Archives of Scientific Psychology Reporting Questionnaire for Manuscripts Describing Primary Data Collections

JARS: ALL: These questions should be answered for ***all*** submitted manuscripts

MANUSCRIPT SECTION	Description
TITLE A Prospective Study of Psychiatric Comorbidity and Recidivism Among Repeat DUI Offenders	Does the Title identify the variables and theoretical issues under investigation, as well as the relationship between them? Yes ■ No ☐ If no, please explain:
AUTHOR NOTE For a review of what should be included in the Author Note, see the *Publication Manual of the American Psychological Association*: http://www.apastyle.org/manual/ The authors extend special thanks to the directors and counselors at Middlesex Driving Under the Influence of Liquor treatment program (MDUIL) - Charles Karayianis, Michael Kennedy, Jim Barry, Christine Breen, Daniel Gallo, Karen Horrigan, Michael Jezylo - as well as the entire MDUIL staff for their collaboration on this project. The authors also would	Does the Author Note contain acknowledgment of special circumstances, for example: • use of data also appearing in previous publications, dissertations, conference papers? Yes☐ No■ If yes, please explain:

- sources of funding or other support?

  Yes ☒ No☐

  If yes, please explain:

  NIAAA Grant R01 AA014710 and NIAAA Grant *R03 AA017516*

- relationships that may be perceived as conflicts of interest?

  Yes☐ No ☒

  If yes, please explain:

SCIENTIFIC ABSTRACT	Does the Scientific Abstract describe:
Psychiatric comorbidity has emerged as a key element distinguishing DUI offenders from others, and, in some cases, distinguishing repeat offenders from first-time offenders. This paper utilizes a prospective design to determine whether the comorbid disorders identified among repeat DUI offenders can predict recidivism. Seven hundred forty-three repeat DUI offenders were recruited from a two-week inpatient treatment program at which they received a standardized mental health assessment and followed across five years post-treatment to track DUI offense, motor vehicle-related offenses, and general criminal offenses. Psychiatric comorbidity, though it did not predict DUI recidivism specifically, predicted criminal re-offense more generally. In addition, there was a specific relationship between lifetime attention deficit disorder and repeated motor vehicle-related offenses. These findings suggest that for many repeat offenders, DUI is one outlet in a constellation of criminal behavior, and that psychiatric	• the problem under investigation? Yes ■ No ☐ If no, please explain: • participants or subjects, specifying pertinent characteristics; in animal research, including genus and species? Yes ■ No ☐ If no, please explain:

- study method, including:
  - sample size?
    Yes ■ No ☐
  - any apparatus used?
    Yes ■ No ☐
  - measures?
    Yes ■ No ☐
  - data-gathering procedures?
    Yes ■ No ☐
  - research design (e.g., experiment, observational study)?
    Yes ■ No ☐

If answered "no" for any of the study methods above, please explain:

- findings, including effect sizes and confidence intervals and/or statistical significance levels?

  Yes ☐ No ■

If no, please explain:

There is not enough room in the abstract for statistical detail. Statistical detail is provided in the results section

- conclusions and the implications or applications?
  Yes ■ No □

  If no, please explain:

INTRODUCTION For the Introduction please indicate whether the requested information can be found in this section of the manuscript, in a supplemental file, or whether the information is not relevant to the study. If the information is not relevant, please provide a brief explanation.	Does the Introduction: • describe the importance of the problem? In manuscript ☒ In supplemental files ☐ Not relevant ☐ If not relevant, please explain: • describe theoretical or practical implications of the problem? In manuscript ☒ In supplemental files ☐ Not relevant ☐ If not relevant, please explain:

	• review relevant scholarship in relation to previous work? In manuscript ⬓ In supplemental files ☐ Not relevant ☐ If not relevant, please explain: • review if other aspects of this study have been reported upon previously and how the current report differs from these earlier reports? In manuscript ⬓ In supplemental files ☐ Not relevant ☐ If not relevant, please explain:

- describe the specific hypotheses or objectives, such as
    - o theories or other means to derive hypotheses, if hypotheses were offered?

In manuscript ☐ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

- o primary hypotheses?

In manuscript ☒ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

o secondary hypotheses?

In manuscript ☐ In supplemental files ☐ Not relevant ☒

If not relevant, please explain:

Only primary hypotheses provided

o planned exploratory analyses?

In manuscript ☐ In supplemental files ☐ Not relevant ☒

If not relevant, please explain:

Analyses are designed to test the hypothesis; exploratory analyses beyond these were not conducted for this manuscript.

	• describe how hypotheses and research design relate to one another? In manuscript ☒ In supplemental files ☐ Not relevant ☐ If not relevant, please explain:

METHOD ***----------*** ***Participant or subject characteristics:***	***For the Method section, please provide the information requested below, regardless of whether it also appears in the rest of the manuscript or in supplemental files.*** • What were the eligibility and exclusion criteria for participants or subjects, including any restrictions based on demographic characteristics? All DUI offenders who attended an inpatient treatment program during the one year study period and could understand English well enough to complete a standardized mental health interview with their counselor were eligible for inclusion. • What were the major demographic characteristics of participants or subjects as well as important topic-specific characteristics, or, in the case of animal research, the genus and species? The sample was 82% male with an average age of 39.4 (range: 19 to 77), and reported an average of 2.5 DUI arrests. Eighty-eight percent were Caucasian, four percent were African American, less than one percent was Asian, and less than one percent was Native American; seven percent were unknown or reported another race. Two percent reported Hispanic ethnicity.
---------- ***Sampling procedures:***	***----------*** • What procedures were used for selecting participants, including o the sampling method We recruited consecutive admissions to a DUI treatment program during a one year period. After completing the mental health interview with their counselor as part of their intake, potential participants met with a member of our research team to undergo informed consent and determine whether they wished to participate in the study.

- the percentage of sample approached that participated

  79.7 %

- any self-selection, either by individuals or by nomination from others?

At the beginning of the study, counselors did not complete computerized intakes with all of their clients. This was essentially random variation resulting from counselor schedules and workload. After 1.5 months, all eligible clients completed intakes.

- What were the settings and locations where data were collected?

We obtained data from intake interviews participants completed with their counselors at a 2 week inpatient DUI treatment program.

- Were any agreements and payments made to participants?

Participants received a $25 gift card for agreeing to provide researchers with access to their data and be contacted at a later time for a follow-up interview.

- Were IRB agreements obtained, ethical standards met, and safety monitored?
  Yes ■ No □

  If no, please explain:

---------- ***Sample size, power and precision:***	• What was the intended sample size? n = 780 • What was the actual sample size? n= 743 • How was sample size determined: o power analysis? Yes ■ No ☐ o other methods used to determine accuracy of parameter estimates? Yes ☐ No ☐ If yes, describe: o stopping rules or interim analyses? Yes ☐ No ☐ If yes, describe:

Measures and covariates:

- Please provide the definitions of all primary and secondary measures and covariates taken in the study, including measures collected but not included in this report

Measure name:	Definition:
Composite International Diagnostic Interview (CAPI v19) Massachusetts Criminal Offense Record Information	The CIDI is a well-validated standardized mental health assessment that assesses mental health disorders using both ICD-10 and DSM-IV criteria. MA CORI data provides information about criminal

- What methods were used to collect data?

We provided the inpatient treatment program with a computerized version of the CIDI and trained all staff on its use. As part of their attendance at the inpatient treatment program, potential participants completed the CIDI with their counselors.
Criminal record information was obtained from the Massachusetts CORI system.

- Were methods used to enhance the quality of measurements?

  o training and reliability of data collectors?
  Yes ■ No ☐

  o use of multiple observations?
  Yes ☐ No ■

- What are the known psychometric and biometric properties of instruments used in the study?

Measure Name:	Property:	Result:
CIDI	reliability and validity	Multiple studies demonstrating reliability and validity of psychiatric diagnoses in general population and clinical settings

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Research design:

- Were conditions manipulated ☐or naturalistic ⬓?

If manipulated, please complete **JARS:EXP** *(see below)*

If manipulated, were subjects randomly assigned to conditions?
Yes ☐ No ☐

If randomly assigned, please complete **JARS: RCT** *(see below)*

If not randomly assigned, please complete **JARS:QED** *(see below)*

Miscellaneous:

- Are there any other aspects of the study's methods that are important for the interpretation or replication of its findings?

Intake interviews, from which most of our results derive, were conducted upon entrance to the DUI treatment program. Entrance to the program could occur within weeks or months of conviction for a DUI offense.

RESULTS	***For the Results section, please provide the information requested in the questionnaire or provide the page number, table, or supplemental file in which the information can be found.*** **If your manuscript is accepted for publication, you will need to deposit your data set in an approved data repository. Please see Instructions to Authors for more information: www.apa.org/pubs/journals/arc**
---------- ***Participant flow:***	• How did participants move through each stage of the study and how many were lost at each stage, if any (use flow chart, if appropriate—*see Figure 1 below for an example*)? 1,220 entered DUI treatment program during study enrollment period 978 completed an intake interview with their counselors 779 agreed to participate in study 767 agreed to allow access to criminal record information 743 had criminal record information available in MA CORI system
---------- ***Recruitment:***	---------- • Please provide the dates defining the periods of recruitment and repeated measures or follow-up. Period Recruitment: 2/20/05-4/23/06 Start Date: baseline: 2/20/05; followup interviews: 2/20/06; CORI data received: 8/2/10 End Date: baseline: 4/23/06; followup interviews: 10/1/07
---------- ***Missing data:***	---------- • Did you experience problems concerning statistical assumptions and/or data distributions that could affect the validity of findings? Yes ☐ No ☒ If yes, please describe:

- Missing data
  - Is missing data a cause of concern in this data set?
    Yes☐ No☒
  - If missing data *was* a cause of concern, is there empirical evidence and/or theoretical arguments for the causes of data that are missing (e.g., missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR))?

  - If missing data *was* a cause of concern, is there empirical evidence and/or theoretical arguments for the causes of data that are missing (for example, missing completely at random (MCAR), missing at random (MAR), or missing not at random (MNAR))?

	• If missing data *was* a cause of concern, what methods, if any, were used for addressing missing data?
DISCUSSION ***----------*** ***Statistics and data analysis:***	***For the Discussion section, please indicate whether the requested information can be found in this section of the manuscript, in a supplemental file, or whether the information is not relevant to the study. If not relevant, please provide a brief explanation.*** • Did you experience problems concerning statistical assumptions and/or data distributions that could affect the validity of findings? Yes☐ No☒ If yes, please describe: • For inferential statistics (NHST), please indicate the a priori Type 1 error rate adopted: .05

- For each NHST conducted, regardless of whether significant results were obtained and regardless of whether or not reported in the text, please provide a log of the centrality (primary, secondary exploratory) of the analyses to the study's purpose, the analytic technique used, the direction, magnitude, degrees of freedom, and exact p-level associated with each test:

Relation of age [continuous] to DUI re-offense [offense or no offense] (secondary; t-test): t(741) = 1.34, p = .181, no DUI group older than DUI group; Relation of age [continuous] to motor vehicle re-offense [offense or no offense] (secondary; t-test): t (741) = 3.08, p = .002; no MV group older than MV group; Relation of age [continuous] to any re-offense [offense or no offense] (secondary; t-test): t(741) = 3.79, p < .001; no

- For multivariable analytic systems (e.g., multivariate analyses of variance, regression analyses, structural equation modeling analyses, and hierarchical linear modeling)
  - provide the associated variance-covariance (or correlation) matrix or matrices:

  - describe any estimation problems (e.g., failure to converge, bad solution spaces), anomalous data points:

  - identify the statistical software program, if specialized procedures were used:

SPSS

- Is there a statement of support or nonsupport for all original hypotheses distinguished by primary and secondary hypotheses?

  In manuscript ☒ In supplemental files ☐ Not relevant ☒

  If not relevant, please explain:

  Only primary hypotheses provided. The discussion includes discussion of how the hypotheses were and were not supported.

- Are post hoc explanations proposed?

  In manuscript ☒ In supplemental files ☐ Not relevant ☐

  If not relevant, please explain:

- Are the similarities and differences between these results and the work of others discussed?

  In manuscript ☒ In supplemental files ☐ Not relevant ☐

  If not relevant, please explain:

- Are results interpreted taking into account
  - sources of potential bias and other threats to internal validity?

In manuscript ◘ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

  - imprecision of measures?

In manuscript ◘ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

  - the overall number of tests or overlap among tests?

In manuscript ◘ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

- other limitations or weaknesses of the study?

In manuscript ■ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

- Is the generalizability (external validity) of the findings taken into account with regard to
  - the target population?

In manuscript ■ In supplemental files ☐ Not relevant ☐

If not relevant, please explain:

  - other contextual issues?

In manuscript ■ In supplemental files ☐ Not relevant ☐

	If not relevant, please explain: • Is there discussion of implications for future research, program, or policy In manuscript ▬ In supplemental files ☐ Not relevant ☐ If not relevant, please explain:

JARS: EXP: These questions should be answered for all studies with an experimental manipulation or intervention (in addition to the JARS: ALL Questionnaire)

METHODS
 	
Experimental manipulations or interventions:
	In the Method section of a study with an experimental manipulation or intervention, please provide the information requested below, regardless of whether it also appears in the manuscript or a supplemental file. If the information requested is irrelevant to the study, briefly explain why.
	
	• Please provide the details about the experimental manipulations or interventions intended for each study condition, including control groups and specifically including
	
	  • the **content of the specific experimental manipulations or interventions**—a summary or paraphrasing of instructions (unless they are unusual or compose the manipulation, in which case they may be presented verbatim):
	
	  • the **method of manipulation or intervention delivery**—a description of apparatus and materials used and their function in the experiment:
	
	  Identify specialized equipment by model and supplier:
	
	  • the **deliverers**, that is, who delivered the manipulations or interventions
	
	  o level of professional training:

- level of training in specific manipulations or interventions:

- the number of deliverers and, in the case of interventions, the M, SD, and range of number of individuals/units treated by each:

- the **setting**, that is, where the manipulations or interventions occurred:

- the **exposure quantity and duration**, that is, how many sessions, episodes, or events were intended to be delivered and how long they were intended to last:

- the **time span**, that is, how long it took to deliver the intervention or manipulation to each unit:

---------- ***Masking:***	• activities to increase compliance or adherence (e.g. i**ncentives**): • the **use of languages** other than English and the translation method: **----------** • Were participants, those administering the interventions, and those assessing the outcomes unaware of condition assignments? Yes☐ No ☐ If no, why not? • If masking took place, how was it accomplished, and how was its success evaluated?

Units of delivery and analysis:	• Unit of delivery: How were participants grouped during delivery? o What was the smallest unit that was analyzed (and, in the case of experiments, that was randomly assigned to conditions) to assess manipulation or intervention effects (e.g., individuals, work groups, classes)? • If the unit of analysis differed from the unit of delivery, please describe the analytical method used to account for this (e.g., adjusting the standard error estimates by the design effect or using multilevel analysis):

RESULTS	***For the Results section, please indicate below the page number, table, or supplemental file in which the information can be found.***
---------- ***Participant flow:***	• What was the total number of groups (if the experimental manipulation or intervention was administered at the group level), and what was the number of participants assigned to each group?
---------- ***Treatment fidelity:***	---------- • What evidence is there that the deliverers of treatment adhered to the respective intervention manuals/guidelines? • What evidence is there that the treatments were delivered competently?

Statistics and data analysis:	• Were the analyses intent-to-treat☐, complier average causal effect☐, or other or multiple ways☐? Please explain:
Adverse events and side effects:	• Please describe all important adverse events or side effects in each experimental or intervention:

DISCUSSION	***For the Discussion section, please indicate below the page number, table, or supplemental file in which the information can be found.***

- Do results discussed take into account the mechanism by which the manipulation or intervention was intended to work (causal pathways) or alternative mechanisms?

  Yes☐ No☐

  If no, please explain:

- If an intervention is involved, is there discussion of the success of and barriers to implementing the intervention, and the fidelity of implementation?
-

  Yes☐ No☐

  If no, please explain:

- Is there a discussion of the generalizability (external validity) of the findings taking into account
  - the characteristics of the intervention?
  -

    Yes☐ No☐

If no, please explain:

- how and what outcomes were measured?

  Yes☐ No☐

  If no, please explain:

- length of follow-up?

  Yes☐ No☐

If no, please explain:

- incentives?

  Yes☐ No☐

If no, please explain:

o compliance rates?

Yes☐ No☐

If no, please explain:

- Is there discussion of the **clinical or practical significance** of outcomes and the basis for these interpretations?

Yes☐ No☐

If no, please explain:

JARS: RCT: These questions should be answered for all studies with an experimental manipulation or intervention that employed random assignment to experimental conditions (in addition to JAR:ALL and JARS: EXP)

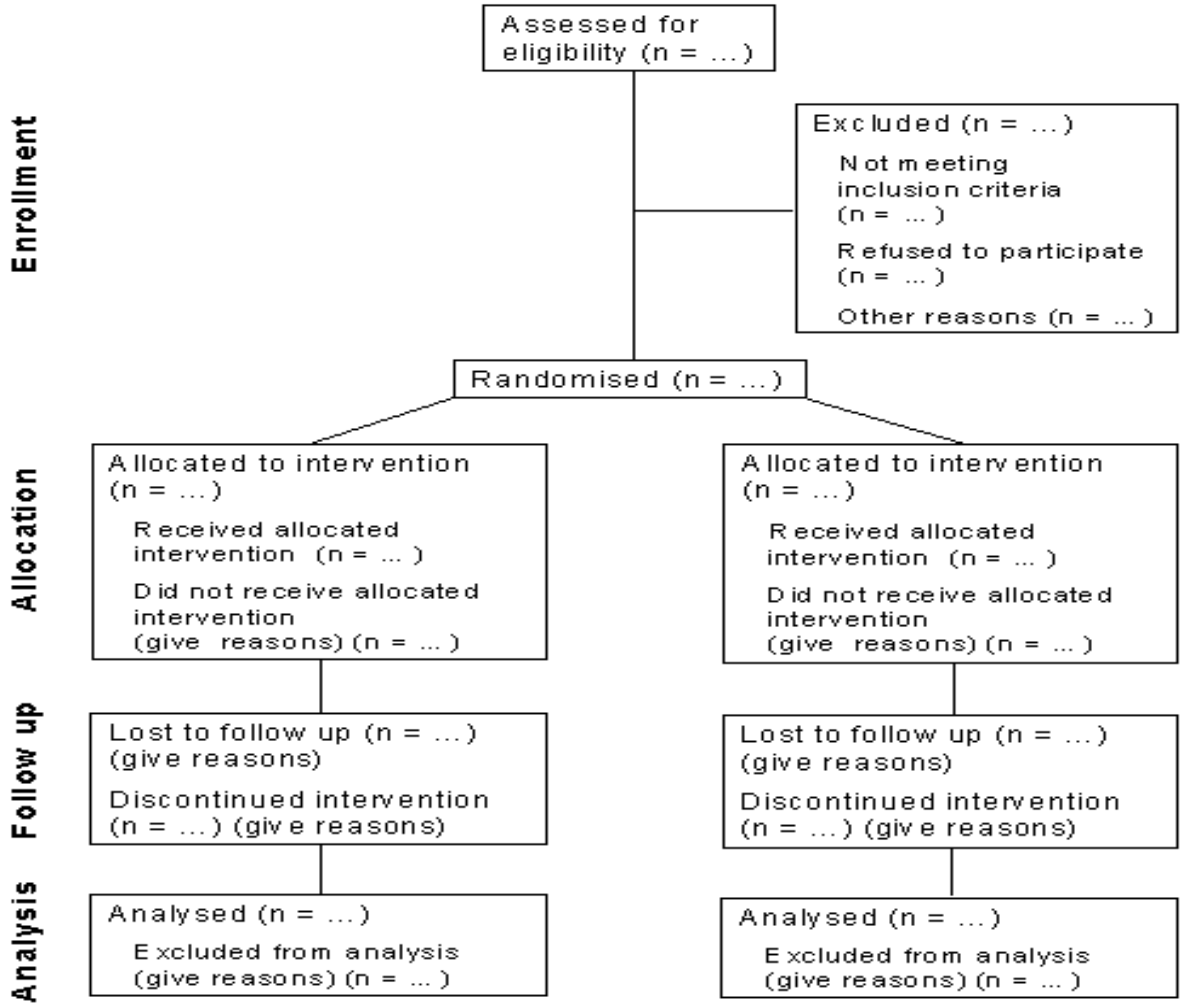
METHOD	***In the Method section of a study that employed random assignment to experimental conditions, please provide the information requested below, regardless of whether it also appears in the manuscript or a supplemental file. If the information requested is irrelevant to the study, briefly explain why.***
---------- ***Random assignment – method:***	• What procedures were used to generate the random assignment sequence (including details of any restrictions—e.g., blocking, stratification)?
---------- ***Random assignment – concealment:***	***----------*** • Was the sequence concealed until experimental or intervention sequence was assigned? Yes ☐ No☐ If no, why not?

---------- ***Random assignment – implementation:***	• Who generated the assignment sequence? • Who enrolled participants? • Who assigned participants to groups?

JARS: QED: These questions should be answered for all studies with an experimental manipulation or intervention that did not employ random assignment to experimental conditions (in addition to JARS: All and JARS: EXP).

METHOD ***Assignment method:***	• What was the unit of assignment (the unit being assigned to study conditions—e.g., individual, group, community)? • What was the method used to assign units to study conditions, including details of any restriction (e.g., blocking, stratification, minimization)? • What procedures were employed to help minimize potential bias due to nonrandomization (e.g., matching, propensity score matching)?

Figure 1. Diagram showing the flow of participants through each stage of a randomized trial.



JARS: MISC: These questions should be answered for all studies not employing an experimental manipulation or intervention (in addition to JARS: All).

Please provide below as detailed a description as possible of the research design used in the study or studies. This description should be at least as detailed than that expected in all APA journals. There is no restriction on length.

Briefly, the current study is an observational epidemiological study of psychiatric disorders among repeat DUI offenders and how those disorders relate prospectively to criminal record data, obtained five years after baseline interview. Consecutive admissions to a DUI inpatient treatment program, over the course of a year, were recruited to participate in the study.

More specifically, the current study utilizes a prospective design to determine whether the comorbid disorders identified among repeat DUI offenders can predict DUI recidivism across 5 years post-treatment. The participants in the current study were 743 repeat DUI offenders recruited from a two-week inpatient treatment program. Offenders attended the program as part of their court sentence, in lieu of additional jail time.

As part of their attendance at the inpatient treatment program, potential participants completed a computerized mental health assessment, the Composite International Diagnostic Interview (CIDI: Kessler & Ustun, 2004), with their counselors. Research staff later met individually with each potential participant to obtain informed consent to access the potential participant's assessment information and criminal record.

We provided the inpatient treatment program with a computerized version of the CIDI and trained all staff on its use. Staff used the CIDI as part of their intake during the study period.