



A STUDY OF RISK FACTORS RELATED TO CRIMINAL ACTIVITY

Alaska Criminal Justice Commission

January 2020

Table of Contents

Executive Summary	i
I. Introduction	1
II. Risk Assessments in the Alaska Department of Corrections	3
A. Level of Service Inventory – Revised: Screening Version	4
B. Level of Service Inventory – Revised	4
III. Analysis	6
A. Custody Status	8
1. LSI-R:SV	8
2. LSI-R.....	9
B. Custody Status and Demographic Characteristics	10
1. LSI-R:SV	11
2. LSI-R.....	11
IV. Current Information about Adverse Childhood Experiences	14
A. Overview of Adverse Childhood Experiences	14
B. Adverse Childhood Experiences in Alaska	15
V. ACEs and the LSI-R	17
A. Research showing association between ACEs and LSI-R scores	17
B. Possible responses to reduce ACEs and protect against the effects of ACEs	17
VI. Discussion and Recommendations	19
Appendix	23
A. LSI-R:SV Response Overview	23
B. LSI-R Response Overview	24
C. Custody Status and Individual Demographic Characteristics	30
1. LSI-R:SV	30
2. LSI-R.....	33
References	36

List of Tables

Table 1: LSI-R:SV – Not in Custody	9
Table 2: LSI-R:SV - In Custody	9
Table 3: LSI-R – Not in Custody	9
Table 4: LSI-R – In Custody	10
Table 5: LSI-R:SV - Custody Status and Demographic Groups - Not in Custody	11
Table 6: LSI-R:SV - Custody Status and Demographic Groups - In Custody	11
Table 7: LSI-R - Custody Status and Demographic Groups - Not in Custody.....	12
Table 8: LSI-R - Custody Status and Demographic Groups - In Custody	13
Table 9: LSI-R:SV - Custody Status.....	24
Table 10: LSI-R – Custody Status	28
Table 11: LSI-R:SV - Not in Custody - Gender.....	31
Table 12: LSI-R:SV - In Custody - Gender	31
Table 13: LSI-R:SV - Not in Custody - Ethnicity.....	31
Table 14: LSI-R:SV - In Custody - Ethnicity	32
Table 15: LSI-R:SV - Not in Custody - Age	32
Table 16: LSI-R:SV - In Custody - Age	32
Table 17: LSI-R - Not in Custody - Gender.....	33
Table 18: LSI-R - In Custody - Gender.....	33
Table 19: LSI-R - Not in Custody - Ethnicity.....	34
Table 20: LSI-R - In Custody - Ethnicity.....	34
Table 21: LSI-R - Not in Custody – Age.....	34
Table 22: LSI-R - In Custody - Age	35

List of Figures

Figure 1: Total Number of Assessments by Custody Status and Assessment	6
Figure 2: Mean Total Score by Custody Status and Assessment	7
Figure 3: LSI-R:SV Mean Response by Custody Status and Question	23
Figure 4: LSI-R Mean Response by Custody Status and Question	25

Abbreviations

ACEs.....	Adverse Childhood Experiences
Commission.....	Alaska Criminal Justice Commission
DOC.....	Alaska Department of Corrections
LSI-R.....	Level of Service Inventory – Revised
LSI-R:SV.....	Level of Service Inventory – Revised: Screening Version

Executive Summary

Background of this Report

The Alaska State Legislature directed the Alaska Criminal Justice Commission (Commission) to examine and report on risk factors associated with criminal activity to inform the Legislature's policy and funding decisions related to primary crime prevention.¹ The Legislature designated the Alaska Department of Corrections (DOC) as the data source for the inquiry, instructing DOC to provide information to the Commission about individuals sentenced to serve terms of incarceration of 30 days or more.² After a statutorily required consultation with the DOC and the Justice Center at the University of Alaska, the Commission proceeded with its study by gathering data from the DOC's risk assessment program established under AS 33.30.011(a)(7). The DOC risk assessments, which are administered to individuals in custody and on probation, are used by DOC to assess the appropriate level of supervision and treatment for individuals in a criminal justice context.

Description of Risk Assessment Findings

The Commission examined the outcomes of risk assessments administered by the DOC from 2002 - 2018 to individuals convicted of a crime and sentenced. The Commission found that most of the respondents who took the risk assessments reported the same major set of issues: association with other individuals involved in crime, an alcohol or drug problem, and to a lesser extent, lack of engagement in community activities, and financial problems. The most prevalent risk/need factor for all groups was the presence of criminal acquaintances and friends. More than three-quarters of the respondents reported having criminal acquaintances and friends. The other pervasive issue was substance abuse, with nearly two-thirds or more reporting they had drug or alcohol problems. The degrees to which individuals reported these problems varied depending on whether or not they were incarcerated at the time of the assessment, but the pattern of their responses was consistent throughout.

Analysis of Findings

Having ascertained that most respondents convicted of crimes and sentenced reported the same set of problems, the Commission examined the extent to which those findings could be used for the Legislature's stated interest in primary prevention programs. The Commission concluded that the risk assessment outcomes can provide some support for recommendations about how to prevent criminal activity; however, it cannot be viewed as a definitive answer.

There are several reasons why the risk assessment findings cannot provide the only basis for considerations of primary prevention. First, this study did not have the ability to determine whether the problems reported by the DOC assessments mirror problems found in the general population; in other words, are the factors reported by the DOC respondents more predictive of criminal behavior than other, unmeasured factors? Additionally, even if these factors are implicated in the criminal behavior, it cannot

¹ Alaska Stat. § 44.19.645, 2017.

² Ibid.

be known whether they were the cause or the effect of criminal activity. Therefore, readers should interpret the results in this report cautiously, and avoid assuming cause-and-effect relationships.

Having encountered the limits of the current study design, the Commission examined results from other studies with more robust designs. Those studies do suggest that certain factors similar to the ones reported in the DOC data are in fact more prevalent and deterministic to individuals in the criminal justice system. For example, one study found that substance abuse, antisocial peers, and absence of social ties were predictive of future criminal activity among juveniles.

The Commission also encountered literature about the relationship between Adverse Childhood Experiences (ACEs) and criminal behavior. ACEs are childhood experiences of physical, emotional, and sexual abuse, physical and emotional neglect, and household dysfunction (defined as mental illness, incarcerated relative, domestic violence, substance abuse and loss of a parent through divorce, death, or abandonment). ACEs are of particular interest in Alaska, where adult residents have been found to have higher rates of ACEs than people in other states (especially the childhood experiences of having an incarcerated family member, a household with substance abuse problems, and a household with separation or divorce).

The original ACEs studies showed that the more ACEs a person has, the more likely they are to have adult physical and mental health problems. Recent research also has shown a strong association between ACEs and criminal behavior. Although the association between ACEs and criminal behavior is not a direct link, it does suggest that efforts to prevent certain ACEs (for example, substance abuse) could be expected to reduce future criminality.

Discussion and Recommendations

The Commission's literature review revealed a linkage between the types of problems most often reported by respondents to DOC's risk assessments, and a likelihood of future criminal behavior. Specifically, more than two-thirds of all people assessed by DOC reported both substance abuse problems and criminal acquaintances or friends, and these types of problems are associated with criminal behavior. Thus, the Legislature may wish to focus on prevention measures targeting substance abuse and antisocial peers. Because the childhood traumas implicated by high ACEs scores also are associated with future criminal behavior, and Alaska residents have more ACEs than people from other states, the Legislature also may wish to consider programs supporting parenting skills, building resilience, and avoiding substance abuse. Examples of evidence-based programs targeting these areas of concern are listed at the end of the report.

I. Introduction

The Alaska Legislature asked the Alaska Criminal Justice Commission to design a project to study the risk factors associated with criminal activity in the state.^{3,4} The results of this project would be available to inform the Legislature’s policy and funding decisions, mitigate determinant risk factors, and prevent crime from happening.⁵ While much of the crime in Alaska and elsewhere is recidivist in nature, the Legislature expressly identified primary crime prevention as the focus.⁶ Primary crime prevention includes efforts to alter the criminogenic conditions in the environment in order to influence the likelihood of an individual committing a crime.^{7,8} Primary crime prevention may focus on minimizing risk factors, for example, poverty and unemployment, or promoting protective factors, for example, job training and after-school programs; but the goal in each is to prevent crime from happening.⁹ Given this, and consistent with approaches used in the juvenile justice and public health fields, this project will focus on dynamic factors, which, if targeted, may impact criminal activity.

The Legislature designated the Alaska Department of Corrections (DOC) as the data source for this project, instructing DOC to provide information to the Alaska Criminal Justice Commission about individuals sentenced to serve terms of incarceration of 30 days or more.^{10,11} The precise data to be provided were left undefined but could include, “adverse childhood experiences, mental health and substance abuse history, education, income, and employment of inmates.”¹² Absent dedicated funding, data collected by DOC under AS 33.30.011(a)(7), “a program to conduct assessments of the risks and needs of offenders sentenced to serve a term of incarceration,” was identified as an existing source that could be utilized without a change in policies or procedures. Currently, the requirements of AS 33.30.011(a)(7) are met via a proprietary risk assessment suite from Multi-Health Systems Inc.: *Level of Service Inventory – Revised: Screening Version* (LSI-R:SV) and *Level of Service Inventory – Revised* (LSI-R).

The LSI-R assessments are relatively broad surveys of respondents’ situations and attributes that touch on mental health and substance abuse history, education, income, and employment. However, the LSI-R assessments do not directly solicit information about adverse childhood experiences. Adverse childhood experiences (ACEs) include “abuse, neglect, witnessing domestic violence, or growing up with

³ Crimes; Sentencing; Probation; Parole. SB 54. 30th Alaska Legislature, Special Session, 2017.

⁴ Alaska Stat. § 44.19.645.

⁵ Ibid.

⁶ Ibid.

⁷ Paul J. Brantingham and Frederic L. Faust, “A Conceptual Model of Crime Prevention,” *Crime & Delinquency* 22, no. 3 (1976): 284–96, <https://doi.org/10.1177/001112877602200302>.

⁸ Public Safety Canada, “Approaches to Understanding Crime Prevention” (Ottawa, Canada: Department of Public Safety and Emergency Preparedness, 2003).

⁹ Ibid.

¹⁰ Alaska Stat. § 44.19.645.

¹¹ HB 49 (Crimes; Sentencing; Drugs; Theft; Reports. HB 49. 31st Alaska Legislature, Regular Session, 2019), which became effective July 2019, changed the term of incarceration needed before conducting an LSI-R to 90 days or more.

¹² Ibid.

substance abuse, mental illness, or a parent in jail.”¹³ Although a respondent may reasonably understand a question on the LSI-R to include one or more of these, no question directly targets ACEs. As an example, a question on the LSI-R asks whether or not the respondent *ever had a criminal family member or spouse*; while a reasonable person might understand this to include a *criminal parent while young*, this question is not specifically and exclusively about childhood experiences. Thus, the LSI-R assessments are poorly equipped to evaluate the role of ACEs.

As noted above, primary crime prevention refers to preventing crime among the general population; yet, DOC uses the LSI-R assessments with individuals who have already been convicted of a crime and sentenced. This suggests a one-group post-test only design, which, because it lacks a comparison group, cannot differentiate between factors that are associated with criminal activity and those that are not. For example, LSI-R respondents in DOC custody routinely report *no recent participation in an organized activity* (see Tables 3 and 4) but a comparison group drawn from the general population may do the same. Furthermore, even if factors are unique to individuals in the criminal justice system, those factors may be the result of criminal activity rather than the cause of it. For example, the LSI-R and LSI-R:SV question with the highest affirmative response concerns *criminal acquaintances* (see Tables 5, 6, 7, and 8) but, given the data available to this project, it is not possible to say whether the influence of delinquent associates leads to criminal behavior, or whether criminal behavior leads to association with delinquent individuals. Results from studies with more robust designs suggest certain factors are in fact more prevalent and deterministic to those in the criminal justice system. For example, longitudinal studies have found that some dynamic risk factors among juveniles are predictive of subsequent delinquent behavior, including substance abuse, antisocial peers, and the absence of social ties.^{14,15} However, it is important to remember that the LSI-R assessments, in their creation and validation, have solely used justice-involved populations to assess risk and recidivism.^{16,17} Consequently, data reported in this project should be interpreted with caution, as they cannot speak to causation, rather, they merely illustrate prevalence among a single group, one which may or may not mirror the general population.

After describing the assessment results available to it, this paper relies on published literature and the linkages that have been documented between LSI-R assessments, ACEs, and subsequent criminal behavior. Discussion and recommendations regarding primary crime prevention in Alaska will then be provided.

¹³ Alaska Department of Health and Social Services, “Adverse Childhood Experiences in Alaska” (Juneau, Alaska: Alaska Department of Health and Social Services, 2019).

¹⁴ Institute of Medicine, “Juvenile Crime, Juvenile Justice” (Washington, D.C.: National Academies Press, 2001).

¹⁵ Mark W. Lipsey and James H. Derzon, “Predictors of Violent or Serious Delinquency in Adolescence and Early Adulthood: A Synthesis of Longitudinal Research” (Thousand Oaks, CA: SAGE Publications, Inc., 1999).

¹⁶ D. A. Andrews, “The Level of Supervisory Inventory (LSI): The First Follow-up” (Toronto, Canada: Ontario Ministry of Correctional Services, Planning and Support Services Division, Planning and Research Branch, 1982).

¹⁷ Christopher T Lowenkamp and Kristin Bechtel, “The Predictive Validity of the LSI-R on a Sample of Offenders Drawn from the Records of the Iowa Department of Corrections Data Management System,” *Federal Probation* 71, no. 3 (2007): 25–29, 5713.

II. Risk Assessments in the Alaska Department of Corrections

The Alaska Department of Corrections (DOC) uses two risk assessments for its general criminal population: the *Level of Service Inventory – Revised: Screening Version (LSI-R:SV)* and the *Level of Service Inventory – Revised (LSI-R)*.¹⁸ These assessments are statutorily required and intended to assess the needs and risks of individuals sentenced to a term of incarceration.¹⁹ Both the LSI-R:SV and LSI-R include static and dynamic risk factors of respondents' situations and attributes, designed, according to the authors, to assess the appropriate level of supervision and treatment in a criminal justice context.²⁰ Static risk factors refer to the history or age of an individual and, as such, cannot be modified by intervention, whereas dynamic risk factors refer to characteristics, like substance dependence, which currently exist and are subject to intervention.²¹ In both the LSI-R:SV and LSI-R, questions are designed to be answered through a structured interview, making most information self-reported.²² However, interviewers are encouraged to make "every effort [. . .] to collaborate [sic] the client's responses with a collateral review" of available resources.^{23,24} Finally, the authors assert that the LSI-R "helps predict parole outcome, success in correctional halfway houses, institutional misconducts, and recidivism" among individuals 16 years and older.²⁵

These assessments are required to be administered at different points in the correctional environment:

- After sentencing when the term of incarceration will be at least 90 days^{26,27}
- Prior to release from a sentenced term of incarceration of at least 90 days²⁸
- At the start of supervision, if not previously done, and annually afterwards²⁹

¹⁸ Morgen Jaco, Charles Van Ravenswaay, and Christina Shadura, "Reentry - Why Should We Care?" (Juneau, Alaska: Alaska Department of Corrections, 2018).

¹⁹ Alaska Stat. § 33.30.011, 2019.

²⁰ Don Andrews and James Bonta, "Level of Service Inventory-Revised: Screening Version" (Toronto, Canada: Multi-Health Systems Inc., 1998).

²¹ Karl Hanson, "Giving Meaning to Risk Factors" (Ottawa, Ontario: Public Safety Canada, 2010).

²² Andrews and Bonta, "Level of Service Inventory-Revised," 1998.

²³ Ibid.

²⁴ As this project is not a process evaluation, the extent to which this is done in Alaska was not investigated, but, for the purposes of comparison, it is assumed to be relatively constant over time.

²⁵ Ibid.

²⁶ Prior to HB 49 (Crimes; Sentencing; Drugs; Theft; Reports. HB 49. 31st Alaska Legislature, Regular Session, 2019), which became effective July 2019, assessments were conducted after sentencing when the term of incarceration was at least 30 days.

²⁷ Alaska Stat. § 33.30.011.

²⁸ Ibid.

²⁹ Alaska Department of Corrections, "Policies and Procedures 902.03" (Juneau, Alaska: Alaska Department of Corrections, 2011).

A. Level of Service Inventory – Revised: Screening Version

The LSI-R:SV serves as a short, eight-question screening version of the LSI-R that parallels the criminogenic domains of the longer assessment. Total scores range from zero to eight, with higher scores indicating greater need and risk: a score of zero to two on the LSI-R:SV means a “minimum” level of service is indicated and an LSI-R follow-up is “desirable;” a score of three to five means a “medium” level of service is indicated and an LSI-R follow-up is “strongly recommended;” and, a score of six to eight means a “maximum” level of service is indicated and an LSI-R follow-up is “mandatory.”³⁰ The questions on the LSI-R:SV are as follows:

- Two or more prior adult convictions³¹
- Arrested under age 16
- Currently unemployed
- Some criminal friends
- Alcohol/drug problem: school/work
- Psychological assessment indicated
- Non-rewarding, parental³²
- Attitudes/orientation: supportive of crime

B. Level of Service Inventory – Revised

The LSI-R is composed of 54 questions, divided into 10 criminogenic domains. Total scores range from zero to 54, with higher scores indicating greater need and risk: a score of zero to 13 on the LSI-R means a “low” level of service is indicated; 14 to 23 means a “low/moderate” level of service is indicated; 24 to 33 means a “moderate” level of service is indicated; 34 to 40 means a “moderate/high” level of service is indicated; and 41 to 54 means a “high” level of service is indicated.^{33,34} The criminogenic domains on the LSI-R are as follows (see the Appendix for the questions):

- Criminal history
- Education/employment
- Financial
- Family/marital
- Accommodation (housing)
- Leisure/recreation

³⁰ Andrews and Bonta, “Level of Service Inventory-Revised,” 1998.

³¹ Two or more prior adult misdemeanor or felony convictions.

³² The interview guide for the LSI-R:SV provides the following information for this question: “How is your relationship with your parents? [Do you visit them? Are they helpful with problems you may have? Do you argue with them?]” (Andrews & Bonta, 1998).

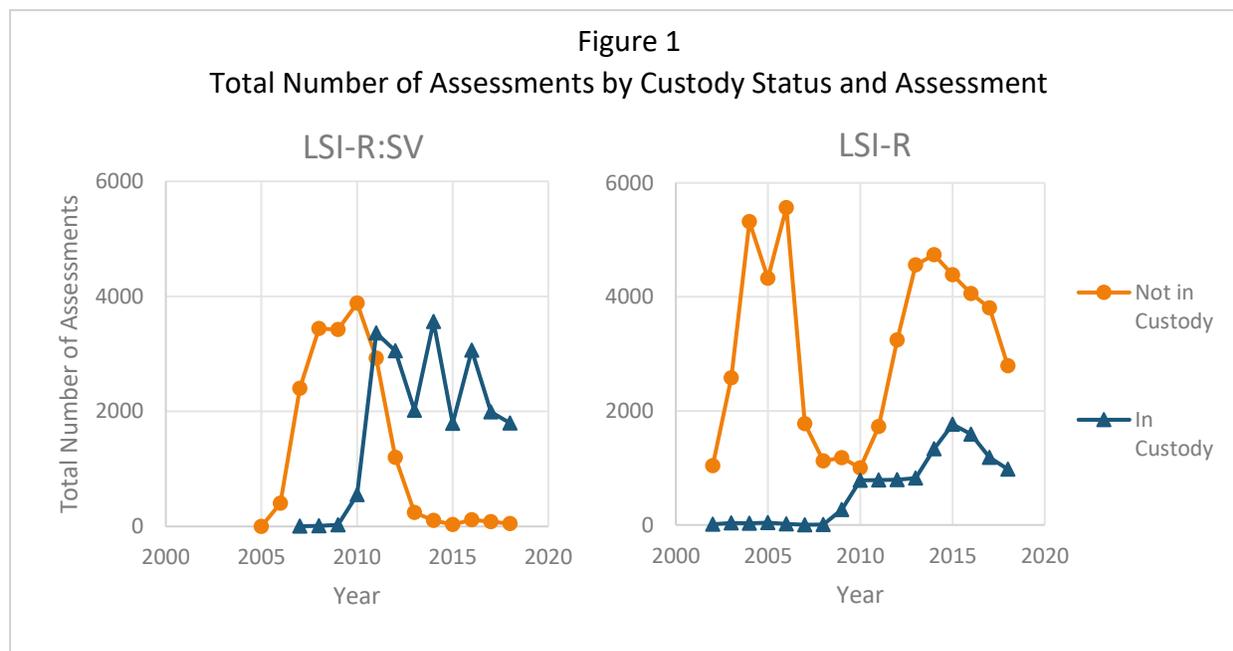
³³ Don Andrews and James Bonta, “Level of Service Inventory-Revised” (Toronto, Canada: Multi-Health Systems Inc., 1994).

³⁴ Lowenkamp and Bechtel, “The Predictive Validity of the LSI-R on a Sample of Offenders Drawn from the Records of the Iowa Department of Corrections Data Management System.”

- Companions
- Alcohol/drug problems
- Emotional/personal
- Attitude/orientation

III. Analysis

Between 2002 and 2018, the number of assessments administered by DOC varied significantly, from fewer than 100 to more than 6,000 (see Figure 1). The reason for the variability is not known. Nor is it known whether the criteria for assessments remained constant over time, such that those who were assessed in 2002 resemble those who were assessed in 2018 in offense type, sentence length, or custody status.

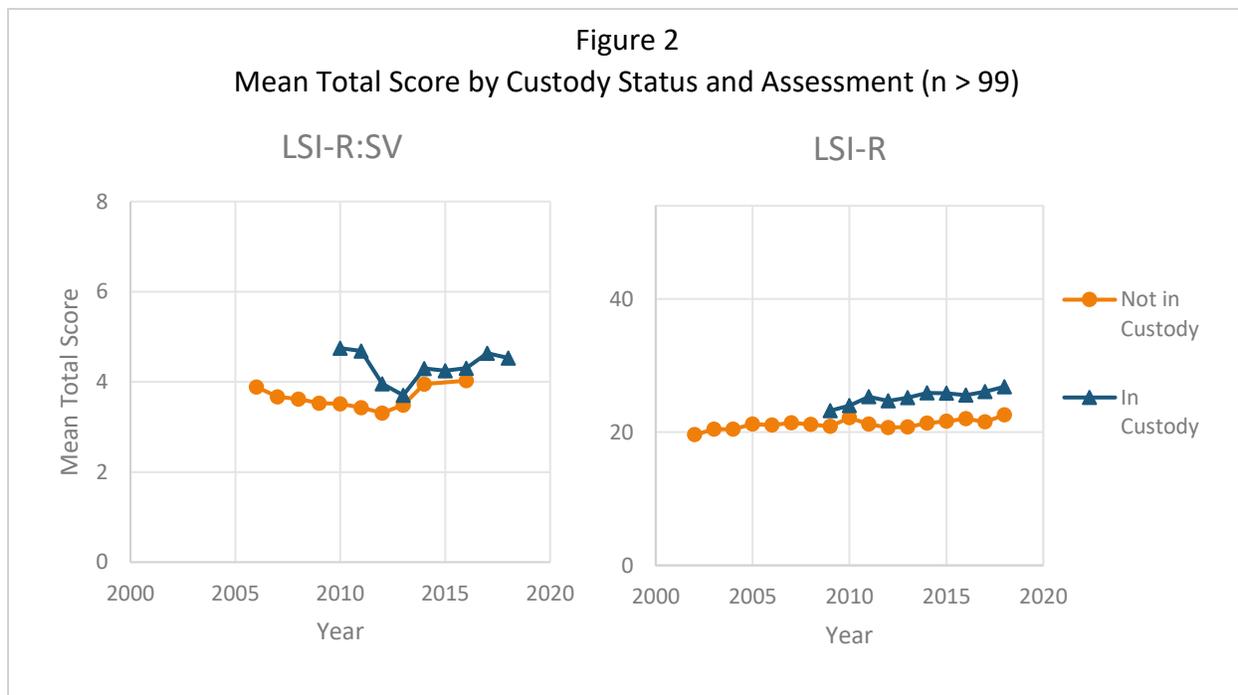


However, despite the variability, and excluding years in which fewer than 100 assessments were administered, the mean total assessment scores have remained relatively stable.³⁵ On the LSI-R:SV, the mean total score during this period was 4.3 among those in custody and 3.6 among those not in custody, both of which indicate a “medium” level of service.³⁶ While the mean total scores on the LSI-R:SV decreased slightly during 2012 and 2013, over the period for which scores are available, scores began and ended in roughly the same place (see Figure 2). On the LSI-R, the mean total score during this period was 25.3 among those in custody and 21.2 among those not in custody, which indicate a “moderate” and “low/moderate” level of service, respectively.³⁷ A modest increase in the mean total scores over this period is apparent (see Figure 2).

³⁵ Small-group means are more susceptible to extreme values.

³⁶ Andrews and Bonta, “Level of Service Inventory-Revised,” 1998.

³⁷ Andrews and Bonta, “Level of Service Inventory-Revised,” 1994.



While the overall scores may have value in terms of predicting outcomes and estimating needs, these measures are outside the scope of this project. They do, however, indicate that despite differences in who administered the assessments and the year in which they were administered, and, assuming that respondents remained similar over time, the assessments as a whole appear stable. Lacking a reason to exclude, all assessments administered between 2002 and 2018 are included in the analyses.

Compared to risk scores, individual risk factors exhibited greater variability (see Appendix for select results). While potentially informative, given the complexity and data requirements of trend analysis, differences over time will not be considered.

Finally, those questions that address criminal histories will be excluded from the bulk of the analyses. This is a significant exclusion, as criminal histories are highly prevalent among respondents (see Appendix).³⁸ However, because these factors are specific to those who have been involved in the criminal justice system, and, as a consequence, are not widely applicable to the general population, and because these factors have by definition occurred in the past, making them static and therefore not subject to change through intervention, these factors too are outside the scope of this project.

Results in subsequent sections will be provided chiefly as the percent of respondents who answered in the affirmative; typically, this is answering “yes” to a question but it can also be answering sufficiently low on a numeric scale; an example of the former: of the 10,208 in-custody respondents who answered the “currently unemployed” question (LSI-R, question 11), 5,531 or 54% answered affirmatively. Also, to ensure output is manageable and unless otherwise noted, the five questions with the highest

³⁸ See Table 9, Questions 1 and 2 (page 24), and Table 10, Questions 1 – 10 (pages 28 and 29).

affirmative response per group under study are reported. Results by assessment type, custody status, and demographic characteristics are examined:³⁹

- Assessment type: LSI-R:SV and LSI-R
- Custody status: in custody and not in custody
- Gender: male and female
- Ethnicity: Caucasian and Alaska Native⁴⁰
- Age: younger than 26 years and older than 25 years⁴¹

A. Custody Status

Custody status differentiates those who are in a DOC institution from those who are under DOC supervision but who are not in a DOC institution; an example of the former is Goose Creek Correctional Center and an example of the latter is probation.⁴² On both the LSI-R:SV and LSI-R, results by custody status are very similar: the questions with the highest affirmative response are identical, only their order and magnitude differ. Irrespective of custody status, questions dealing with criminal acquaintances and substance abuse receive the highest affirmative response on both assessments. Affirmative responses tend to be higher on the LSI-R than the LSI-R:SV, suggesting that individuals with low LSI-R:SV scores are not provided an LSI-R follow-up, which is congruent with what is recommended by the assessments' authors.⁴³ Finally, with one exception (30. *No recent participation in an organized activity* (LSI-R)), the affirmative response is always higher among those in custody than those not in custody.

1. LSI-R:SV

Excluding *criminal history* questions, the questions on the LSI-R:SV with the highest affirmative response include those related to criminal acquaintances, substance abuse, and employment. Results by

³⁹ The LSI-R and LSI-R:SV assessment data from DOC do not include information about the offense that led to the LSI-R or LSI-R:SV being done. An attempt was made to add this information to the analysis for a subset of assessments (those that occurred between July 1, 2014 and March 31, 2019), but failed in approximately 20% of newer cases and nearly 100% of older cases. The failure to match offense information to a specific LSI-R or LSI-R:SV assessment has several causes. It is difficult to link DOC data to Department of Public Safety data because of missing information about name, date of birth, ID number, and so forth. There is also a finite disposition repository from which to pull information for this paper. The cases that were matched successfully might be an unbiased sample of the total cases available, if the types of individuals assessed by DOC have remained constant and the way in which offense information is matched has not introduced error. However, because we cannot rule out a systematic bias (for instance, one particular type of case might be missing offense information more often than other types), the report does not provide any analysis by offense severity and offense class. Additional information on this process is available upon request.

⁴⁰ Additional analyses by ethnicity are available upon request.

⁴¹ "Younger than 26" includes age 25 and under; "older than 25" includes age 26 and over. Additional analyses by age are available upon request.

⁴² For this report, individuals on Electronic Monitoring or in a Community Residential Center are considered "not in custody."

⁴³ Andrews and Bonta, "Level of Service Inventory-Revised," 1998.

custody status are similar with only a slight difference in their magnitude. Tables 1 and 2 below rank the questions by percentage of affirmative responses.

Question	Response	
	Count	Affirmative (%)
4. Some criminal friends	18,276	66.3
5. Alcohol/drug problem: School/work	18,279	58.2
3. Currently unemployed	18,193	46.7
8. Attitudes/orientation: Supportive of crime	18,204	37.3
7. Non-rewarding, parental	18,209	31.7

Question	Response	
	Count	Affirmative (%)
4. Some criminal friends	21,016	69.8
5. Alcohol/drug problem: School/work	21,103	65.2
3. Currently unemployed	21,044	65.1
8. Attitudes/orientation: Supportive of crime	21,005	56.4
7. Non-rewarding, parental	21,022	44.4

2. LSI-R

Excluding *criminal history* questions, the questions on the LSI-R with the highest affirmative response include those related to criminal acquaintances and substance abuse. Results by custody status are similar with only a slight difference in their order.

Question	Response	
	Count	Affirmative (%)
33. Some criminal acquaintances	53,038	84.4
37. Alcohol problem, ever	53,027	72.6
38. Drug problem, ever	52,951	72.1
34. Some criminal friends	53,024	68.8
30. No recent participation in an organized activity	53,000	65.4

Question	Response	
	Count	Affirmative (%)
33. Some criminal acquaintances	10,312	93.2
37. Alcohol problem, ever	10,300	84.6
38. Drug problem, ever	10,337	76.1
34. Some criminal friends	10,324	76.0
30. No recent participation in an organized activity	10,258	61.5

B. Custody Status and Demographic Characteristics

Demographic characteristics include gender, ethnicity, and age. All three demographic characteristics are considered simultaneously with custody status.⁴⁴ As above, custody status differentiates those who are in DOC institutions from those who are not.⁴⁵

Results mirror those above, with criminal acquaintances and substance abuse tending to be highest. As shown in Tables 5 and 6, on the LSI-R:SV, *criminal friends* receives the highest affirmative response in 14 of the 16 groups. *Alcohol/drug problems* receives the highest or second-highest affirmative response in 12 of the 16 groups. In both questions, affirmative responses were at least 50% for all groups considered.

As shown in Tables 7 and 8 on the LSI-R, *criminal acquaintances* receives the highest affirmative response in 13 of the 16 groups, of which almost two-thirds are at or above 90%. *Criminal friends*, *drug problems*, and *alcohol problems* follow. Caucasian respondents reported a higher prevalence of drug problems than alcohol problems; Alaska Native respondents reported the reverse. In-custody respondents reported a higher prevalence of criminal friends/acquaintances than those not in custody.

Although people “with serious mental health illnesses are substantially overrepresented in the criminal justice system (citations omitted),”⁴⁶ the reason appears to be that they have more of the major underlying risk factors, not because they have a mental illness. Dr. Fred Osher noted that the major risk factors associated with mental illness were “‘the big four’... related to their antisocial thinking and personality and friends.”⁴⁷

⁴⁴ For custody status and individual demographic characteristics, see the Appendix.

⁴⁵ For this report, individuals on Electronic Monitoring or in a Community Residential Center are considered “not in custody.”

⁴⁶ Specifically, schizophrenia, bipolar disorder, and major depression. These have not been shown to cause, or be caused by mental illness, but are associated with it. See Skeem, et al., page 212, http://risk-resilience.berkeley.edu/sites/default/files/journal-articles/files/2014.offenders_with_mental_illness_have_criminogenic_needs_too_toward_recidivism_reduction.pdf.

⁴⁷ Dr. Osher’s remarks were cited in “Mental Illness and the criminal justice system: Reducing the risks,” *Clinical Psychiatry News*, August 22, 2018. <https://www.mdedge.com/psychiatry/article/173208/schizophrenia-other-psychotic-disorders/mental-illness-and-criminal/page/0/1>

1. LSI-R:SV

Excluding *criminal history questions*, the affirmative response to all LSI-R:SV questions by custody status and demographic groups follow:

Question	Caucasian				Alaska Native			
	Male		Female		Male		Female	
	<26	>25	<26	>25	<26	>25	<26	>25
4. Some criminal friends	60.3	70.6	63.4	78.3	70.4	80.6	64.5	84.7
5. Alcohol/drug problem: School/work	57.1	57.9	57.1	59.3	64.9	69.1	64.6	71.6
3. Currently unemployed	37.9	45.1	49.3	57.5	54.9	67.9	62.3	70.5
8. Attitudes/orientation: Supportive of crime	35.7	37.1	27.7	37.4	39.3	42.1	34.7	38.5
7. Non-rewarding, parental	29.0	32.2	31.6	34.6	32.5	35.7	33.0	44.8
6. Psychological assessment indicated	16.2	15.6	23.8	19.7	17.5	20.0	20.6	18.6

Note: "<26" indicates age of respondent is 25 years or younger; ">25" indicates age of respondent is 26 years or older

Question	Caucasian				Alaska Native			
	Male		Female		Male		Female	
	<26	>25	<26	>25	<26	>25	<26	>25
4. Some criminal friends	67.0	68.0	80.1	83.2	73.1	68.7	77.2	75.5
5. Alcohol/drug problem: School/work	65.2	60.0	75.3	73.0	69.6	58.6	74.2	63.3
3. Currently unemployed	58.1	62.2	64.1	72.2	69.7	76.0	72.4	72.6
8. Attitudes/orientation: Supportive of crime	59.2	59.9	48.1	47.4	53.9	53.1	46.8	46.9
7. Non-rewarding, parental	45.1	44.0	38.1	42.6	44.0	39.9	37.9	38.0
6. Psychological assessment indicated	25.3	26.7	31.1	25.5	22.7	24.5	25.5	25.3

Note: "<26" indicates age of respondent is 25 years or younger; ">25" indicates age of respondent is 26 years or older

2. LSI-R

Excluding *criminal history questions*, the affirmative response to all LSI-R questions by custody status and demographic groups follow:

Table 7
LSI-R – Custody Status and Demographic Groups
Not in Custody

Question	Caucasian				Alaska Native			
	Male		Female		Male		Female	
	<26	>25	<26	>25	<26	>25	<26	>25
33. Some criminal acquaintances	81.8	84.8	81.7	85.9	87.7	91.3	85.4	93.6
37. Alcohol problem, ever	76.9	60.2	59.9	46.1	95.2	83.8	87.3	76.9
38. Drug problem, ever	73.3	74.8	75.9	82.7	67.2	71.4	67.0	73.7
30. No recent participation in an organized activity	66.1	69.8	60.0	65.8	61.7	70.7	60.7	70.7
34. Some criminal friends	64.1	71.3	66.8	71.1	70.7	78.3	69.4	79.0
21. Problems (financial)	57.8	63.3	66.9	68.5	62.0	68.8	67.3	72.8
14. Ever fired	53.7	53.6	55.5	52.8	47.6	37.7	48.6	35.9
31. Could make better use of time	48.4	58.7	46.2	54.6	49.2	67.3	47.4	56.7
17. Suspended or expelled at least once	48.0	67.1	31.2	48.1	43.3	63.3	26.0	43.2
46. Moderate interference (emotional/personal)	42.7	39.5	55.7	49.5	40.2	39.9	50.2	48.6
26. Criminal-Family/Spouse	40.2	43.8	58.2	57.6	59.8	59.4	71.1	69.8
20. Authority Interaction (at school/work)	38.3	47.1	44.5	52.8	49.3	62.2	49.6	60.3
16. Less than regular grade 12	37.0	49.5	34.4	46.6	38.1	55.9	38.9	51.9
42. Marital/family (alcohol/drug problem)	36.7	37.4	37.0	44.8	42.7	41.7	45.0	44.3
18. Participation/Performance (in school/work)	36.0	46.4	44.9	51.5	50.7	64.0	53.4	65.4
19. Peer interaction (at school/work)	35.8	44.0	44.0	51.8	47.3	59.9	49.7	59.0
43. School/work (alcohol/drug problem)	33.9	37.5	29.2	34.8	32.6	33.2	30.1	32.7
24. Non-rewarding, parental	33.7	34.8	39.2	41.9	35.2	37.6	38.5	40.8
11. Currently unemployed	33.3	42.4	44.6	52.5	52.5	65.8	59.4	67.2
36. Few anti-criminal friends	33.2	35.4	34.6	40.3	31.8	35.9	33.0	39.2
51. Supportive of crime	32.9	34.6	27.6	33.7	26.2	32.9	23.7	30.8
12. Frequently unemployed	32.0	46.8	45.3	55.4	52.1	72.8	60.9	70.2
48. Mental health treatment, past	32.0	33.1	51.8	41.1	31.7	33.0	47.5	35.8
40. Drug problem, currently	31.9	43.0	37.4	49.5	25.9	36.9	29.5	42.5
23. Dissatisfaction with marital or equivalent situation	29.5	25.8	34.6	32.2	28.4	24.9	30.7	39.6
53. Poor attitude toward sentence/conviction	29.3	27.4	21.9	23.3	24.7	22.0	21.0	20.7
35. Few anti-criminal acquaintances	29.3	32.5	29.9	36.5	28.0	33.0	29.3	35.1
25. Non-rewarding, other (family/marital)	29.2	26.8	33.9	33.1	28.5	26.5	30.9	36.0
52. Unfavorable attitude toward convention	28.6	31.5	22.9	26.4	25.0	31.4	23.9	31.7
39. Alcohol problem, currently	28.3	27.8	19.3	16.1	45.8	48.7	38.8	45.2
22. Reliance upon social assistance	26.5	19.8	44.0	37.3	39.8	30.5	53.5	47.6
27. Unsatisfactory (housing)	25.0	27.7	23.3	28.3	22.2	26.0	24.2	29.1
54. Poor attitude toward supervision	22.8	24.7	17.9	20.5	21.8	25.9	19.3	26.1
29. High crime neighborhood	19.0	16.7	19.6	17.4	17.7	16.0	21.4	21.0
13. Never employed for a full year	18.2	40.6	25.7	41.9	37.7	66.5	39.1	60.5
50. Psychological assessment indicated	15.3	15.1	21.4	19.9	11.9	15.9	14.9	16.2
28. 3 or more address changes last year	15.2	22.9	18.2	28.5	15.1	21.9	20.0	23.4
49. Mental health treatment, current	13.5	10.8	27.2	16.6	12.2	10.9	22.6	14.3
32. A social isolate	13.1	9.6	9.9	9.5	10.4	9.6	10.1	9.5
15. Less than regular grade 10	11.8	16.0	13.2	22.0	13.6	18.9	17.2	21.0
45. Other clinical indicators (alcohol/drug problem)	9.7	9.8	10.9	11.1	10.7	8.4	10.7	9.8
44. Medical (alcohol/drug problem)	7.9	4.8	12.2	9.3	6.2	3.8	11.1	4.5
47. Severe interference (emotional/personal)	5.7	4.5	7.6	5.3	4.9	6.5	6.2	6.4

Note: "<26" indicates age of respondent is 25 years or younger; ">25" indicates age of respondent is 26 years or older

Question	Caucasian				Alaska Native			
	Male		Female		Male		Female	
	<26	>25	<26	>25	<26	>25	<26	>25
33. Some criminal acquaintances	91.8	94.7	94.9	98.1	93.7	92.7	95.3	98.6
37. Alcohol problem, ever	72.5	55.7	66.7	55.9	94.6	84.6	88.1	89.9
38. Drug problem, ever	79.6	83.1	89.2	96.2	67.2	68.8	79.0	90.0
30. No recent participation in an organized activity	57.3	66.8	65.6	70.6	62.3	62.2	68.2	82.9
34. Some criminal friends	80.9	87.4	88.4	89.4	86.5	85.0	88.1	89.9
21. Problems (financial)	56.0	63.8	60.9	68.3	60.7	60.0	57.5	65.2
14. Ever fired	53.8	49.8	51.9	51.0	49.4	41.3	41.2	42.0
31. Could make better use of time	54.2	66.3	66.3	69.2	60.6	68.5	69.8	87.1
17. Suspended or expelled at least once	57.0	73.6	35.8	50.5	52.9	69.5	34.4	52.2
46. Moderate interference (emotional/personal)	53.0	52.0	68.1	58.7	51.0	49.3	67.3	72.5
26. Criminal-Family/Spouse	47.6	59.1	70.2	75.0	65.7	66.5	74.0	71.4
20. Authority Interaction (at school/work)	44.2	53.1	41.5	48.1	54.0	60.5	56.8	60.0
16. Less than regular grade 12	35.8	49.3	32.2	41.7	42.4	54.4	39.0	57.1
42. Marital/family (alcohol/drug problem)	49.5	53.1	61.1	62.5	59.1	52.4	69.4	73.9
18. Participation/Performance (in school/work)	44.9	57.7	46.3	58.8	58.3	63.5	57.3	72.5
19. Peer interaction (at school/work)	41.2	49.5	39.2	46.2	51.7	55.7	54.5	55.7
43. School/work (alcohol/drug problem)	44.6	48.1	55.8	64.4	47.2	45.8	54.0	68.1
24. Non-rewarding, parental	39.6	41.4	43.0	45.2	45.5	42.9	39.6	42.9
11. Currently unemployed	46.8	58.9	46.5	61.8	59.6	66.6	60.9	72.9
36. Few anti-criminal friends	55.3	57.6	66.2	68.3	53.1	49.2	62.4	65.2
51. Supportive of crime	44.7	44.8	42.6	47.1	45.9	41.1	49.8	54.3
12. Frequently unemployed	37.7	53.3	54.4	63.5	59.1	69.0	67.5	85.5
48. Mental health treatment, past	38.0	46.7	60.5	56.3	36.5	37.2	56.0	68.1
40. Drug problem, currently	50.3	62.3	64.8	80.0	36.1	45.8	53.7	70.0
23. Dissatisfaction with marital or equivalent situation	31.7	24.7	30.7	25.0	35.4	26.6	33.6	21.7
53. Poor attitude toward sentence/conviction	38.6	31.0	25.0	14.4	39.0	31.4	27.4	29.0
35. Few anti-criminal acquaintances	51.4	52.7	52.5	61.5	48.5	43.7	50.9	55.1
25. Non-rewarding, other (family/marital)	33.6	34.8	35.1	32.7	33.9	30.1	34.6	40.0
52. Unfavorable attitude toward convention	36.7	37.4	27.3	28.8	39.3	37.5	31.9	46.4
39. Alcohol problem, currently	37.0	30.3	25.1	15.4	66.5	63.4	56.3	54.3
22. Reliance upon social assistance	34.8	34.9	41.7	47.6	45.8	41.7	50.6	59.4
27. Unsatisfactory (housing)	34.2	41.0	36.3	38.5	36.4	35.5	32.7	43.5
54. Poor attitude toward supervision	30.6	28.1	29.4	22.1	31.2	27.4	28.3	30.9
29. High crime neighborhood	27.3	31.3	35.3	29.0	26.8	25.4	32.7	36.2
13. Never employed for a full year	26.2	44.1	28.6	50.0	45.2	65.6	37.7	68.1
50. Psychological assessment indicated	22.3	27.6	25.4	30.5	19.3	22.7	26.3	27.5
28. 3 or more address changes last year	21.0	31.9	26.2	37.6	21.9	29.1	26.3	36.2
49. Mental health treatment, current	14.3	10.8	30.4	18.4	11.0	8.6	33.8	27.5
32. A social isolate	9.5	11.3	8.5	7.7	10.6	6.9	6.9	7.1
15. Less than regular grade 10	13.4	20.5	15.7	22.3	17.2	17.3	18.7	24.6
45. Other clinical indicators (alcohol/drug problem)	15.9	16.3	19.6	27.2	18.3	19.1	20.8	26.1
44. Medical (alcohol/drug problem)	13.5	10.0	25.9	25.0	12.1	10.3	22.7	16.2
47. Severe interference (emotional/personal)	11.0	9.1	10.3	10.7	11.3	9.2	11.4	11.4

Note: "<26" indicates age of respondent is 25 years or younger; ">25" indicates age of respondent is 26 years or older

IV. Current Information about Adverse Childhood Experiences

A. Overview of Adverse Childhood Experiences

Kaiser Permanente and the federal Centers for Disease Control and Prevention asked California healthcare recipients about childhood experiences as part of a late-1990s survey. They found that two-thirds of the respondents had experienced one or more of the potentially difficult situations listed in the survey (abuse, neglect, divorce, economic hardship, etc.); more strikingly, the research found that the more adverse childhood experiences (ACEs) a person had, the more likely they were to have adult physical and mental health problems.⁴⁸ Later research has shown strong association between ACEs and criminal behavior.^{49,50,51}

How are ACEs determined? ACEs assessments are primarily self-reported.^{52,53} Various tools allow anyone to measure ACEs for themselves, including online “score-it-yourself” tests.⁵⁴ The larger, peer-reviewed studies have been primarily phone surveys.^{55,56} Some studies of ACEs have used checklists completed by clinicians from information already in clients’ or patients’ files, but again, much of that information was initially self-reported by the patient/client or another person.^{57,58,59}

⁴⁸ Alaska Department of Health and Social Services, “Adverse Childhood Experiences-Overcoming ACEs in Alaska” (Juneau, Alaska: Alaska Department of Health and Social Services, 2015).

⁴⁹ Christopher Freeze, “Adverse Childhood Experiences and Crime,” *FBI: Law Enforcement Bulletin*, 2019.

⁵⁰ Matthew Moore and Anthony Tatman, “Adverse Childhood Experiences and Offender Risk to Re-Offend in the United States: A Quantitative Examination,” *International Journal of Criminal Justice Sciences* 11, no. 2 (2016): 11.

⁵¹ James Reavis et al., “Adverse Childhood Experiences and Adult Criminality: How Long Must We Live Before We Possess Our Own Lives?” *The Permanente Journal* 17 (2013): 44–48, <https://doi.org/10.7812/TPP/12-072>.

⁵² Christina D. Bethell et al., “Methods to Assess Adverse Childhood Experiences of Children and Families: Toward Approaches to Promote Child Well-Being in Policy and Practice,” *Academic Pediatrics* 17, no. 7 Suppl (2017): S51–S69, <https://doi.org/10.1016/j.acap.2017.04.161>.

⁵³ Karen Hughes et al., “The Effect of Multiple Adverse Childhood Experiences on Health: A Systematic Review and Meta-Analysis,” *The Lancet Public Health* 2, no. 8 (August 2017): e356–e366, [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4).

⁵⁴ ACEs Too High News, “Got Your ACE Score? ACEs Too High” (<https://acestoohigh.com/got-your-ace-score/>, 2019).

⁵⁵ Centers for Disease Control and Prevention, “Behavioral Risk Factor Surveillance System Survey ACE Data, 2009–2018” (Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2019).

⁵⁶ Leah K. Gilbert et al., “Childhood Adversity and Adult Chronic Disease: An Update from Ten States and the District of Columbia, 2010,” *American Journal of Preventive Medicine* 48, no. 3 (2015): 345–49, <https://doi.org/10.1016/j.amepre.2014.09.006>.

⁵⁷ Robert F. Anda et al., “Building a Framework for Global Surveillance of the Public Health Implications of Adverse Childhood Experiences,” *American Journal of Preventive Medicine* 39, no. 1 (2010): 93–98, <https://doi.org/10.1016/j.amepre.2010.03.015>.

⁵⁸ Shanta R. Dube et al., “Assessing the Reliability of Retrospective Reports of Adverse Childhood Experiences Among Adult HMO Members Attending a Primary Care Clinic,” *Child Abuse & Neglect* 28, no. 7 (2004): 729–37, <https://doi.org/10.1016/j.chiabu.2003.08.009>.

⁵⁹ V. J. Edwards et al., “Bias Assessment for Child Abuse Survey: Factors Affecting Probability of Response to a Survey About Childhood Abuse,” *Child Abuse & Neglect* 25, no. 2 (2001): 307–12, [https://doi.org/10.1016/s0145-2134\(00\)00238-6](https://doi.org/10.1016/s0145-2134(00)00238-6).

Some studies done since the original ACEs population was surveyed look at the need for expanding the definitions of adversity to better reflect lives in non-White, lower income, more ethnically diverse communities.^{60,61,62} Researchers described other measures that they believed should be added to the original ACEs measures; for example, a study on the prevalence of ACEs (as reported by parents of children between birth and age 17) showed statistically significant ethnic and geographic differences, with black non-Hispanic children and Hispanic children scoring the highest, and Asian non-Hispanic children scoring significantly lower.^{63,64}

B. Adverse Childhood Experiences in Alaska

The most comprehensive information about ACEs in Alaska comes from a 2015 report prepared by the Alaska Department of Health and Social Services, in which eight adverse childhood experiences were surveyed: physical abuse, sexual abuse, emotional abuse, living with someone with mental illness, living with someone with substance abuse, separation or divorce, living with someone who went to jail or prison, and witnessing domestic violence.⁶⁵ From the report: “Researchers created a scoring method to determine the ‘dose’ of each study participant’s exposure to each type of ‘adverse childhood experiences,’ or ACEs. A person who reported no exposure to any of the adverse experience categories would have an ACE score of zero. A person who reported exposure to all eight categories of trauma would have an ACE score of eight.”⁶⁶

Furthermore, the 2015 report by the Alaska Department of Health and Social Services found that the reported rates of adverse experiences were higher for Alaska adults than the average rates in a 2009 CDC study from five states (Arkansas, Louisiana, Tennessee, New Mexico, and Washington).⁶⁷ Continuing, the report says, “In all but two of the categories, these higher rates were statistically significant given the two studies’ sample sizes. The three categories of adverse experiences with significantly higher rates among adults in Alaska – incarcerated family member, household substance abuse and separation and divorce – were also found to be significantly higher in a sample of Alaska children when compared with a

⁶⁰ Centers for Disease Control and Prevention, “Adverse Childhood Experiences Reported by Adults — Five States, 2009,” *MMWR. Morbidity and Mortality Weekly Report* 59, no. 49 (2010): 1609–13.

⁶¹ Kathryn Maguire-Jack, Paul Lanier, and Brianna Lombardi, “Investigating Racial Differences in Clusters of Adverse Childhood Experiences,” *The American Journal of Orthopsychiatry*, 2019, <https://doi.org/10.1037/ort0000405>.

⁶² Melissa Stropolis et al., “The Intersectionality of Adverse Childhood Experiences, Race/Ethnicity, and Income: Implications for Policy,” *Journal of Prevention & Intervention in the Community*, 2019, 1–15, <https://doi.org/10.1080/10852352.2019.1617387>.

⁶³ Vanessa Sacks and David Murphey, “The Prevalence of Adverse Childhood Experiences, Nationally, by State, and by Race or Ethnicity,” *Child Trends*, 2018.

⁶⁴ Economic hardship and divorce or separation of a parent or guardian are the most common ACEs reported nationally, and in all states.

⁶⁵ Alaska Department of Health and Social Services, “Adverse Childhood Experiences-Overcoming ACEs in Alaska.”

⁶⁶ Ibid.

⁶⁷ Ibid.

national rate.”^{68,69} A 2016-2017 update by the Annie E. Casey Foundation said that 44,054 of Alaska’s children had experienced two or more ACEs (24%).

The ACEs-associated issue most clearly related to criminal behavior in Alaska may be substance abuse. Alaska data consistently suggest that 80% or more of people who are in DOC custody or control have substance abuse problems (drugs, alcohol, or both).^{70,71} The 2015 Alaska Department of Health and Social Services report says, “The Alaska research suggests that 20.5% of adult heavy drinking is linked back to ACEs. If 20 percent of other substance abuse is also tied to ACEs (a conservative estimate), then we can estimate that \$246 million in annual costs due to substance abuse in Alaska are linked to ACEs.”⁷²

The national evidence also supports the finding that higher ACEs scores are significantly related to substance abuse problems.^{73,74} One study showed that about 2% of people with a “zero” ACEs score had alcoholism issues as an adult, compared to 16% of people with an ACEs score of 4 or more who had adult alcoholism issues.⁷⁵

⁶⁸ From the 2015 Alaska Department of Health and Social Services report: “The Alaska Department of Labor and Workforce Development estimated that there were approximately 550,000 Alaskans aged 18 and older in 2013. What does the five-point difference between the five-state average of 40.6 percent of residents with an ACE score of zero to Alaska’s 35.6 percent mean? If Alaska were to improve to the level of the five states, approximately 27,500 more adults would have zero ACEs. If Alaska could reduce the percentage of people with four or more ACEs to the level of the five states, then more than 11,500 Alaskans would have a lower ACE score. Changing an ACE score for 11,500 people may not seem significant but evidence suggests it would have a great impact on many health, economic, and social outcomes.”

⁶⁹ Ibid.

⁷⁰ Andrew Kitchenman, “Why Prison Drug Treatment Programs in Alaska Ramped down at ‘Exactly the Wrong Time,’” *Alaska Public Media*, 2017.

⁷¹ Quoting Laura Brooks at DOC from the article: “Eighty percent of our population have substance abuse issues.”

⁷² Alaska Department of Health and Social Services, “Adverse Childhood Experiences-Overcoming ACEs in Alaska.”

⁷³ Elizabeth Crouch et al., “Adverse Childhood Experiences (ACEs) and Alcohol Abuse Among South Carolina Adults,” *Substance Use & Misuse* 53, no. 7 (2018): 1212–20, <https://doi.org/10.1080/10826084.2017.1400568>.

⁷⁴ Hughes et al., “The Effect of Multiple Adverse Childhood Experiences on Health.”

⁷⁵ Shanta R. Dube et al., “Adverse Childhood Experiences and Personal Alcohol Abuse as an Adult,” *Addictive Behaviors* 27, no. 5 (2002): 713–25, [https://doi.org/10.1016/s0306-4603\(01\)00204-0](https://doi.org/10.1016/s0306-4603(01)00204-0).

V. ACEs and the LSI-R

A. Research showing association between ACEs and LSI-R scores

Several reports have demonstrated a strong link between ACEs and higher LSI-R scores. A small 2016 study showed that the higher a person's ACEs scores, the higher that person tended to score on the LSI-R, while controlling for demographic factors (age, ethnicity, and gender).⁷⁶ The authors concluded that "an increased ACE score is predictive of an increased LSI-R score" and suggested that conducting an ACEs assessment before using a risk/needs assessment (such as the LSI-R) could allow better targeting of resources to reduce future recidivism.⁷⁷

A Journal of Juvenile Justice assessment of the relationship between ACEs and juveniles involved with the justice system cited several studies showing associations between high ACEs scores and incarceration, as well as an association with increased violence.⁷⁸ Studies that compared juveniles involved with the justice system to those in the general population found that they had experienced more childhood trauma, divorce, exposure to family domestic violence, and other ACEs.⁷⁹ Furthermore, ACEs scores correlated strongly with risk for re-offense as measured by a widely used juvenile risk/needs assessment instrument, PACT.^{80,81}

B. Possible responses to reduce ACEs and protect against the effects of ACEs

The Legislature asked the Alaska Criminal Justice Commission to consider ways to prevent ACEs, and implicitly, ways to counter-balance effects of ACEs through "protective factors" in order to reduce the likelihood of future criminal behavior.⁸² Suggestions from a variety of resources include: improving parenting skills, providing resources for at-risk children, and creating resilience through evidence-based practices and techniques.⁸³ Evidence-based techniques have shown positive benefit-cost ratios, and significant crime reduction.^{84,85,86}

⁷⁶ Moore and Tatman, "Adverse Childhood Experiences and Offender Risk to Re-Offend in the United States."

⁷⁷ Ibid.

⁷⁸ Michael Baglivio et al., "The Prevalence of Adverse Childhood Experiences (ACE) in the Lives of Juvenile Offenders," *Journal of Juvenile Justice* 3, no. 2 (2014): 107.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ The Positive Achievement Change Tool (PACT) measures static, dynamic, and protective factors.

⁸² Alaska Stat. § 44.19.645.

⁸³ Michael Shader, "Risk Factors for Delinquency: An Overview" (Rockville, MD: Office of Juvenile Justice and Delinquency Prevention, 2004).

⁸⁴ Baglivio et al., "The Prevalence of Adverse Childhood Experiences (ACE) in the Lives of Juvenile Offenders."

⁸⁵ Alison Giovanelli et al., "Adverse Childhood Experiences and Adult Well-Being in a Low-Income, Urban Cohort," *Pediatrics* 137, no. 4 (April 2016), <https://doi.org/10.1542/peds.2015-4016>.

⁸⁶ Heather Larkin and John Records, "Adverse Childhood Experiences: Overview, Response Strategy, and Integral Theory," *The Journal of Integral Theory & Practice* 2 (January 2007): 1–25.

Washington State has taken the lead in addressing ACEs, including passing legislation, changing the ways in which some services were delivered, and creating school programs.^{87,88,89} The National Conference of State Legislators summed up this legislation, saying, “The law notes that a focused effort is needed to: 1) identify and promote the use of innovative strategies based on evidence-based and research-based approaches and practices; and 2) align public and private policies and funding with approaches and strategies that have demonstrated effectiveness.”⁹⁰

⁸⁷ Ruth Kagi and Debbie Regala, “Translating the Adverse Childhood Experiences (ACE) Study into Public Policy: Progress and Possibility in Washington State,” *Journal of Prevention & Intervention in the Community* 40, no. 4 (2012): 271–77, <https://doi.org/10.1080/10852352.2012.707442>.

⁸⁸ The Kagi and Regala article is a resource for more information about the legislative approaches taken by Washington State legislators who, for example, combined existing agencies and programs, and created new approaches using evidence-based practices.

⁸⁹ National Center for Injury Prevention and Control, Division of Violence Prevention, “Case Study: Learning from Washington’s Adverse Childhood Experiences (ACE) Story” (Atlanta, GA: Centers for Disease Control and Prevention, n.d.).

⁹⁰ National Conference of State Legislatures, “Child Well-Being Legislative Enactments” (<http://www.ncsl.org/research/human-services/50-state-well-being-legislative-enactments-2008-2014.aspx>, 2016).

VI. Discussion and Recommendations

The findings from the analysis of the LSI-R:SV and LSI-R data consistently show that alcohol and drug problems are pervasive among people assessed using the instruments. Nearly two-thirds or more say that they have had drug or alcohol problems, no matter how or when (i.e., out of custody or in custody) the question is asked. This holds true among each of the demographic analyses, whether gender, ethnicity, or age groups. The alcohol problems appear to be worse among Alaska Natives than Caucasians. Caucasians have had more drug problems, however, than Alaska Natives. There are no significant differences by gender, although women in custody mention more drug problems than men. Younger people characterize themselves as having more drug and alcohol problems than older (more than 25 years old) people.

The other pervasive issue is the presence of criminal acquaintances and friends. More than three-quarters of the people in all groups, whether in custody or out of custody, have had criminal acquaintances and friends. Not surprisingly, people in custody tended to have more criminal acquaintances and friends than those out of custody.

What may be surprising are the relatively low rates with which individuals report being currently unemployed or being frequently unemployed.⁹¹ Responses tended to be highest among Alaska Natives whose mean affirmative responses were between sixty and eighty percent, compared to Caucasians whose mean affirmative responses were between thirty and sixty percent; yet only occasionally for either group were these ranked among the highest for questions on the LSI-R. Whether this is an artifact of education or training programs being assessed as “employed” for the purposes of the risk assessment, or, compared to substance use and criminal associates, employment is simply a lesser issue, it is not known but may be relevant for the types of programs both the general and justice-involved populations are offered.

Similar to the employment results, the relatively low rates with which individuals report mental health disorders may be surprising, given a 2014 study by Hornby et al. that found an overlap between incarcerated individuals and individuals appearing in data sources suggestive of mental health disorders.^{92,93} Hornby et al. considered 60,247 unique individuals who were admitted, released, or

⁹¹ The following guidance is provided to assessment administrators when asking respondents about employment in the context of incarceration: “When doing an LSI-R:SV with an incarcerated client it is helpful to view his/her incarceration as a type of ‘leave without pay.’ If he/she is serving a relatively brief sentence (under two years) consider first, was he/she working before incarceration and if so, will he/she be able to return to this job. If the answer is no, then the client is assessed as unemployed. If a client, whether incarcerated or not, is being paid to participate in a training program and there is a work component, then he/she is assessed as employed” (LSI-R:SV, 1998).

⁹² Helaine Hornby, Mark Rubin, and Dennis Zeller, “Trust Beneficiaries in Alaska’s Department of Corrections” (South Portland, ME: Hornby Zeller Associates, Inc., 2014).

⁹³ In “Trust Beneficiaries in Alaska’s Department of Corrections,” 2014, Hornby et al. state that, lacking a centralized list of individuals who, per AS 47.30.056, qualify as an Alaska Mental Health Trust Authority “beneficiary,” researchers were required to create criteria by which individuals who appeared in DOC custody during the study period would be categorized, namely, “(1) clinical diagnosis of a mental illness, developmental disability, chronic alcoholism or other substance-related disorders, Alzheimer’s disease and related dementia, or a traumatic brain

incarcerated in DOC between July 1, 2008, and June 30, 2012; of these, 18,323 were identified as being in datasets suggestive of a mental health disorder; of these, 11,265 were sufficiently complete that the specific mental health disorder could be identified; and finally, of these, which are not mutually exclusive, 9,383 were identified as having a mental illness, 752 were identified as having a developmental disability, 60 were identified as having Alzheimer's or related disease, and 264 were identified as having traumatic brain injury.^{94,95,96} Given these data, the floor of mental-health-disorder prevalence among unique individuals in DOC custody between 2008 and 2012 is 16%. Based on information presented elsewhere in the report, the prevalence of mental health disorders in a one-day snapshot is likely higher. While Hornby et al. do not provide enough information to calculate this metric, they state that the length of incarceration is longer among individuals with certain disorders, including mental health disorders, than those without.⁹⁷ Furthermore, Hornby et al. state that on June 30, 2012, 65% of DOC population could be linked to data sources that suggested a substance-abuse disorder, mental illness, developmental disability, Alzheimer's or related disease, and/or traumatic brain injury.⁹⁸ This would represent the ceiling, and some smaller percentage would constitute those with a mental health disorder in a one-day snapshot. Among respondents to the LSI-R:SV, the mean affirmative response to "6. Psychological assessment indicated" was 21%, the lowest mean affirmative response of the questions asked on that assessment.⁹⁹ This held true by demographic characteristics and custody status. Among respondents to the LSI-R, the mean affirmative response to "46. Moderate interference" was 45%, the mean affirmative response to "47. Severe interference" was 6%, the mean affirmative response to "48. Mental health treatment, past" was 35%, the mean affirmative response to "49. Mental health treatment, current" was 14%, and, the

injury, (2) admission to API, or (3) receipt of community services of significant duration and intensity either where a mental health and/or substance abuse diagnosis had been made or where the service itself was clearly related to mental health and/or substance abuse." Hornby et al. continue, "With multiple datasets and overlapping criteria, identification of Trust Beneficiaries occurred according to a strictly linear process. First, any offender with one of the above conditions recorded in any of ADOC's databases was deemed a Trust Beneficiary. Then, any offender not identified by ADOC but who had been admitted to API was added to the list. The third added group consisted of offenders unknown to either ADOC or API as having mental health and/or substance abuse issues but who had a clinical diagnosis recorded in Medicaid. AKAIMS supplies the final group, all those not identified by the other sources who have received mental health or substance abuse services of sufficient duration and intensity."

⁹⁴ Ibid.

⁹⁵ See AS 47.30.056 or Alaska Mental Health Trust Authority for definitions of these mental health disorders.

⁹⁶ It is important to note that of the 11,265, Hornby et al. identified 7,899 as having substance-abuse disorders, which, again, are not mutually exclusive to mental illness, developmental disability, Alzheimer's or related disease, and/or traumatic brain injury.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ The following guidance is provided to assessment administrators when asking respondents about psychological assessment indicators: "If the client has never been assessed, or if it is unknown whether the client has ever been assessed, but there are indicators of problems with the following, answer 'Yes' for this item and note the problems that the client's behaviors indicate, for example: intellectual functioning; academic/vocational potential; academic/vocational interests; excessive fears, negative attitudes towards self, depression, tension; hostility, anger, potential for assaultive behavior, over-assertion/aggression; impulse control, self-management skills; interpersonal confidence, interpersonal skills, under-assertive; contact with reality, severe withdrawal, over-activity, possibility of delusion/hallucination; disregard for feelings of others, possibility of reduced ability or inability to experience guilty/shame, may be superficially 'charming' but appears to repeatedly disregard rules and feelings of others; criminal acts that do not make sense or appear irrational; other" (LSI-R:SV, 1998).

mean affirmative response to “50. Psychological assessment indicated” was 16%. While less than 50% in the aggregate, in some demographic and custody status sub-groups, for example, Alaska Natives and, in particular, Alaska Natives who are in custody for the assessment, these mean affirmative responses are higher at 50% to 80% (see Tables 7 and 8 for more information).

Because more than two-thirds of all people taking the LSI-R:SV or the LSI-R reported both substance abuse problems and criminal acquaintances or friends, those may be two aspects of life that prevention measures could target. As discussed above, parenting, resilience training, and other prevention and response measures have the potential to reduce the number of children exposed to ACEs or to mitigate effects among those that have already been exposed, and, as a result, reduce LSI-R scores if these individuals come into contact with the criminal justice system. While not intended as an exhaustive list, below are examples of evidenced-based programs that help at-risk youth improve resiliency and avoid substance abuse.

- Multisystemic Therapy – Substance Abuse focuses on adolescents who have substance abusing or substance dependent behavior and works to replace negative, delinquent associates with positive, pro-social ones. A study found lower rates of marijuana use and fewer convictions for aggressive crimes among participants compared to a control group.¹⁰⁰
- SNAP[®] Under 12 Outreach Project is an intervention for boys age 12 and under who demonstrate aggressive and antisocial behavior, teaching participants self-control and problem-solving skills. A study found fewer criminal convictions by 18 years of age among program participants compared to a control group.¹⁰¹
- Big Brothers Big Sisters Community-Based Mentoring Program provides mentoring to at-risk youth between the ages of six and 18. A study found lower rates of drug use, lower rates of alcohol use, and fewer antisocial behaviors, including criminal behavior, among participants compared to a control group.¹⁰²
- Multidimensional Family Therapy is an intervention for adolescents with drug and behavior problems that helps youth develop interdependent, developmentally appropriate relationships with family and community, including peers. Several studies have found reduced substance use among participants compared to a control group, and one study found less criminal behavior.¹⁰³

¹⁰⁰ Crime Solutions, “Program Profile: Multisystemic Therapy - Substance Abuse” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=179>, 2011).

¹⁰¹ Crime Solutions, “Program Profile: SNAP Under 12 Outreach Project” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=231>, 2012).

¹⁰² Crime Solutions, “Program Profile: Big Brothers Big Sisters Community-Based Mentoring Program” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=112>, 2011).

¹⁰³ Crime Solutions, “Program Profile: Multidimensional Family Therapy” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=267>, 2012).

- Positive Family Support focuses on children at-risk for problem behaviors or substance use. A study found lower rates of substance use and fewer arrests from grades six to eleven among participants compared to a control group.¹⁰⁴
- Perry Preschool Project provides early childhood education for disadvantaged children ages three to four. A study found significantly lower crime rates in a 27-year follow-up among participants compared to a control group.¹⁰⁵

Policy makers may also wish to consider programs that show promise, but that have not yet been rigorously evaluated, if those programs address the unique needs in Alaskan communities. Programs that are rooted in evidence-based practices may be beneficial. For example, the use of cognitive-behavioral therapy is evidence-based, and can be adapted for use in a variety of settings. Therefore, programs that have not been individually evaluated but that use cognitive-behavioral therapy as one component of the program may be successful.¹⁰⁶

Additionally, policy makers may wish to implement primary prevention programs that address needs other than developing resiliency and avoiding substance abuse. Mental health screening and treatment, job training, cultural and social engagement, and housing, which, while not among the LSI-R assessment questions with the highest affirmative response, may nonetheless represent critical needs in communities, particularly among those not involved in the criminal justice system. Care should be taken, however, where the evidence base is not fully developed.

¹⁰⁴ Crime Solutions, “Program Profile: Positive Family Support” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=289>, 2013).

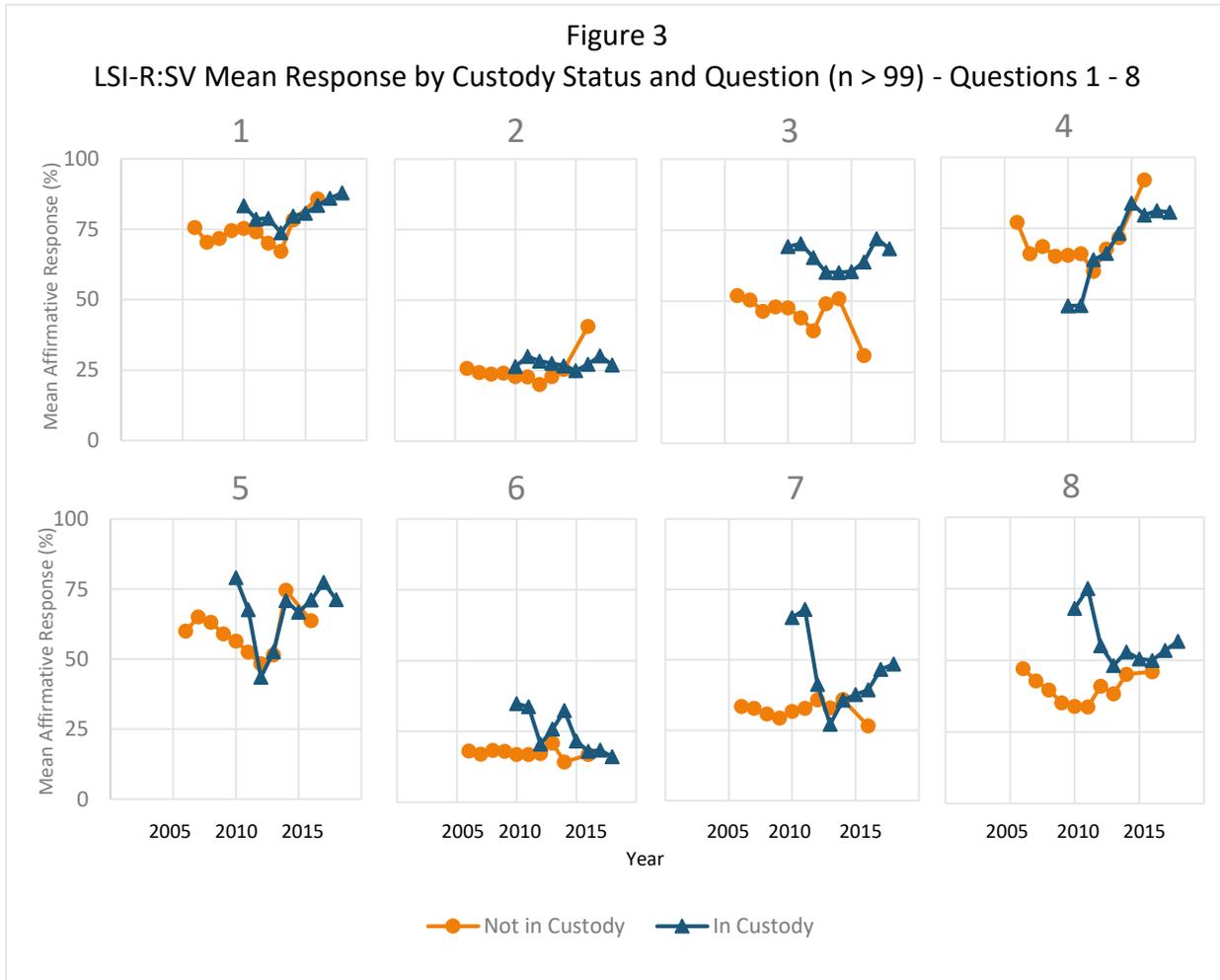
¹⁰⁵ Crime Solutions, “Program Profile: Perry Preschool Project” (<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=143>, 2011).

¹⁰⁶ Washington State Institute for Public Policy, “Cognitive Behavioral Therapy (CBT)” (Olympia, WA: Washington State Institute for Public Policy, 2018).

Appendix

A. LSI-R:SV Response Overview

Affirmative response by custody status and question over years (see Table 9 for questions):



Affirmative response and counts by custody status and question:

Custody	Question	Response	
		Count	Affirmative (%)
Not in Custody	1. Two or more prior adult convictions	18,295	73.3
Not in Custody	2. Arrested under age 16	18,176	23.4
Not in Custody	3. Currently unemployed	18,193	46.7
Not in Custody	4. Some criminal friends	18,276	66.3
Not in Custody	5. Alcohol/drug problem: School/work	18,279	58.2
Not in Custody	6. Psychological assessment indicated	18,262	17.3
Not in Custody	7. Non-rewarding, parental	18,209	31.7
Not in Custody	8. Attitudes/orientation: Supportive of crime	18,204	37.3
In Custody	1. Two or more prior adult convictions	21,223	80.8
In Custody	2. Arrested under age 16	21,041	27.8
In Custody	3. Currently unemployed	21,044	65.1
In Custody	4. Some criminal friends	21,016	69.8
In Custody	5. Alcohol/drug problem: School/work	21,103	65.2
In Custody	6. Psychological assessment indicated	20,994	24.6
In Custody	7. Non-rewarding, parental	21,022	44.4
In Custody	8. Attitudes/orientation: Supportive of crime	21,005	56.4

B. LSI-R Response Overview

Affirmative response by custody status and question over years (see Table 10 for questions):

Figure 4
 LSI-R Mean Response by Custody Status and Question (n > 99) - Questions 1 - 20

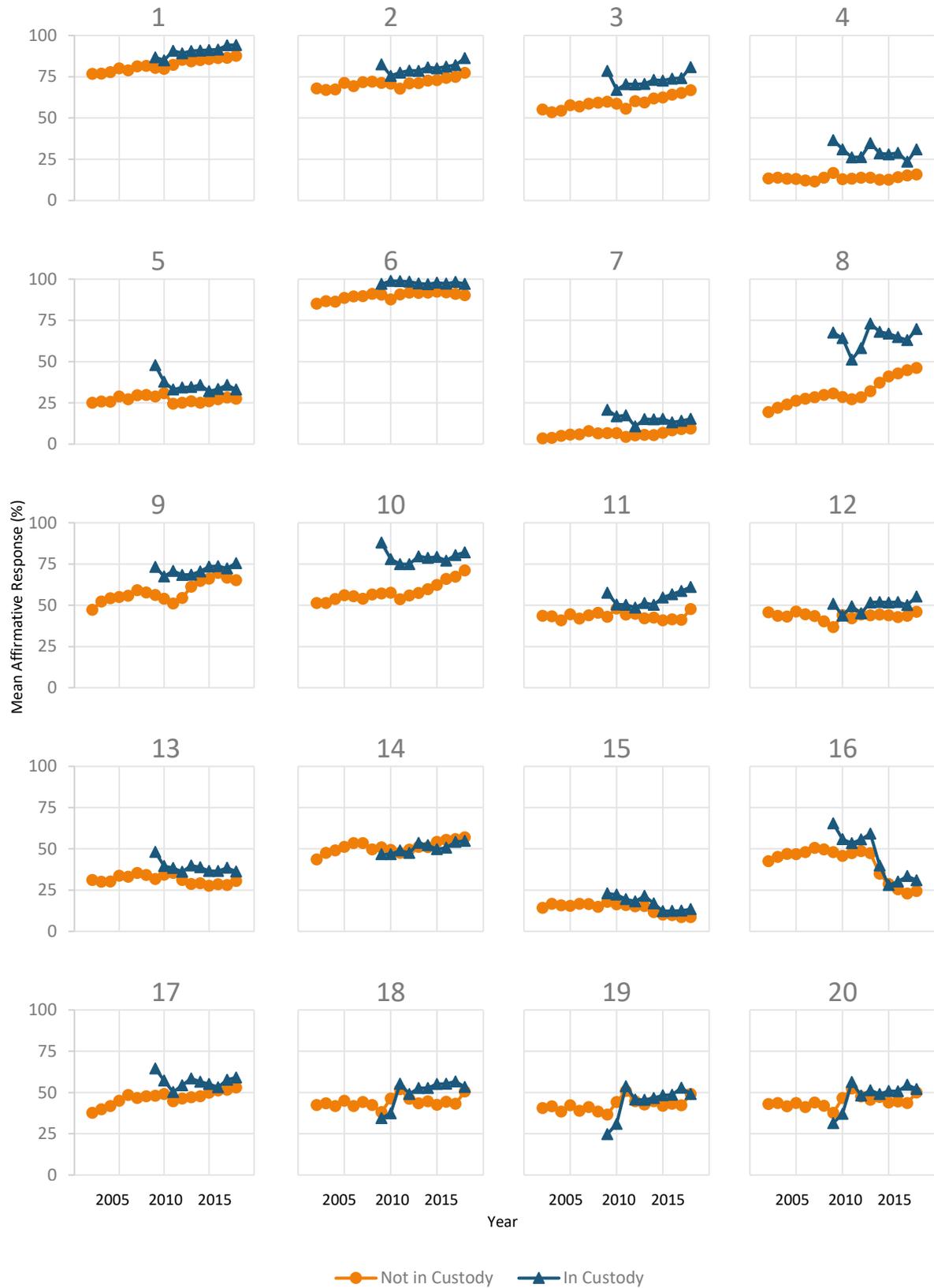
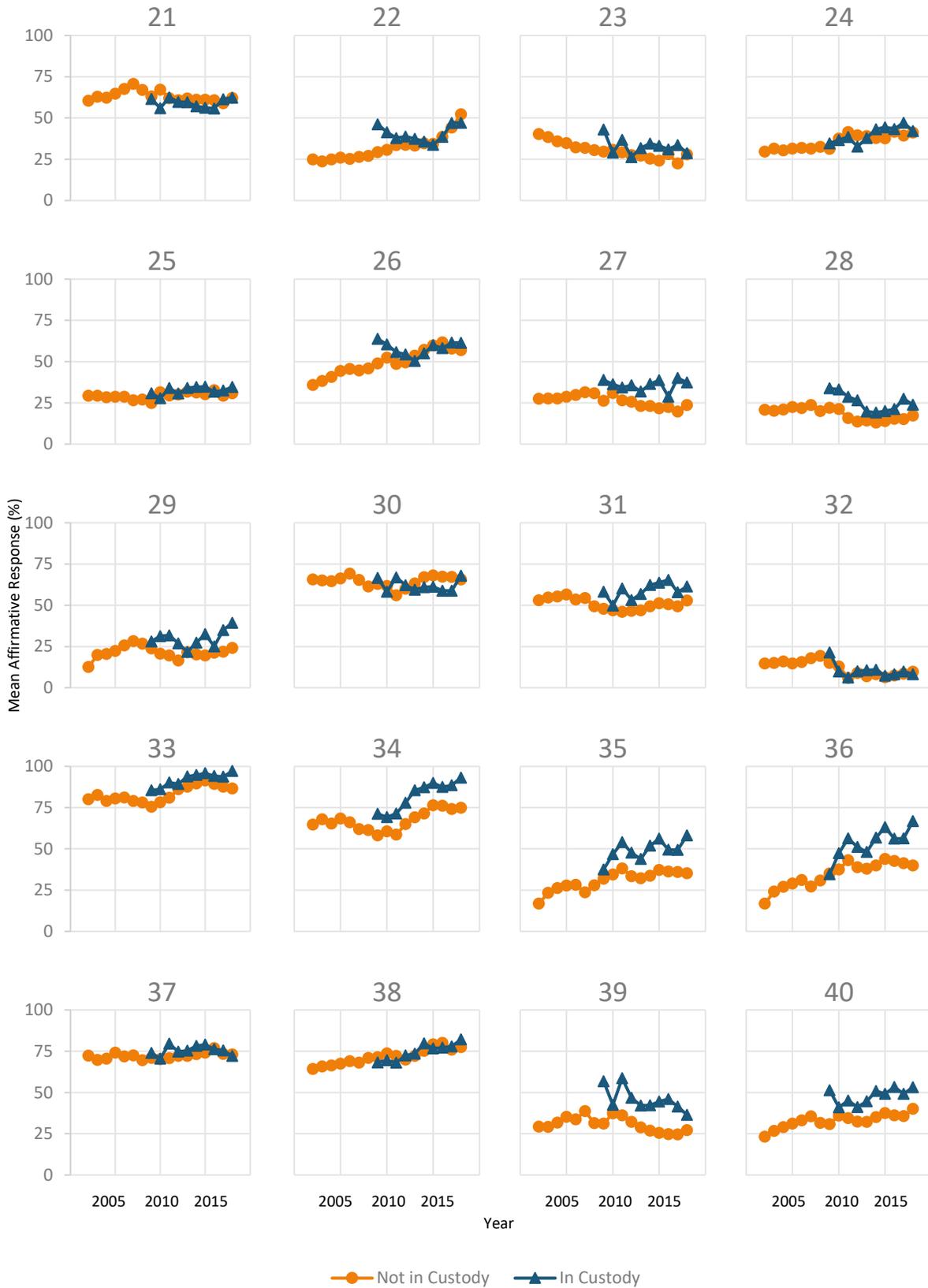
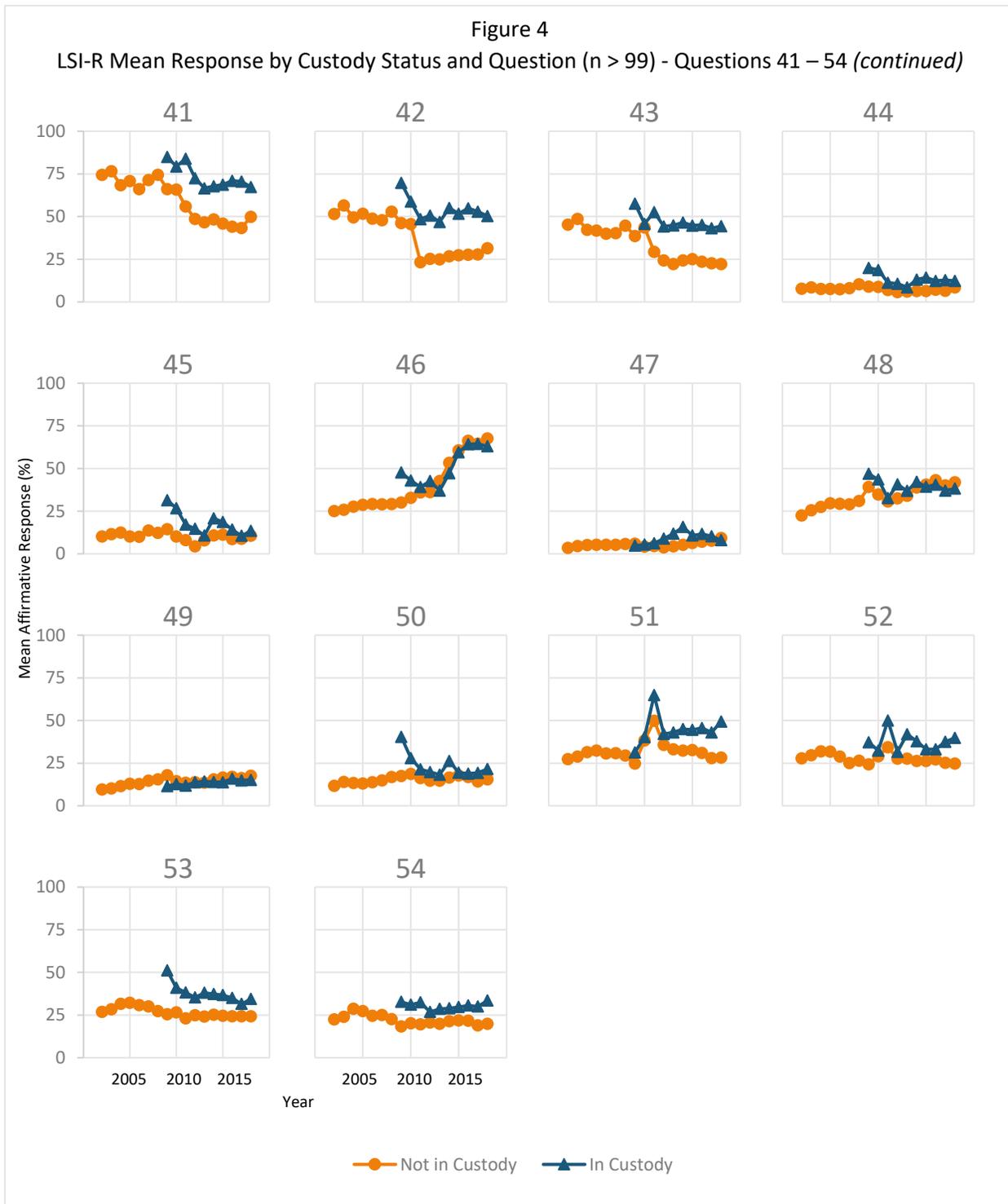


Figure 4
 LSI-R Mean Response by Custody Status and Question (n > 99) - Questions 21 – 40 (continued)





Affirmative response and counts by custody status and question:

Table 10
LSI-R – Custody Status

Custody	Question	Response	
		Count	Affirmative (%)
Not in Custody	1. Any prior convictions	53,157	82.6
Not in Custody	2. Two or more prior convictions	53,150	71.4
Not in Custody	3. Three or more prior convictions	53,132	59.7
Not in Custody	4. Three or more present offenses	52,972	13.6
Not in Custody	5. Arrested under age 16	52,758	26.8
Not in Custody	6. Ever incarcerated upon conviction	53,041	90.0
Not in Custody	7. Escape history - institution	52,946	6.3
Not in Custody	8. Ever punished for institutional misconduct	52,624	32.6
Not in Custody	9. Charge or prob/parole suspended [during] supervision	53,054	59.6
Not in Custody	10. Record of assault/violence	53,080	58.7
Not in Custody	11. Currently unemployed	53,031	42.9
Not in Custody	12. Frequently unemployed	52,880	43.9
Not in Custody	13. Never employed for a full year	52,922	30.6
Not in Custody	14. Ever fired	52,483	51.8
Not in Custody	15. Less than regular grade 10	52,697	13.6
Not in Custody	16. Less than regular grade 12	52,707	40.0
Not in Custody	17. Suspended or expelled at least once	52,233	47.2
Not in Custody	18. Participation/Performance (in school/work)	52,911	44.0
Not in Custody	19. Peer interaction (at school/work)	52,730	42.3
Not in Custody	20. Authority Interaction (at school/work)	52,751	44.5
Not in Custody	21. Problems (financial)	53,089	62.9
Not in Custody	22. Reliance upon social assistance	52,786	32.4
Not in Custody	23. Dissatisfaction with marital or equivalent situation	52,705	29.8
Not in Custody	24. Non-rewarding, parental	52,923	36.0
Not in Custody	25. Non-rewarding, other (family/marital)	52,862	29.7
Not in Custody	26. Criminal-Family/Spouse	52,659	50.6
Not in Custody	27. Unsatisfactory (housing)	53,062	25.6
Not in Custody	28. 3 or more address changes last year	52,756	17.7
Not in Custody	29. High crime neighborhood	52,766	21.6
Not in Custody	30. No recent participation in an organized activity	53,000	65.4
Not in Custody	31. Could make better use of time	53,065	51.4
Not in Custody	32. A social isolate	52,889	11.3
Not in Custody	33. Some criminal acquaintances	53,038	84.4
Not in Custody	34. Some criminal friends	53,024	68.8
Not in Custody	35. Few anti-criminal acquaintances	52,753	31.3
Not in Custody	36. Few anti-criminal friends	52,687	35.3
Not in Custody	37. Alcohol problem, ever	53,027	72.6
Not in Custody	38. Drug problem, ever	52,951	72.1
Not in Custody	39. Alcohol problem, currently	52,961	30.0
Not in Custody	40. Drug problem, currently	52,785	33.3
Not in Custody	41. Law violation (alcohol/drug problem)	52,844	57.3
Not in Custody	42. Marital/family (alcohol/drug problem)	52,874	37.4
Not in Custody	43. School/work (alcohol/drug problem)	52,854	32.2
Not in Custody	44. Medical (alcohol/drug problem)	52,815	7.3
Not in Custody	45. Other clinical indicators (alcohol/drug problem)	52,541	10.0
Not in Custody	46. Moderate interference (emotional/personal)	52,863	42.8
Not in Custody	47. Severe interference (emotional/personal)	52,862	5.6
Not in Custody	48. Mental health treatment, past	52,822	34.1
Not in Custody	49. Mental health treatment, current	52,789	14.3
Not in Custody	50. Psychological assessment indicated	52,647	15.1
Not in Custody	51. Supportive of crime	52,946	31.9

Table 10
LSI-R – Custody Status (continued)

Custody	Question	Response	
		Count	Affirmative (%)
Not in Custody	52. Unfavorable attitude toward convention	52,931	28.1
Not in Custody	53. Poor attitude toward sentence/conviction	52,826	26.9
Not in Custody	54. Poor attitude toward supervision	52,860	22.6
In Custody	1. Any prior convictions	10,429	90.9
In Custody	2. Two or more prior convictions	10,417	80.4
In Custody	3. Three or more prior convictions	10,409	72.9
In Custody	4. Three or more present offenses	10,300	28.6
In Custody	5. Arrested under age 16	10,240	34.6
In Custody	6. Ever incarcerated upon conviction	10,416	97.7
In Custody	7. Escape history - institution	10,245	14.8
In Custody	8. Ever punished for institutional misconduct	10,350	64.8
In Custody	9. Charge or prob/parole suspended [during] supervision	10,343	71.4
In Custody	10. Record of assault/violence	10,392	78.6
In Custody	11. Currently unemployed	10,208	54.2
In Custody	12. Frequently unemployed	10,236	50.7
In Custody	13. Never employed for a full year	10,230	38.0
In Custody	14. Ever fired	10,201	51.0
In Custody	15. Less than regular grade 10	10,169	15.9
In Custody	16. Less than regular grade 12	10,258	40.5
In Custody	17. Suspended or expelled at least once	10,248	56.0
In Custody	18. Participation/Performance (in school/work)	10,170	52.5
In Custody	19. Peer interaction (at school/work)	10,215	47.1
In Custody	20. Authority Interaction (at school/work)	10,221	50.2
In Custody	21. Problems (financial)	10,253	58.9
In Custody	22. Reliance upon social assistance	10,215	39.4
In Custody	23. Dissatisfaction with marital or equivalent situation	10,211	32.3
In Custody	24. Non-rewarding, parental	10,204	41.6
In Custody	25. Non-rewarding, other (family/marital)	10,212	33.0
In Custody	26. Criminal-Family/Spouse	10,273	57.9
In Custody	27. Unsatisfactory (housing)	10,132	35.8
In Custody	28. 3 or more address changes last year	9,884	23.8
In Custody	29. High crime neighborhood	9,651	30.3
In Custody	30. No recent participation in an organized activity	10,258	61.5
In Custody	31. Could make better use of time	10,305	60.3
In Custody	32. A social isolate	10,242	9.4
In Custody	33. Some criminal acquaintances	10,312	93.2
In Custody	34. Some criminal friends	10,300	84.6
In Custody	35. Few anti-criminal acquaintances	10,156	50.8
In Custody	36. Few anti-criminal friends	10,184	56.0
In Custody	37. Alcohol problem, ever	10,337	76.1
In Custody	38. Drug problem, ever	10,324	76.0
In Custody	39. Alcohol problem, currently	10,298	44.6
In Custody	40. Drug problem, currently	10,300	48.4
In Custody	41. Law violation (alcohol/drug problem)	10,324	71.6
In Custody	42. Marital/family (alcohol/drug problem)	10,255	53.0
In Custody	43. School/work (alcohol/drug problem)	10,197	45.8
In Custody	44. Medical (alcohol/drug problem)	10,154	13.0
In Custody	45. Other clinical indicators (alcohol/drug problem)	10,256	16.6
In Custody	46. Moderate interference (emotional/personal)	10,155	53.3

Custody	Question	Response	
		Count	Affirmative (%)
In Custody	47. Severe interference (emotional/personal)	10,137	10.4
In Custody	48. Mental health treatment, past	10,271	39.5
In Custody	49. Mental health treatment, current	10,148	14.2
In Custody	50. Psychological assessment indicated	10,307	21.6
In Custody	51. Supportive of crime	10,277	45.6
In Custody	52. Unfavorable attitude toward convention	10,285	36.8
In Custody	53. Poor attitude toward sentence/conviction	10,273	36.5
In Custody	54. Poor attitude toward supervision	10,239	30.1

C. Custody Status and Individual Demographic Characteristics

Not included in the main body of the report, bivariate comparisons, specifically, custody status and individual demographic characteristics, are considered in the following. Custody status differentiates those who are in DOC institutions from those who are not.¹⁰⁷ Demographic characteristics include gender, ethnicity, and age. On both the LSI-R:SV and LSI-R, results by custody status and across demographic characteristics are similar.

On the LSI-R:SV, the questions with the highest affirmative response are identical irrespective of custody status or demographic characteristic, with only their order and magnitude differing. With one exception (4. Some criminal friends (LSI-R:SV) among those over 25 years), the affirmative response is always higher among those in custody than those not in custody. Intra-demographic results vary.

On the LSI-R, results are more varied but generally there is agreement on four of the five questions. As with the LSI-R:SV, question order on the LSI-R may differ and the affirmative response is typically higher among those in custody than those not in custody. Where questions overlap, intra-demographic results vary.

1. LSI-R:SV
 - a) Gender

Excluding criminal history questions, the questions on the LSI-R:SV with the highest affirmative response by gender include those related to criminal acquaintances, employment, and substance abuse. Results by custody status are similar with only a slight difference in their order.

¹⁰⁷ For this report, individuals on Electronic Monitoring or in a Community Residential Center are considered “not in custody.”

Question	Affirmative Response (%)	
	Male	Female
4. Some criminal friends	66.2	66.7
5. Alcohol/drug problem: School/work	58.6	56.8
3. Currently unemployed	44.4	53.9
8. Attitudes/orientation: Supportive of crime	38.9	32.1
7. Non-rewarding, parental	31.2	33.3

Question	Affirmative Response (%)	
	Male	Female
4. Some criminal friends	68.6	78.3
5. Alcohol/drug problem: School/work	64.7	68.4
3. Currently unemployed	64.2	72.5
8. Attitudes/orientation: Supportive of crime	57.7	47.5
7. Non-rewarding, parental	45.2	38.9

b) Ethnicity

Excluding criminal history questions, the questions on the LSI-R:SV with the highest affirmative response by ethnicity include those related to criminal acquaintances, employment, and substance abuse. Results by custody status are similar.

Question	Affirmative Response (%)	
	Caucasian	Alaska Native
4. Some criminal friends	63.7	72.3
5. Alcohol/drug problem: School/work	57.4	66.1
3. Currently unemployed	42.3	60.2
8. Attitudes/orientation: Supportive of crime	34.6	38.9
7. Non-rewarding, parental	30.4	34.0

Question	Affirmative Response (%)	
	Caucasian	Alaska Native
4. Some criminal friends	69.1	72.7
5. Alcohol/drug problem: School/work	65.6	67.7
3. Currently unemployed	59.8	71.4
8. Attitudes/orientation: Supportive of crime	57.8	52.8
7. Non-rewarding, parental	44.1	42.4

c) Age

Excluding criminal history questions, the questions on the LSI-R:SV with the highest affirmative response by age include those related to criminal acquaintances, employment, and substance abuse. Results by custody status are similar.

Question	Affirmative Response (%)	
	25 Yrs & Under	Over 25 Yrs
4. Some criminal friends	63.4	75.1
5. Alcohol/drug problem: School/work	58.1	58.4
3. Currently unemployed	44.2	54.0
8. Attitudes/orientation: Supportive of crime	36.0	41.1
7. Non-rewarding, parental	30.6	34.8

Question	Affirmative Response (%)	
	25 Yrs & Under	Over 25 Yrs
4. Some criminal friends	70.1	68.9
5. Alcohol/drug problem: School/work	67.1	58.4
3. Currently unemployed	63.9	69.4
8. Attitudes/orientation: Supportive of crime	56.6	56.0
7. Non-rewarding, parental	44.8	42.9

2. LSI-R

a) *Gender*

Excluding criminal history questions, the questions on the LSI-R with the highest affirmative response by gender include those related to criminal acquaintances and substance abuse. Results by custody status are similar, with general overlap and small differences in their order. (Note that blank values indicate a particular question was not among the five with the highest affirmative response for that group.)

Question	Affirmative Response (%)	
	Male	Female
33. Some criminal acquaintances	84.8	82.9
37. Alcohol problem, ever	75.5	62.9
38. Drug problem, ever	72.1	72.2
34. Some criminal friends	69.0	67.9
30. No recent participation in an organized activity	66.5	–
21. Problems (financial)	–	68.2

Question	Affirmative Response (%)	
	Male	Female
33. Some criminal acquaintances	93.0	95.0
37. Alcohol problem, ever	84.1	87.9
38. Drug problem, ever	76.6	72.5
34. Some criminal friends	74.5	86.0
30. No recent participation in an organized activity	60.5	–
21. Problems (financial)	–	71.3

b) *Ethnicity*

Excluding criminal history questions, the questions on the LSI-R with the highest affirmative response by ethnicity include those related to criminal acquaintances and substance abuse. Results by custody status are similar, with general overlap and small differences in their order. (Note that blank values indicate a particular question was not among the five with the highest affirmative response for that group.)

Question	Affirmative Response (%)	
	Caucasian	Alaska Native
33. Some criminal acquaintances	82.4	88.2
37. Alcohol problem, ever	74.4	68.3
38. Drug problem, ever	69.7	90.4
34. Some criminal friends	66.0	72.4
30. No recent participation in an organized activity	65.5	–
21. Problems (financial)	–	64.9

Question	Affirmative Response (%)	
	Caucasian	Alaska Native
33. Some criminal acquaintances	92.7	93.8
37. Alcohol problem, ever	82.9	86.5
38. Drug problem, ever	81.6	69.2
34. Some criminal friends	69.2	92.1
30. No recent participation in an organized activity	59.9	–
21. Problems (financial)	–	66.9

c) Age

Excluding criminal history questions, the questions on the LSI-R with the highest affirmative response by age include those related to criminal acquaintances and substance abuse. Results by custody status are similar, with general overlap and small differences in their order. (Note that blank values indicate a particular question was not among the five with the highest affirmative response for that group.)

Question	Affirmative Response (%)	
	25 Yrs & Under	Over 25 Yrs
33. Some criminal acquaintances	83.5	87.5
37. Alcohol problem, ever	75.7	–
38. Drug problem, ever	71.7	73.4
34. Some criminal friends	67.1	74.4
30. No recent participation in an organized activity	64.0	70.1
21. Problems (financial)	–	67.1

Question	Affirmative Response (%)	
	25 Yrs & Under	Over 25 Yrs
33. Some criminal acquaintances	93.0	94.3
34. Some criminal friends	84.2	86.1
37. Alcohol problem, ever	78.5	–
38. Drug problem, ever	75.9	76.1
30. No recent participation in an organized activity	60.6	–
17. Suspended or expelled at least once	–	69.0
31. Could make better use of time	–	68.3

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