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Centre for Addiction and Mental Health

Characteristics and Predictors of Recidivist Drink-Drivers




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Remedial Programs

- Aim - to reduce risk behaviours, and drink-driving recidivism and collisions, among those previously convicted of DWI.
- Education Programs - inform participants about:
  - 1) Safe drinking levels
  - 2) Effects of alcohol on the body
  - 3) Safe driving techniques
  - Drinking problems are not a direct focus
- Treatment Programs – reduce drinking problems
- Randomized experiments have shown benefits on knowledge, attitudes, drinking behaviour, recidivism, collisions, and health-related measures including mortality rates

Understanding Recidivism: Important for Assessment of Remedial Programs

- Few studies have addressed this issue.
- Previous research has examined remedial program data for groups that do and do not recidivate over a particular follow-up interval
  - Recidivism status based on whether or not drivers are apprehended for a subsequent offence
- But, chances of being caught are relatively low.
- Thus, these studies face obvious bias.

Nochajski & Stasiewicz (2006): Review on Recidivist Drink-Drivers

- Factors found to be associated with drink-driving recidivism included:
  - Being male, older, and not currently married
  - Higher rates of collisions and traffic violations
  - More indications of psychopathology
  - Measures of substance use were not consistently associated with recidivism.
- Conclusion: drink-driving offenders are a heterogeneous group, and thus many factors are likely to be involved in the processes leading to recidivism

Back on Track (BOT)

- Ontario's remedial program for impaired drivers
- Includes assessment, workshop, and follow-up interview
- Assessment measures severity of substance-related problems.
  - Less severe: 8-hour education workshop
  - More severe: 16-hour treatment workshop
- Assessment data is the focus of the current analysis.

Outcome Evaluation of Recidivist Drivers in BOT

- Question 1: What proportion of BOT drivers are repeat offenders (i.e., repeat program participants)?
- No information on # of BOT drivers are convicted recidivists
- Recidivist conviction rates from other jurisdictions range from 2.5 - 10%
- Thus we estimated how many BOT first-time offenders should be expected to become second-time offenders.

Outcome Evaluation of Recidivist Drivers in BOT

- Based on a sample of 59,134 offenders and assuming:
  - No replacements
  - First re-offences only
  - Conservative estimate of 60% for # of re-offenders who would attend BOT (based on # of BOT registrations since inception)
- We would expect between 887 and 3,548 re-entrants.
  - If # of re-entrants is > 3,548, may suggest program is failing in goal to reduce recidivism
  - If # of re-entrants is < 887, suggests program is successful in reducing recidivism rates.

Outcome Evaluation of Recidivist Drivers in BOT

- Question 2: What factors differentiate repeat program participants from those who do not become repeat program participants?
- No previous studies examined characteristics of drivers returning to remedial program
- Macdonald & Mann (1996) reviewed studies comparing the characteristics of recidivists vs. non-recidivists
- Recidivist drivers:
  - Consumed more alcohol
  - Had more alcohol problems
  - Scored higher on psychological measures of:
    - Hostility
    - Sensation seeking
    - Psychopathic deviance
    - Mania
    - Depression

Outcome Evaluation of Recidivist Drivers in BOT

- Based on these and other findings, we predicted that BOT re-offenders would be characterized by specific demographic factors (male, older, not married) and higher levels of alcohol problems.

Methods

- Sample: 59,134 individuals who completed follow-up interview by 2010
- Demographic Profile:
  - Predominantly male (88%)
  - Mean age: 42 years (75% younger than 50 years)
  - Average 12 years of schooling
  - Mean income between $20,000 and $49,999
  - 72.1% currently employed
  - Most married (44.4%) or single (35.8%)
  - 25.8% self-reported a previous drink-driving offence
  - 72.4% assigned to the education workshop; 27.6% to treatment workshop

Methods

- BOT Assessment of substance use issues and related problems
  - Alcohol Dependence Scale (ADS)
  - Drug Abuse Screening Test (DAST)
  - Research Institute on Addictions Self-Inventory (RIASI) – total score and recidivism score
  - Adverse Consequences of Substance Use Scale (ACSUS)
  - Self-reported days of substance use in the previous 90 days

Results – Question 1
of Recidivists

- Of the 59, 134 BOT participants, 586 were repeat offenders.
- Based on these numbers, the recidivism rate among BOT participants is estimated to be less than 1%.
- The # of repeat offenders is less than the 887 to 3,548 re-entrants that might have been expected.
- Suggests that BOT is having a positive effect on client recidivism, which is consistent with previous evaluations of BOT.
- BUT, expected number of re-entrants was based on data from several jurisdictions that may have differing policies and circumstances that affect recidivism rates differently.
- Still, these results are very positive.

Results – Question 2
Characteristics of Recidivists

- Chi-square and t-test analyses
- Comparisons:
  - Non-recidivists vs Recidivists (1st attendance)
  - Non-recidivists vs Recidivists (2nd attendance)
  - Recidivists (1st attendance) vs Recidivists (2nd attendance)

Demographic Characteristics of BOT Recidivists at 1st Attendance

- Compared to non-recidivists, recidivists (1st attendance) were younger, more likely to be male, and less likely to be married.
- No differences on income, employment, education or workshop assignment.

Variables		*Non-recidivists (N=58548)*	*Recidivists – 1st Assessment (N=586)*	*Recidivists – 2nd Assessment (N=586)*
Age (%)	<30	26.82%	31.91%	19.28%
	30-44	38.50%	39.76%	38.05%
	45-59	28.33%	24.23%	33.79%
	60-74	6.03%	3.92%	8.02%
	>75	0.33%	0.17%	0.85%
Gender (%)	Female	12.96%	7.51%	7.51%
	Male	87.04%	92.49%	92.49%
Marital Status (%)	Married	43.35%	37.54%	44.18%
	Single	37.93%	41.13%	33.39%
	Previously	18.72%	21.33%	22.43%

Demographic Characteristics of BOT Recidivists at 1st Attendance

- Male/younger/unmarried
  - Traditionally associated with more risk-taking behaviours (e.g., problematic alcohol and substance use, driving after drinking, driving after cannabis use, aggressive driving)
  - Previously identified as predictors of impaired driving recidivism
- Higher SES and education have previously been associated with less likelihood of repeat offending, but not so in the current analysis.
  - This relationship may not hold for multiple program attendance.
- Program assignment not associated with recidivist status.
  - May suggest differential assignment did not alter recidivism risk, or recidivism risk was similarly reduced by both programs.
  - Future regression discontinuity research?

Demographic Characteristics of BOT Recidivists at 2nd Attendance

- Compared to non-recidivists, recidivists (2nd attendance) were older, less likely to be single and more likely to be previously married.

Variables		*Non-recidivists (N=58548)*	*Recidivists – 1st Assessment (N=586)*	*Recidivists – 2nd Assessment (N=586)*
Age (%)	<30	26.82%	31.91%	19.28%
	30-44	38.50%	39.76%	38.05%
	45-59	28.33%	24.23%	33.79%
	60-74	6.03%	3.92%	8.02%
	>75	0.33%	0.17%	0.85%
Gender (%)	Female	12.96%	7.51%	7.51%
	Male	87.04%	92.49%	92.49%
Marital Status (%)	Married	43.35%	37.54%	44.18%
	Single	37.93%	41.13%	33.39%
	Previously	18.72%	21.33%	22.43%

Demographic Characteristics of BOT Recidivists at 2nd Attendance

- Compared to non-recidivists, recidivists (2nd attendance) had higher income levels, were more likely to be retired and less likely to be employed part-time, and were more likely to be assigned to the treatment workshop.

Variables		***Non-recidivists*** *(N=58548)*	***Recidivists – 1st Assessment*** *(N=586)*	***Recidivists – 2nd Assessment*** *(N=586)*
Income (%)	<$20000	24.45%	24.43%	20.32%
	$20000-49999	52.32%	51.14%	51.87%
	$50000-79999	17.10%	19.16%	18.00%
	$80000 and above	6.12%	5.27%	9.80%
Employment (%)	Employed full-time	70.39%	73.46%	70.62%
	Employed part-time	5.73%	6.68%	3.09%
	Not employed/ student	19.58%	16.44%	19.76%
	Retired	4.30%	3.42%	6.53%
Assigned to: (%)	Education	72.10%	71.84%	63.31%
	Treatment	27.90%	28.16%	36.69%

Demographic Characteristics of BOT Recidivists at 2nd Attendance

- Some changes reflect simple passage of time (e.g., older, retired)
- Others may reflect individuals becoming more engaged with their society, who may have more to lose from their conviction.
- The larger proportion of recidivists assigned to treatment workshop may reflect recognition of alcohol problems by this group and increasing honesty in reporting these problems.

Characteristics of BOT Recidivists at 1st vs 2nd Attendance

- Changes in recidivists over time generally confirm what we have learned thus far.
- Relative to 1st attendance, recidivists at 2nd attendance were more engaged with society: higher income, more likely to be married.

Variables		*Non-recidivists (N=58548)*	*Recidivists – 1st Assessment (N=586)*	*Recidivists – 2nd Assessment (N=586)*
Marital Status (%)	Married	43.35%	37.54%	44.18%
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	$80000 and above	6.12%	5.27%	9.80%
Assigned to: (%)	Education	72.10%	71.84%	63.31%
	Treatment	27.90%	28.16%	36.69%

Characteristics of BOT Recidivists at 1st vs 2nd Attendance

- Relative to their 1st attendance, more drivers assigned to treatment workshop at 2nd attendance, suggesting greater severity of alcohol- or substance-related problems.

Variables		***Non-recidivists*** *(N=58548)*	***Recidivists – 1st Assessment*** *(N=586)*	***Recidivists – 2nd Assessment*** *(N=586)*
Marital Status (%)	Married	43.35%	37.54%	44.18%
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Screening Scores & Previous Convictions

Recidivists at 1st Attendance

- Previous research: all screening measures predict 6-mth substance use and related problems.
- Compared to non-recidivists, recidivists (1st attendance) had higher scores on the ADS, but not the RIASI-T, RIASI-R or DAST.
- ADS may have a special role in identifying potential recidivists.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
RIASI-T	6.92(4.95)	7.11(5.18)	7.91(5.53)
RIASI-R	3.30(2.16)	3.36(2.21)	3.60(2.22)
ADS	1.78(3.36)	2.23(3.42)	1.77(3.61)
DAST	0.31(1.17)	0.40(1.39)	0.24(1.01)
DWI Convictions	1.35(0.74)	1.24(0.60)	2.16(0.63)

Screening Scores & Previous Convictions

Recidivists at 1st Attendance

- Surprisingly, recidivist drivers (1st attendance) had fewer previous DWI convictions than non-recidivists.
- This may be due to the fact that the recidivist group is younger and had likely not been licensed for as long as the non-recidivist group; may have had less access to a vehicle and thus fewer opportunities to drive.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
RIASI-T	6.92(4.95)	7.11(5.18)	7.91(5.53)
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ADS	1.78(3.36)	2.23(3.42)	1.77(3.61)
DAST	0.31(1.17)	0.40(1.39)	0.24(1.01)
DWI Convictions	1.35(0.74)	1.24(0.60)	2.16(0.63)

Screening Scores & Previous Convictions

Recidivists at 2nd Attendance

- Compared to non-recidivists, recidivists (2nd attendance) had higher scores on the RIASI-T and RIASI-R, but not the ADS
- May suggest that the RIASI has more concurrent validity, while the ADS has more predictive validity; future research needed.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
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DWI Convictions	1.35(0.74)	1.24(0.60)	2.16(0.63)

Screening Scores & Previous Convictions

Recidivists at 1st vs 2nd Attendance

- Compared to their 1st attendance, recidivists at 2nd attendance had higher scores on the RIASI but lower scores on the ADS and DAST.
- Provides some confirmation of the sensitivity of the RIASI to factors that affect recidivism status.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
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DWI Convictions	1.35(0.74)	1.24(0.60)	2.16(0.63)

RIASI Factor Scores

- Mann et al. (2009) identified 8 factors in the RIASI: negative affect, sensation seeking, alcohol-quantity, social conformity, high risk lifestyle, alcohol problems, interpersonal competence, family history.
- No factor score differentiated recidivists (1st attendance) from non-recidivists.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Negative Affect	1.14(1.53)	1.25(1.59)	1.30(1.82)
Sensation Seeking	0.44(0.73)	0.45(0.79)	0.44(0.70)
Alcohol-Quantity	1.48(1.45)	1.51(1.47)	1.53(1.47)
Social Desirability scale	0.48(0.74)	0.48(0.72)	0.46(0.73)
High Risk Lifestyle	1.17(1.15)	1.14(1.17)	1.32(1.21)
Alcohol-Consequences	0.58(1.13)	0.65(1.29)	0.94(1.38)
Interpersonal Competence	0.54(0.82)	0.57(0.89)	0.75(1.04)
Family History	0.53(0.70)	0.51(0.71)	0.58(0.72)

RIASI Factor Scores

- Recidivists (2nd attendance), compared to non-recidivists, had higher scores on negative affect, high risk lifestyle, alcohol-consequences and interpersonal competence.
- May reflect an increased readiness to change including acknowledgement of problems related to alcohol and drugs.
- These differences were generally confirmed by the comparison of recidivists at first versus second attendance.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Negative Affect	1.14(1.53)	1.25(1.59)	1.30(1.82)
Sensation Seeking	0.44(0.73)	0.45(0.79)	0.44(0.70)
Alcohol-Quantity	1.48(1.45)	1.51(1.47)	1.53(1.47)
Social Desirability scale	0.48(0.74)	0.48(0.72)	0.46(0.73)
High Risk Lifestyle	1.17(1.15)	1.14(1.17)	1.32(1.21)
Alcohol-Consequences	0.58(1.13)	0.65(1.29)	0.94(1.38)
Interpersonal Competence	0.54(0.82)	0.57(0.89)	0.75(1.04)
Family History	0.53(0.70)	0.51(0.71)	0.58(0.72)

RIASI Factor Scores

- Recidivists (2nd attendance), compared to non-recidivists, had higher scores on negative affect, high risk lifestyle, alcohol-consequences and interpersonal competence.
- May reflect an increased readiness to change including acknowledgement of problems related to alcohol and drugs.
- These differences were generally confirmed by the comparison of recidivists at first versus second attendance.

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Negative Affect	1.14(1.53)	1.25(1.59)	1.30(1.82)
Sensation Seeking	0.44(0.73)	0.45(0.79)	0.44(0.70)
Alcohol-Quantity	1.48(1.45)	1.51(1.47)	1.53(1.47)
Social Desirability scale	0.48(0.74)	0.48(0.72)	0.46(0.73)
High Risk Lifestyle	1.17(1.15)	1.14(1.17)	1.32(1.21)
Alcohol-Consequences	0.58(1.13)	0.65(1.29)	0.94(1.38)
Interpersonal Competence	0.54(0.82)	0.57(0.89)	0.75(1.04)
Family History	0.53(0.70)	0.51(0.71)	0.58(0.72)

Consequences of Substance Use

- The ACSUS showed some ability to differentiate recidivists from non-recidivists.
- Compared to non-recidivists, recidivists (1st attendance) had more problems with memory, relationships, and the law.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Health problems	0.02(0.21)	0.02(0.17)	0.04(0.27)
Memory Loss	0.02(0.14)	0.03(0.17)	0.02(0.14)
Mood Changes	0.06(0.24)	0.07(0.27)	0.06(0.24)
Relationship problems	0.03(0.18)	0.05(0.23)	0.04(0.25)
Aggression problems	0.01(0.11)	0.01(0.14)	0.01(0.07)
Work problems	0.01(0.14)	0.02(0.15)	0.01(0.12)
Legal problems	0.26(0.67)	0.34(0.75)	0.04(0.29)
Financial problems	0.02(0.16)	0.03(0.22)	0.02(0.15)

Consequences of Substance Use

- Compared to non-recidivists, recidivists (2nd attendance) had more problems with health and relationships, but fewer legal problems.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Health problems	0.02(0.21)	0.02(0.17)	0.04(0.27)
Memory Loss	0.02(0.14)	0.03(0.17)	0.02(0.14)
Mood Changes	0.06(0.24)	0.07(0.27)	0.06(0.24)
Relationship problems	0.03(0.18)	0.05(0.23)	0.04(0.25)
Aggression problems	0.01(0.11)	0.01(0.14)	0.01(0.07)
Work problems	0.01(0.14)	0.02(0.15)	0.01(0.12)
Legal problems	0.26(0.67)	0.34(0.75)	0.04(0.29)
Financial problems	0.02(0.16)	0.03(0.22)	0.02(0.15)

Consequences of Substance Use

- However, recidivists showed only a decline in legal problems from 1st to 2nd attendance.
- Nonetheless, various problem measures show promise in identifying participants who may be more likely to become recidivists.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Health problems	0.02(0.21)	0.02(0.17)	0.04(0.27)
Memory Loss	0.02(0.14)	0.03(0.17)	0.02(0.14)
Mood Changes	0.06(0.24)	0.07(0.27)	0.06(0.24)
Relationship problems	0.03(0.18)	0.05(0.23)	0.04(0.25)
Aggression problems	0.01(0.11)	0.01(0.14)	0.01(0.07)
Work problems	0.01(0.14)	0.02(0.15)	0.01(0.12)
Legal problems	0.26(0.67)	0.34(0.75)	0.04(0.29)
Financial problems	0.02(0.16)	0.03(0.22)	0.02(0.15)

of Days of Substance Use

(previous 90 days)

- Recidivists (1st attendance) did not differ from non-recidivists on any measure of substance use.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Drinks per drinking day	3.16(2.96)	3.35(3.00)	2.56(3.05)
Alcohol	12.77(16.96)	11.61(14.81)	10.39(17.46)
Cocaine	0.02(0.47)	0.01(0.09)	0.05(0.71)
Amphetamines	0.04(1.83)	0.01(0.22)	0.00(0.00)
Cannabis	1.26(7.65)	1.16(7.17)	0.78(6.34)
Benzodiazepines	1.45(10.75)	0.71(7.37)	2.80(15.34)
Barbiturates	0.09(2.65)	0.00(0.00)	0.15(3.68)
Heroin	0.01(0.83)	0.00(0.00)	0.00(0.00)
Prescription Opioids	1.89(11.74)	1.02(8.16)	2.11(12.70)
Codeine	0.19(3.27)	0.02(0.25)	0.17(2.71)
Hallucinogens	0.00(0.08)	0.00(0.06)	0.00(0.04)
Glue	0.00(0.17)	0.00(0.00)	0.00(0.00)
Tobacco	49.91(43.63)	50.97(43.29)	48.10(43.71)
Other	3.91(18.07)	4.04(18.36)	5.08(20.72)

of Days of Substance Use

(previous 90 days)

- Compared to non-recidivists, recidivists (2nd attendance) reported drinking fewer drinks per occasion, and having fewer drinking occasions.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Drinks per drinking day	3.16(2.96)	3.35(3.00)	2.56(3.05)
Alcohol	12.77(16.96)	11.61(14.81)	10.39(17.46)
Cocaine	0.02(0.47)	0.01(0.09)	0.05(0.71)
Amphetamines	0.04(1.83)	0.01(0.22)	0.00(0.00)
Cannabis	1.26(7.65)	1.16(7.17)	0.78(6.34)
Benzodiazepines	1.45(10.75)	0.71(7.37)	2.80(15.34)
Barbiturates	0.09(2.65)	0.00(0.00)	0.15(3.68)
Heroin	0.01(0.83)	0.00(0.00)	0.00(0.00)
Prescription Opioids	1.89(11.74)	1.02(8.16)	2.11(12.70)
Codeine	0.19(3.27)	0.02(0.25)	0.17(2.71)
Hallucinogens	0.00(0.08)	0.00(0.06)	0.00(0.04)
Glue	0.00(0.17)	0.00(0.00)	0.00(0.00)
Tobacco	49.91(43.63)	50.97(43.29)	48.10(43.71)
Other	3.91(18.07)	4.04(18.36)	5.08(20.72)

of Days of Substance Use

(previous 90 days)

- Benzodiazepine use was higher among recidivists.
- Data on 1st vs 2nd attendance confirm these results: fewer drinks per drinking day and higher benzodiazepine use at 2nd attendance.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
Drinks per drinking day	3.16(2.96)	3.35(3.00)	2.56(3.05)
Alcohol	12.77(16.96)	11.61(14.81)	10.39(17.46)
Cocaine	0.02(0.47)	0.01(0.09)	0.05(0.71)
Amphetamines	0.04(1.83)	0.01(0.22)	0.00(0.00)
Cannabis	1.26(7.65)	1.16(7.17)	0.78(6.34)
Benzodiazepines	1.45(10.75)	0.71(7.37)	2.80(15.34)
Barbiturates	0.09(2.65)	0.00(0.00)	0.15(3.68)
Heroin	0.01(0.83)	0.00(0.00)	0.00(0.00)
Prescription Opioids	1.89(11.74)	1.02(8.16)	2.11(12.70)
Codeine	0.19(3.27)	0.02(0.25)	0.17(2.71)
Hallucinogens	0.00(0.08)	0.00(0.06)	0.00(0.04)
Glue	0.00(0.17)	0.00(0.00)	0.00(0.00)
Tobacco	49.91(43.63)	50.97(43.29)	48.10(43.71)
Other	3.91(18.07)	4.04(18.36)	5.08(20.72)

of Days of Substance Use

(previous 90 days)

- Benzodiazepine use was higher among recidivists.
- Data on 1st vs 2nd attendance confirm these results: fewer drinks per drinking day and higher benzodiazepine use at 2nd attendance.

Variables	***Non-Recidivists*** *Mean(SD) (N= 58,548)*	***Recidivists – 1st Assessment*** *Mean(SD) (N= 586)*	***Recidivists – 2nd Assessment*** *Mean(SD) (N= 586)*
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Best Measures for Identifying Potential Recidivists

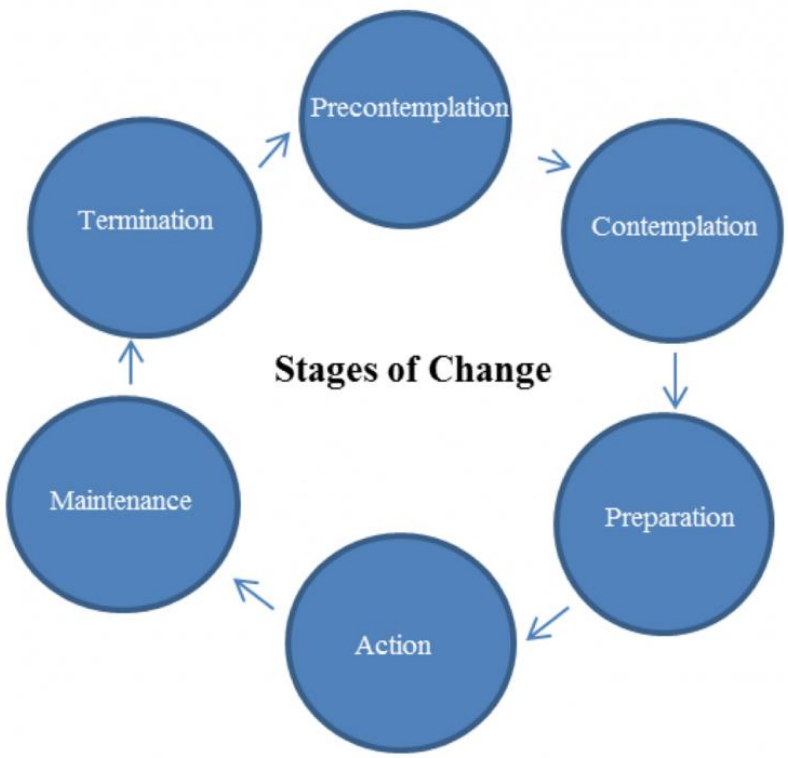
- Sociodemographic, problem screening, and adverse consequence measures showed ability to identify potential recidivists; substance use measures did not.
  - Consistent with Nochajski & Stasiewicz (2006).
- Previous studies have had difficulty developing instruments to identify recidivists. Perhaps these studies relied consumption measures.
- Focusing on problems and consequences may identify those individuals who experience more difficulty in modifying their behaviour to avoid negative consequences of drinking and drug use, even when substance use measures are similar.

Readiness to Change?

- Changes from 1st to 2nd Attendance
  - Increased socioeconomic engagement (e.g. higher income)
  - More acute substance use problems (RIASI)
  - Decreases in problems reflecting more severe dependence (ADS)
  - Decreases in legal problems
  - Increases in factor scores suggesting greater reporting or recognition of problems
  - Lower levels of alcohol use but higher levels of benzodiazepine use

Readiness to Change?

- These changes could reflect greater insight into personal problems and reduced denial – important prerequisites for constructive change
- Transtheoretical Model
  = influential model of how individuals engage with treatment services, which suggests that there are important stages that individuals pass through reflecting readiness to change.



Readiness to Change?

- BOT recidivists have been reconvicted of a drink-driving offence following program participation, and thus might be considered to be lacking a readiness to change.
- But, because this group has also returned to BOT to re-engage with the remedial process, it is possible that the group may in fact now be more ready to change. Differences in the data between first and second appearance may be evidence of this.
- We cannot know which explanation is correct because analyses do not include recidivists who did not return to BOT.
- Future analyses should endeavour to link program data to driver record data to determine how returning and non-returning recidivists differ.

Limitations

- Observations are restricted to individuals who chose to abide by mandatory re-licensing requirements by completing the BOT program.
  - This represents a selection bias, thus demonstrated effects may not be generalizable to the full population of convicted drink-drivers.
  - Nonetheless, more than 50% of eligible individuals choose to participate in BOT, which is one of the highest participation rates in Canada.
- Results are based on self-report, which may be biased by socially desirable responding.
  - However, reviews of behavioural self-reports of drug users have identified this approach as a valid and reliable means of measuring drug use and related problems.

Future Directions

- These results are useful for understanding the nature of recidivist drivers and how best to identify and respond to them.
- These results suggest that it may be possible to develop targeted program initiatives to further reduce recidivism risk.
- Future research will be needed to achieve this goal.