary

There were **10,096** Driver Risk Inventory-2 (DRI-2) tests administered by Oklahoma Department of Mental Health and Substance Abuse Services between June 1, 2017 and May 31, 2018. This was a 2.0% increase in tests administered from 2016-2017. **2,819** Defendant Questionnaire (DQ) tests were administered between June 1, 2017 and May 31, 2018. This was a 16.1% increase in DQ tests administered from 2016-2017.

0.5% of tests were invalid on the DRI-2 and 2.0% of tests were invalid on the DQ for 2017-2018. Invalid tests refer to the number of individuals who score above the 90th percentile (Severe Problem range) on the Truthfulness Scale.

DRI-2

- Prevalent demographic characteristics were: 74.5% were male, 65.3% were Caucasian, and 52.4% were single.
- 85.3% of offenders were considered first-time offenders and 14.3% were considered repeat offenders.
- 27.7% of offenders refused a breath test when arrested.
- 72.9% of offenders scored in the Low Risk range on the Alcohol Scale and 66.5% scored in the Low Risk range on the Driver Risk Scale.
- **On average, repeat offenders scored higher on all scales than first-time offenders.**
- There was a mean difference of 38.3 points between first-time and repeat offenders on the Alcohol Scale.

Reliability scores for each scale were as follows: **Truthfulness Scale, .84; Alcohol Scale, .89; Drug Scale, .90; Driver Risk Scale, .85; and Stress Management Scale, .90.** All scales meet or exceed accepted reliability standards.

DQ

- Prevalent demographic characteristics were: 72.4% were male, 66.4% were Caucasian, and 62.2% were single.
- 35.2% of offenders were first-time offenders and 64.5% were repeat offenders.
- 42.1% of offenders were employed 6 months or less in the previous 12 months.
- 45.0% of offenders reported 3 or more arrests.
- 82.0% of offenders reported at least one drug arrest.
- **On average, male offenders had a greater frequency of arrests than female offenders.**
- **On average, repeat offenders scored higher than first-time offenders on the Alcohol, Drug, Violence, and Stress Management Scales.**

Reliability scores for each scale were as follows: **Truthfulness Scale, .87; Alcohol Scale, .93; Drug Scale, .92; Antisocial Scale, .86; Violence Scale, .87; and Stress Management Scale, .91.** All scales meet or exceed accepted reliability standards.

Behavior Data Systems' instruments have demonstrated high reliability, accuracy, and validity. This report confirms the strong psychometric properties of the DRI-2 and DQ. These elements are essential in assessment tools in order to correctly identify individuals who demonstrate higher problem severity and consequently have more intense treatment needs. Properly identifying offenders, using empirically supported instruments, has been associated with reduced recidivism, reduced costs, and increased public safety (PEW Center on the States, 2013).

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Driver Risk Inventory-2

The Driver Risk Inventory-2 (DRI-2) is an evidence-based DUI screening test that is widely used across the United States and has demonstrated high reliability, accuracy, and validity in identifying offenders who have problems that warrant intervention, counseling, or treatment. There were 10,096 Driver Risk Inventory 2 tests administered by Oklahoma Department of Mental Health and Substance Abuse Services in 2017-2018.

Figure 1

Offender gender in 2017-2018 was:

- 74.5% (7,525) were male
- 25.5% (2,571) were female

In 2016-2017 offender gender was: 74.3% were male and 25.7% were female.

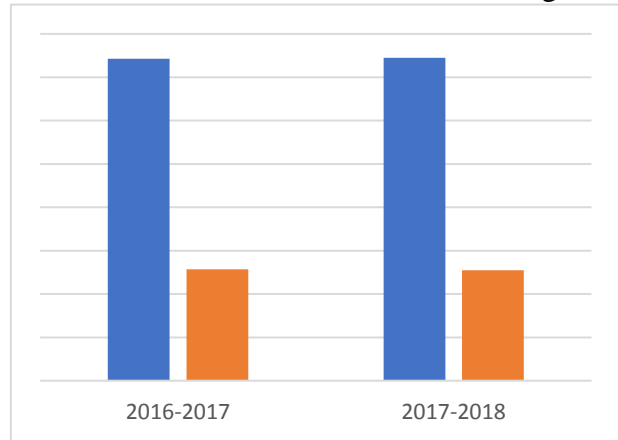


Figure 2

Offender race and ethnicity results are presented in figure 2:

- 65.3% (6,591) were Caucasian
- 8.9% (899) were African American
- 9.3% (939) were Hispanic
- 1.0% (103) were Asian
- 13.7% (1,381) were Native American
- 1.4% (144) responded other.

Information was missing for 39 offenders.

In 2016-2017, 63.9% were Caucasian, 9.7% were African American, 9.5% were Hispanic, 1.0% were Asian, 14.6% were Native American, and 1.4% responded other.

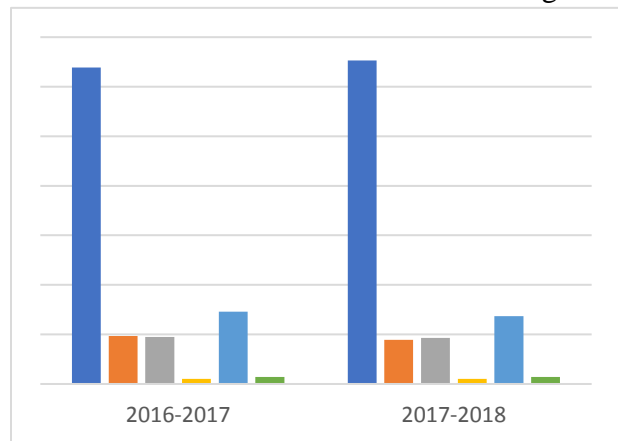


Figure 3

Marital status of offenders is presented in figure 3:

- 52.4% (5,294) were single
 - 23.0% (2,318) were married
 - 18.0% (1,814) were divorced
 - 3.9% (398) were separated
 - 2.2% (220) were widowed
- Information was missing for 52 offenders.

In 2016-2017, 52.1% were single, 23.3% were married, 18.4% were divorced, 4.2% were separated, and 2.0% were widowed.

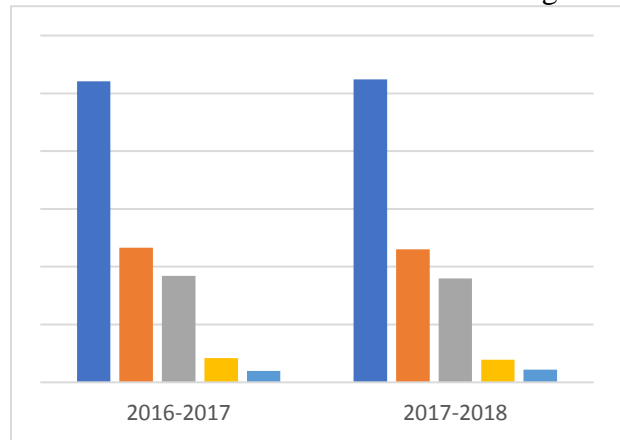


Figure 4

Educational attainment of offenders is presented in figure 4:

- 2.3% (231) completed 8th grade or less
 - 12.4% (1,252) completed some high school
 - 8.9% (894) obtained a GED
 - 37.1% (3,745) graduated high school
 - 4.8% (482) completed technical or trade school
 - 23.3% (2,354) completed some college
 - 9.0% (908) graduated college
 - 1.9% (189) obtained a graduate degree
- Information was missing for 41 offenders.

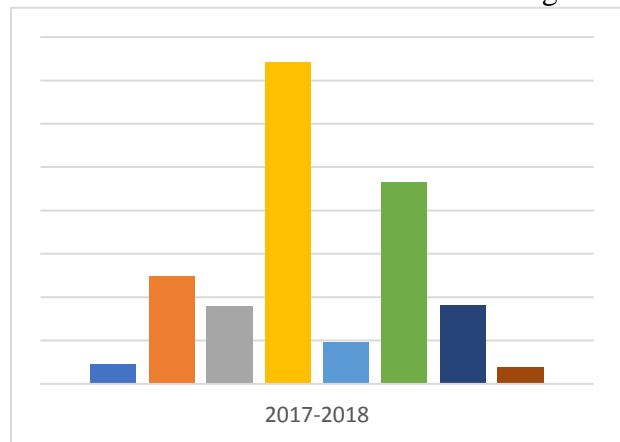


Figure 5

Age of offenders is presented in figure 5:

- <1% (48) were 17 or younger
 - 21.7% (2,195) were 18 to 25
 - 30.8% (3,107) were 26 to 35
 - 21.4% (2,159) were 36 to 45
 - 15.2% (1,536) were 46 to 55
 - 8.6% (8,710) were 56 to 65
 - 1.8% (179) were 66 or older
- Information was missing for one offender.

In 2016-2017, <1% were 17 or younger, 22.4% were 18 to 25, 31.6% (3,160) were 26 to 35, 21.2% (2,094) were 36 to 45, 15.3% were 46 to 55, 7.8% were 56 to 65, and 1.5% were 66 or older.

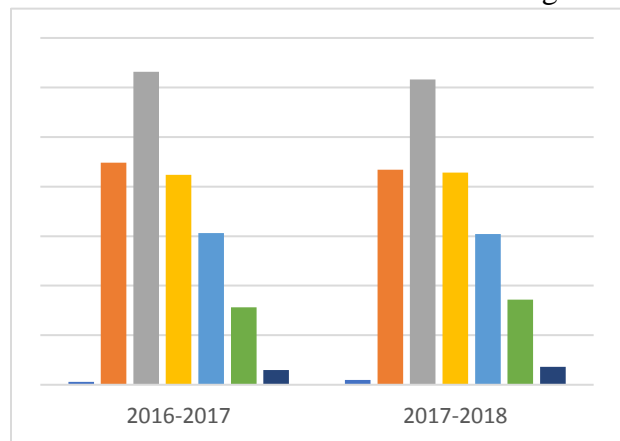
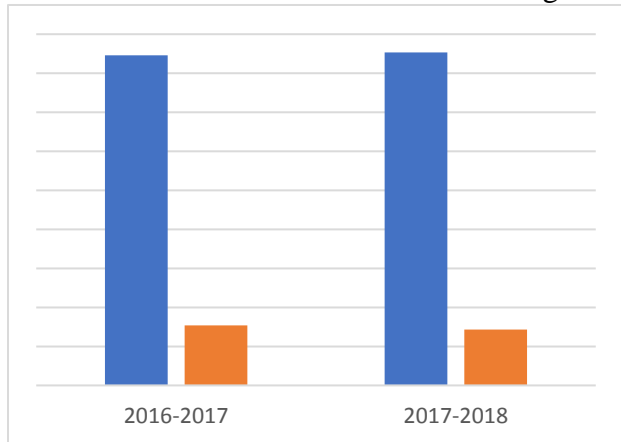


Figure 6

Offenders were categorized into first-time and repeat offenders based on the number of total DUI arrests they reported. First-time offenders were defined as having one DUI arrest; repeat offenders had two or more arrests. Results for 2017-2018 were:

- 85.3% (8,611) were considered first-time offenders
- 14.3% (222) were considered repeat offenders

Information was missing for 42 offenders.



In 2016-2017, 34.9% were considered first-time offenders and 65.1% were considered repeat offenders.

Figure 7

Offenders were asked four Yes/No questions about their current DUI charge. Responses were as follows:

- 30.4% (3,072) of offenders reported having their license suspended
- 1.6% (164) of offenders reported a pending DUI charge
- 27.7% (2,792) of offenders refused a breath test
- 2.9% (291) of offenders were charged with reckless driving

Information was missing for 2.6% to 4.3% of offenders on each question.

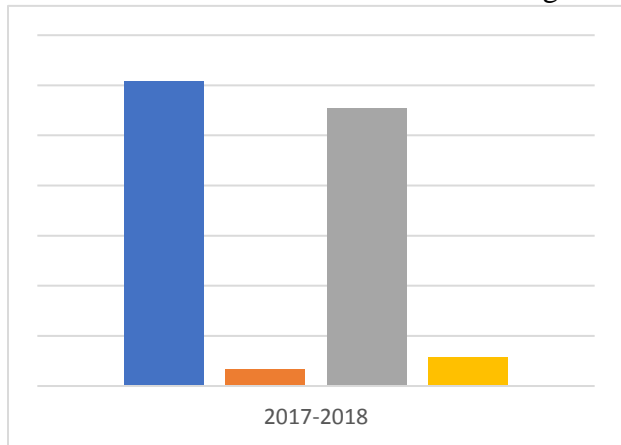


Figure 8

Blood alcohol level of offenders tested is presented in figure 8:

- 5.7% (580) had BAC of .00-.07
- 18.3% (1,846) had BAC of .08-.14
- 9.5% (961) had BAC of .15-.19
- 3.5% (350) had BAC of .20-.24
- 1.2% (125) had a BAC of .25-.45

Information was missing for 61.7% of offenders.

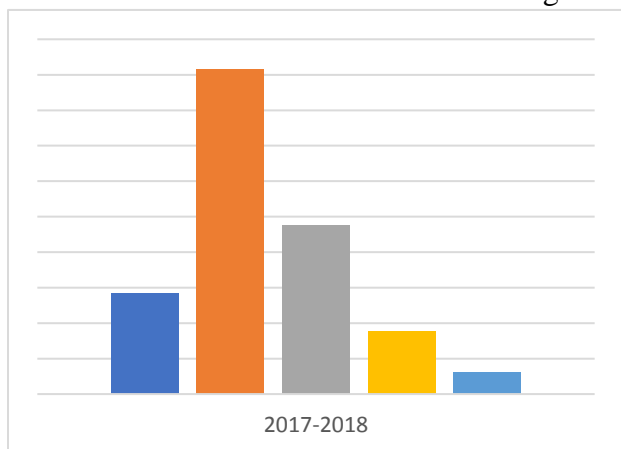
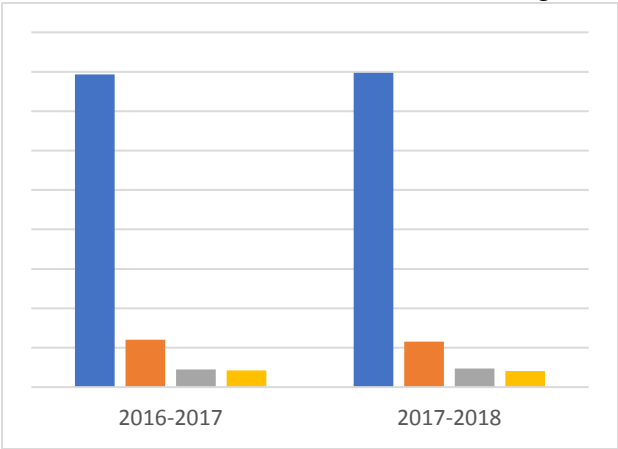


Figure 9

The DRI-2 uses a series of questions, based on the DSM-5 criteria to make a determination of substance use disorder severity. For offenders tested in 2017-2018, DSM-5 classification was:

- 79.7% (8,045) did not meet DSM-5 criteria for substance abuse
- 11.5% (1,165) met criteria for mild risk substance use disorder problem
- 4.7% (474) met criteria for moderate risk substance use disorder problem
- 4.1% (412) met criteria for severe risk substance use disorder problem



In 2016-2017, 79.3% did not meet DSM-5 criteria for substance abuse, 12.0% met criteria for mild risk substance use disorder problem, 4.5% met criteria for moderate risk substance use disorder problem, and 4.2% met criteria for a severe risk substance use disorder problem.

Figure 10 Self-Reported Offender Criminal History (N=10,096)

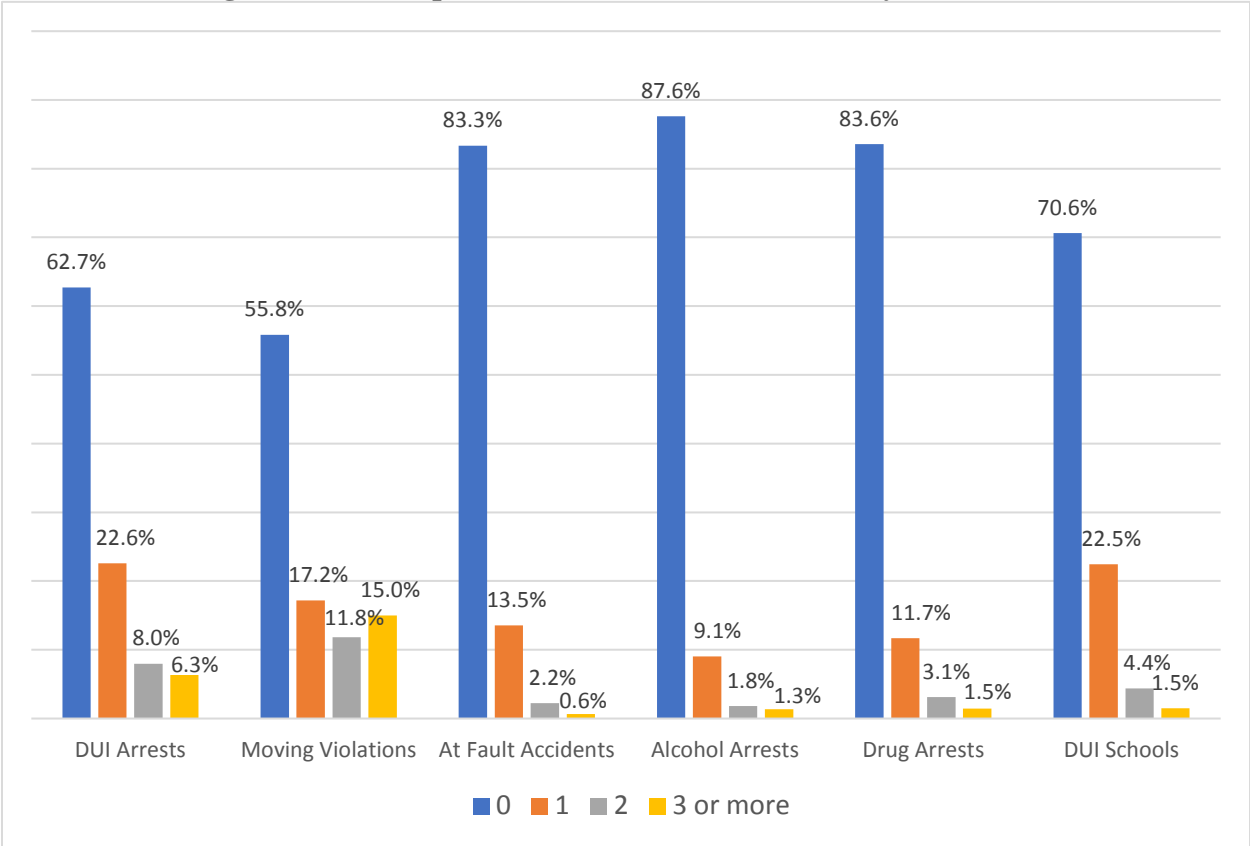
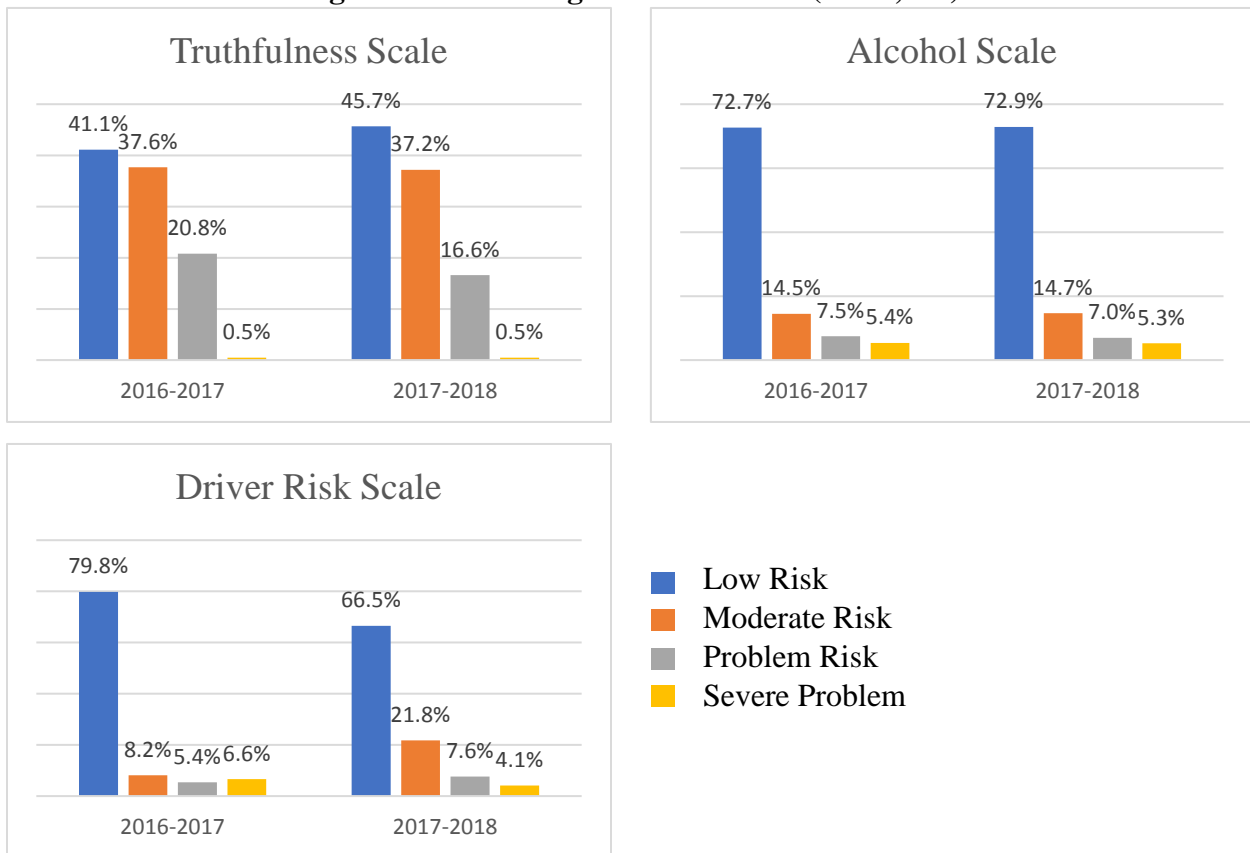


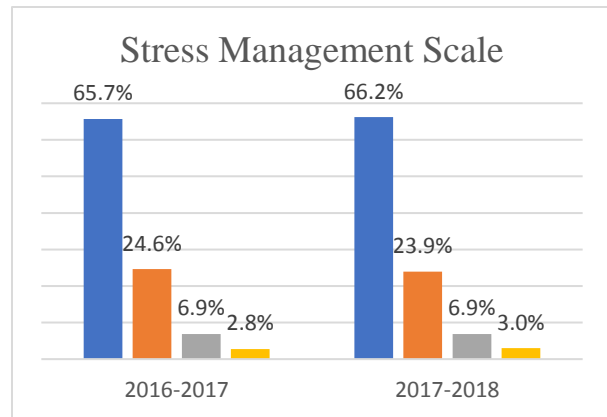
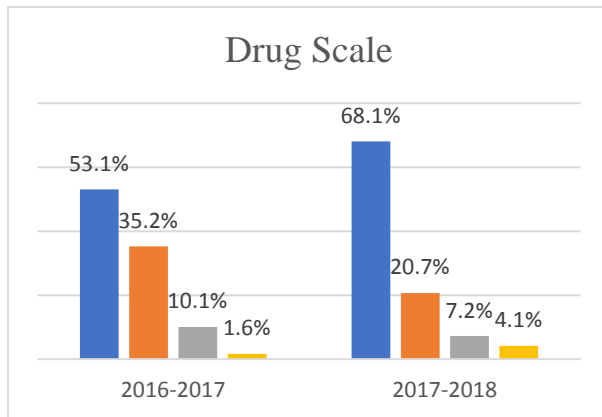
Figure 10 shows the self-reported criminal history of offenders tested in 2017-2018. 36.9% of offenders reported at least one DUI arrest, 12.2% reported at least one non-driving alcohol arrests, and 16.3% reported at least one non-driving drug arrests. 44.0% of offenders reported a moving violation and 16.3% reported an at-fault accident. 28.4% of offenders attended a DUI school. There was a statistically significant difference between male and female offenders in the frequency of criminal history items, however the mean difference was less than .3 on each item. Information was missing for 19 to 42 offenders on each criminal history item.

Risk Range Analysis

For each DRI-2 scale, respondents were classified 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). The expected percentage of offenders within the low risk is 39%, moderate risk is 30%, problem risk is 20%, and the expected percentage for severe problem classification is 11%.

Figure 11 Risk Range Classifications (N=10,096)





The Truthfulness Scale in figure 11 shows 0.5% of offenders in the Severe Problem range. 72.9% of offenders scored in the Low Risk range on the Alcohol Scale and 66.2% scored in the Low Risk range on the Stress Management Scale. There was a decrease in offenders in the Low Risk range on the Driver Risk Scale, from 79.8% to 66.5%. The percentage of offenders in the Low Risk range on the Drug Scale increased from 53.1% to 68.1%. **There was a statistically significant difference between first-time and repeat offenders on all scales. On average, repeat offenders scored higher on all scales than first-time offenders.**

Figure 12

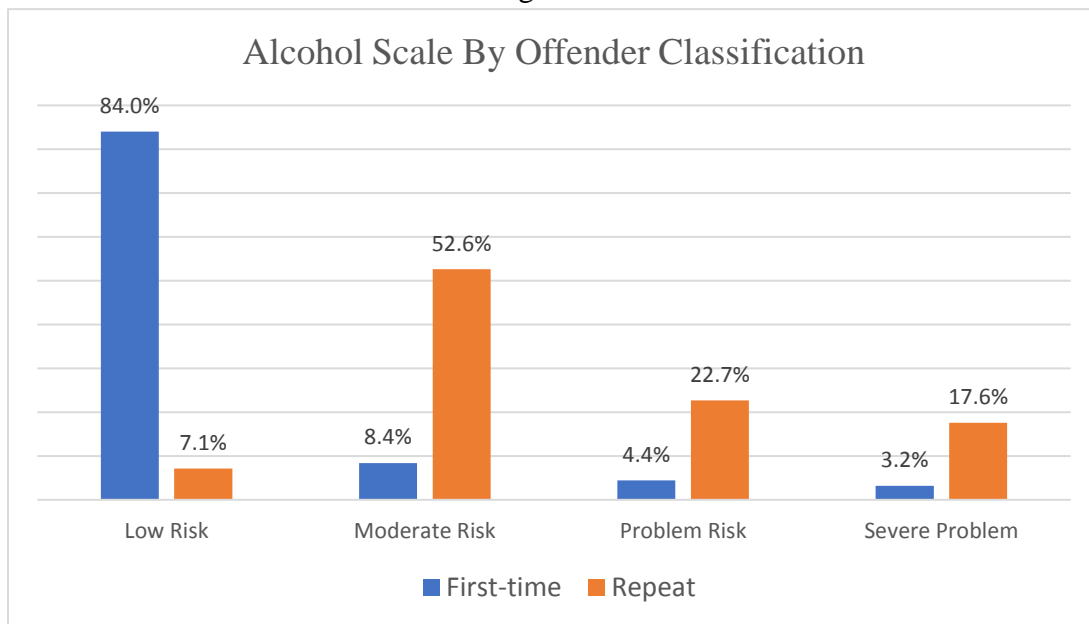


Figure 12 shows the Alcohol Scale by first-time and repeat offenders. 84.0% of first-time offenders scored in the Low Risk range. 40.3% of repeat offenders scored in the Problem Risk and Severe Problem range. On average, repeat offenders scored higher than first-time offenders on the Alcohol Scale, with a mean difference of 38.3 points.

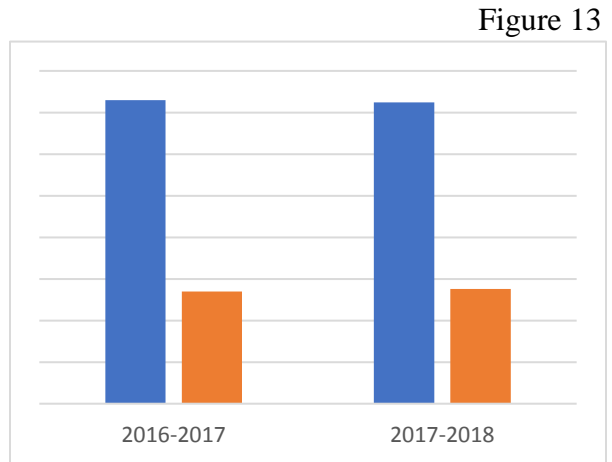
Defendant Questionnaire

The Defendant Questionnaire (DQ) is an evidence based self-report that is used to assess or evaluate adult defendants, probationers, and patients, accused or convicted of misdemeanors and felonies. The DQ consists of true-false and multiple-choice items and takes approximately 30 minutes to completed. There were 2,819 DQ tests administered between June 1, 2017 and May 31, 2018.

Offender gender results are presented in figure 13:

- 72.4% (2,040) were male
- 27.6% (779) were female

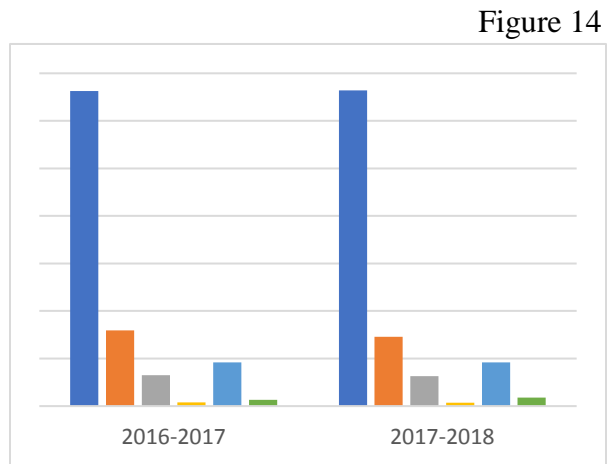
In 2016-2017, 73.0% of offenders were male and 27.0% were female.



Race and ethnicity results are presented in figure 14:

- 66.4% (1,871) were Caucasian
 - 14.6% (412) were African American
 - 6.3% (178) were Hispanic
 - <1% (20) were Asian
 - 9.2% (258) were Native American
 - 1.8% (51) responded other
- Information was missing for 29 offenders.

In 2016-2017, 66.3% were Caucasian, 15.8% were African American, 6.5% were Hispanic, <1% were Asian, 9.2% were Native American, 1.3% responded other.

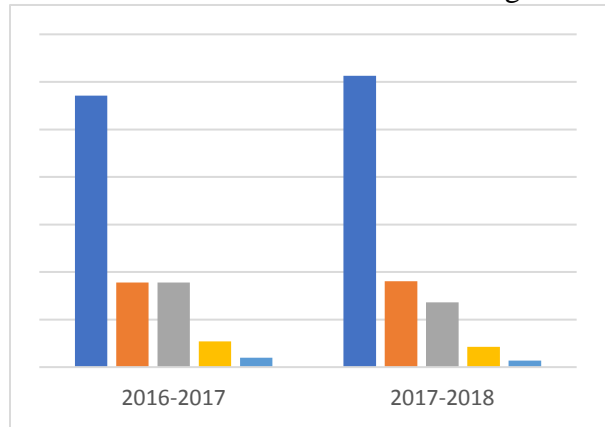


Marital status for offenders is presented in figure 15:

- 61.3% (1,729) were single
- 18.1% (510) were married
- 13.6% (382) were divorced
- 4.3% (120) were separated
- 1.4% (39) were widowed

Information was missing for 39 offenders.

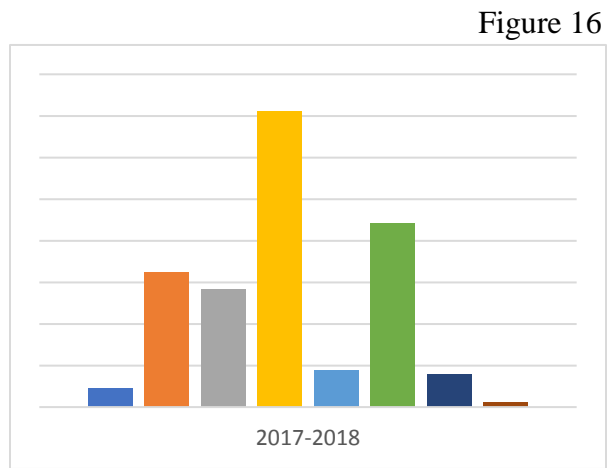
In 2016-2017, 57.1% were single, 17.8% were married, 17.7% were divorced, 5.4% were separated, and 2.0% were widowed.



Educational attainment of offenders is presented in figure 16:

- 2.2% (61) completed 8th grade or less
- 16.2% (456) completed some high school
- 14.1% (397) obtained a GED
- 35.5% (1,001) graduated high school
- 4.4% (124) completed Technical or trade school
- 22.1% (623) completed some college
- 3.9% (109) graduated college
- <1% (18) attended graduate school

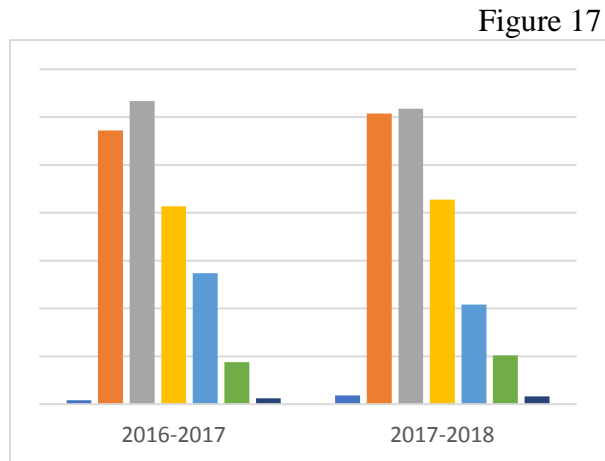
Information was missing for 30 offenders.



Age of offenders is presented in figure 17:

- <1% were 17 or younger
- 30.4% (858) were 18 to 25
- 30.9% (872) were 26 to 35
- 21.4% (604) were 36 to 45
- 10.4% (293) were 46 to 55
- 5.1% (143) were 56 to 65
- <1% (23) were 66 or older

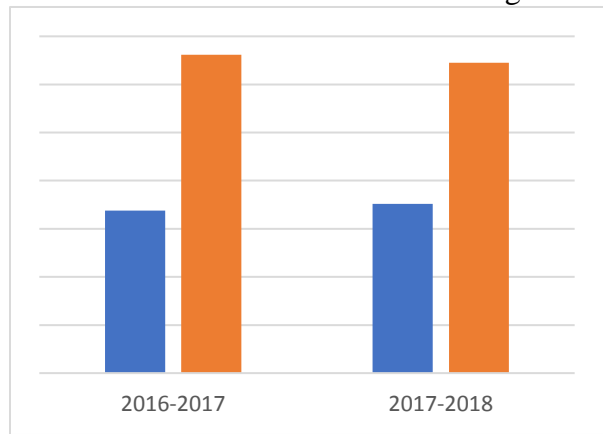
In 2016-2017, <1% were 17 or younger, 30.4% were 18 to 25, 30.9% were 26 to 35, 21.4% 36 to 45, 10.4% were 46 to 55, 5.1% (143) were 56 to 65, and <1% (23) were 66 or older.



Offenders were categorized into first-time and repeat offenders based on the number of total arrests they reported. First-time offenders were defined as having one arrest; repeat offenders had two or more arrests. Results for 2017-2018 were:

- 35.2% (993) were first-time offenders
 - 64.5% (1,819) were repeat offenders
- Information was missing for 7 offenders.

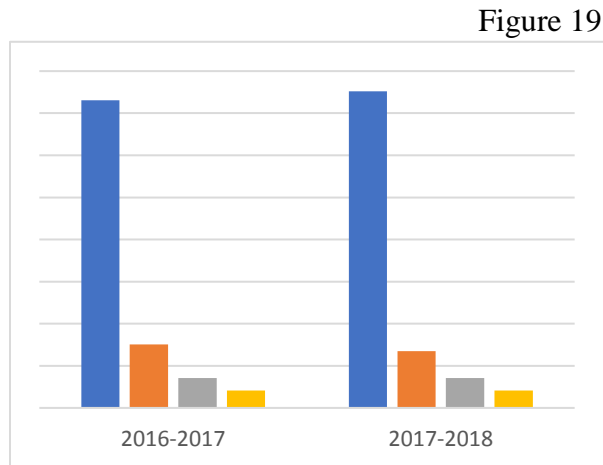
In 2016-2017, 33.8% were first-time offenders and 66.2% were repeat offenders.



Offenders were asked if they were ever convicted of a crime before age 16. 6.2% (175) of offenders reported a conviction before the age of 16. In 2016-2017, 7.1% of offenders reported a conviction before age 16.

The Defendant Questionnaire uses a series of questions, based on DSM-5 criteria to make a determination of substance use disorder severity. For 2017-2018, DSM-5 classification was:

- 75.2% (2,121) did not meet the criteria for substance use disorder severity
- 13.5% (381) of offenders were diagnosed with a mild substance use problem
- 7.1% (201) of offenders were diagnosed with a moderate substance use problem
- 4.1% (116) of offenders were diagnosed with a severe substance use problem



In 2016-2017, 73.1% did not meet the criteria for substance use disorder, 15.1% were diagnosed with a mild substance use problem, 7.1% were diagnosed with a moderate substance use problem, and 4.1% were diagnosed with a severe substance use problem.

Figure 20

Offenders were asked how many months they were employed in the last 12 months. Results for 2017-2018 were:

- 19.5% (551) were not employed in the last 12 months
- 11.7% (330) were employed 1 to 3 months
- 10.9% (308) were employed 4 to 6 months
- 9.0% (253) were employed 7 to 9 months
- 45.1% (1,272) were employed 10 to 12 months

Information was missing for 105 offenders.

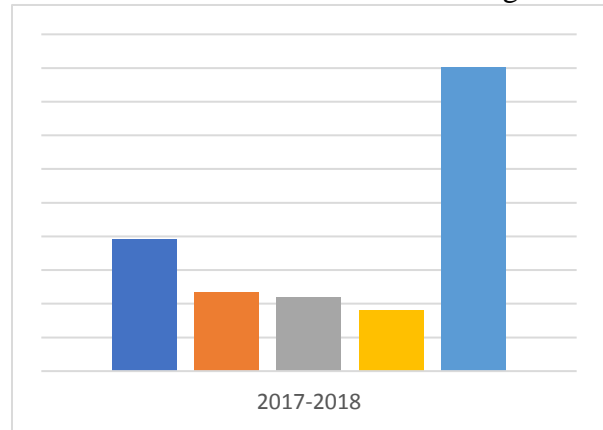


Figure 21 Self-Reported Offender Criminal History

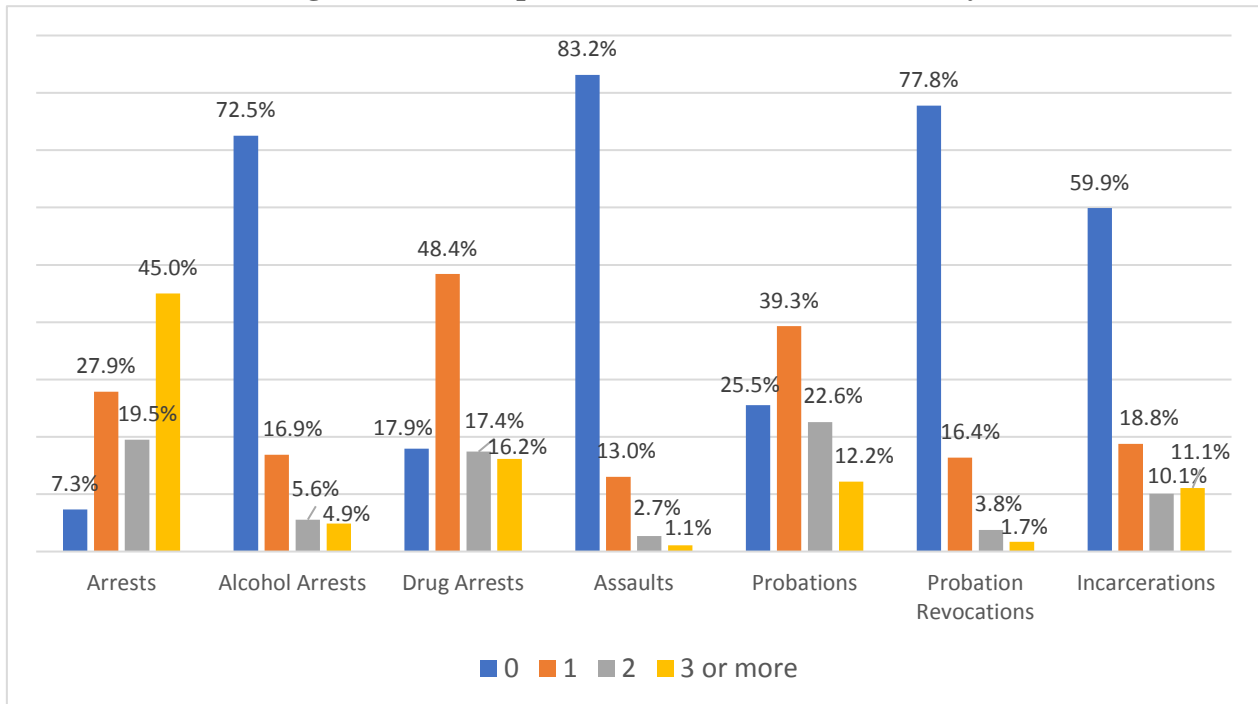
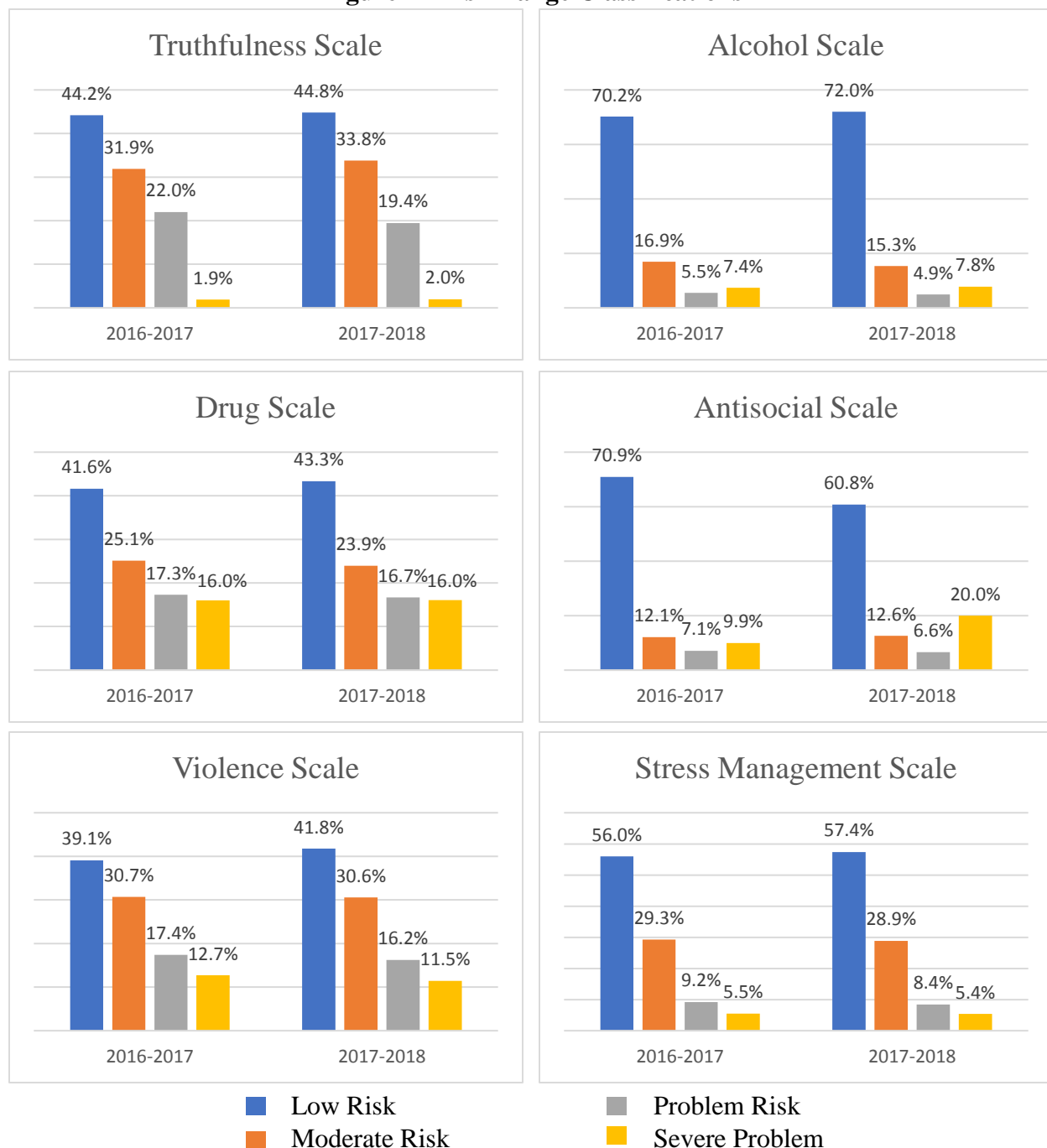


Figure 21 presents self-reported criminal history of offenders tested between June 2017 and May 2018. 45.0% of offenders reported 3 or more arrests. 27.4% of offenders reported at least one alcohol arrest, 82.0% reported at least one drug arrest, and 16.8% reported at least one assault. 74.1% of offenders reported at least one probation and 21.9% reported at least one probation revocation. 40.0% of offenders were incarcerated at least once. **There was a statistically significant between male and female offenders in the frequency of arrests. On average, male offenders had a greater frequency of arrests than female offenders.**

Risk Range Analysis

For each DQ scale, respondents were classified 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). The expected percentage of offenders within the low risk is 39%, moderate risk is 30%, problem risk is 20%, and the expected percentage for severe problem classification is 11%.

Figure 22 Risk Range Classifications



The Truthfulness Scale in figure 22 shows 2.0% of offenders in the Severe Problem range. The Alcohol and Antisocial Scales each show over 60% of offenders in the Low Risk range. 16.0% of offenders scored in the Severe Problem range on the Drug Scale. The Stress Management Scale shows 86.3% of offenders in the Low Risk or Moderate Risk range. **There was a statistically significant difference between first-time and repeat offenders on the Alcohol, Drug, Violence, and Stress Management Scales. On average, repeat offenders scored higher than first-time offenders on the Alcohol, Drug, Violence, and Stress Management Scales.**

Figure 23

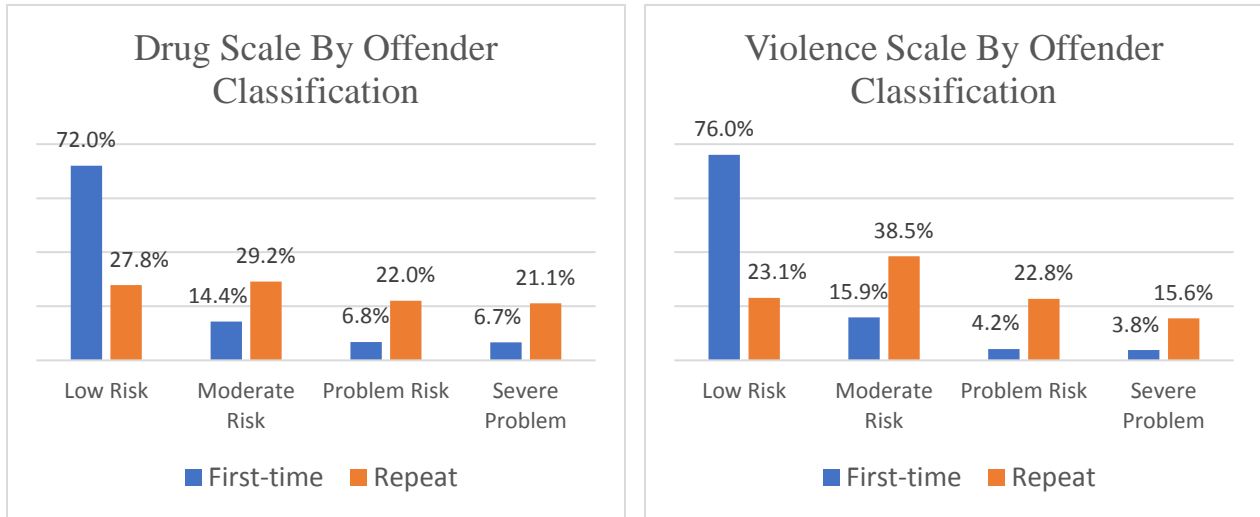


Figure 23 shows the Drug and Violence Scales by first-time and repeat offenders. Both scales show over 70% of first-time offenders in the Low Risk range. 43.1% of repeat offenders scored in the Problem Risk or Severe Problem ranges on the Drug Scale and 38.4% of repeat offenders scored in the Problem Risk or Severe Problem ranges on the Violence Scale. On average, repeat offenders scored higher than first-time offenders on the Drug and Violence Scales.

APPENDIX I

Interpreting Test Statistics

Truthfulness Scales

Each BDS test contains a Truthfulness Scale. Truthfulness Scales have been influenced by Minnesota Multiphasic Personality Inventory (MMPI) Truthfulness Scale methodology. Research has demonstrated that truthfulness is linked to positive treatment outcomes (Barber, et al, 2001; Simpson, 2004). While denial (refutation, problem minimization, or lying) has been linked to negative treatment outcomes (Marshall, Thornton, Marshall, Fernandez & Mann, 2001); resistance (Simpson, 2004); problem minimization (Murphy & Baxter, 1997); treatment dropout (Daly & Pelowski, 2000; Evans, Libo & Hser, 2009); and recidivism (Grann & Wedin, 2002; Nunes, Hanson, Firestone, Greenberg & Bradford, 2007). Ultimately test users need to determine if the patient or offender was being truthful while taking the test. Evidence-based truthfulness scales are the solution to this problem.

Truthfulness

The impact of a client's (respondent's) truthfulness on test scores is contingent upon the severity of client denial or untruthfulness, as measured by the client's Truthfulness Scale score. Low risk and moderate risk Truthfulness Scale scores mean that all Driver Risk Inventory-2 and Defendant Questionnaire scale scores are accurate. They do not need to be truth-corrected. DRI-2 and DQ truthfulness scale scores in the problem risk range mean that all DRI-2 and DQ scale scores are truth corrected for accuracy. This DRI-2 and DQ truth-correction is completed automatically on DRI-2 and DQ scale scores. In other words, all DRI-2 and DQ scale scores are automatically truth corrected when the client's truthfulness scale score is in the problem risk range. And, when the client's Truthfulness Scale score is in the severe problem risk range, this test is invalidated due to the client's denial, problem minimization, or attempted to fake good. In other words, the test and all scale scores contained therein are invalidated.

In summary, DRI-2 and DQ truthfulness scale scores in the low and moderate range mean all DRI-2 and DQ scale scores are accurate. Truthfulness Scale scores in the problem risk range are automatically truth-corrected to ensure accuracy. All DRI-2 and DQ scale scores are truth-corrected and are accurate. In contrast, Truthfulness Scale scores in the severe problem range mean that DRI-2 and DQ tests and all scales contained therein are invalid.

Reliability

Test reliability refers to a scale's consistency of measurement, Cronbach's Alpha, a measure of reliability measured the internal consistency of each scale for each instrument administered by Oklahoma Department of Mental Health and Substance Abuse Services. Perfect reliability is 1.00 and the professionally accepted standard of reliability for these types of instruments is .70-.80 (Murphy & Davidshofer, 2001).

Validity

In testing, the term validity refers to the extent that a test measures what it was designed to measure. A test cannot be accurate without being valid. When individuals known to have more severe problems or symptoms receive higher scale scores than individuals known to have fewer problems

or symptoms, the test is said to have evidence of construct validity (DeVon, et al, 2007). Offenders were categorized into first-time and repeat offenders. First-time offenders are defined as having one (the current) arrest; repeat offenders have two or more arrests. It has been demonstrated that repeat offenders' mean scale scores will be higher than first-time offenders, indicating the presence of more severe symptoms or problems.

DRI-2 Test Statistics

Reliability scores for each scale were as follows: **Truthfulness Scale, .84; Alcohol Scale, .89; Drug Scale, .90; Driver Risk Scale, .85; and Stress Management Scale, .90.** All scales meet or exceed accepted reliability standards.

T-test analyses were conducted to examine whether the differences in mean scores were statistically significant between first-time and repeat offenders on each scale. Adjustments were made for unequal variance and Bonferroni correction was applied to control for experimentwise error. Results were statistically significant for the Truthfulness, Alcohol, Drug, Driver Risk, and Stress Management Scales, demonstrating repeat offenders, on average, scored higher than first-time offenders on these scales.

DQ Test Statistics

Reliability scores for each scale were as follows: **Truthfulness Scale, .87; Alcohol Scale, .93; Drug Scale, .92; Violence Scale, .87; Antisocial Scale, .86; and Stress Management Scale, .91.** All scales exceed accepted reliability standards.

T-test analyses were conducted to examine whether the differences in mean scores were statistically significant between first-time and repeat offenders on each scale. Adjustments were made for unequal variance and Bonferroni correction was applied to control for experimentwise error. Results were statistically significant for the Alcohol, Drug, Violence, and Stress Management Scales, demonstrating repeat offenders, on average, scored higher than first-time offenders on the scales. Results were not significant for the Truthfulness or Antisocial Scales.

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