

Adult Basic Education and General Education Development Program Study Findings: FY2018 Releases

Prepared by the Research - Evaluation Unit

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VIRGINIA DEPARTMENT OF CORRECTIONS

Presentation Outline

- Overview of the Adult Basic Education Program (ABE) and the General Education Development Program (GED®)
 - Purpose and background of the two programs
 - ABE levels and how they relate to employability
- Characteristics of ABE & GED Participant and Non-Participants
- ABE participants
 - Test of Adult Basic Education (TABE) Scores
 - Score improvements
 - Recidivism rates by ABE levels
- GED® participants
 - Testing results
 - Recidivism rates for GED® earners
 - Program participants versus comparison groups
- Comparison to FY2016 Education Evaluation
- Summary

Overview of Academic Correctional Education Programs at DOC Facilities

- Academic Correctional Education programs
 - Focus on helping inmates successfully re-enter the community
 - Improve skills: academic, workplace readiness, and employability skills to aid in successful re-entry
 - Inmates are required* to participate in Adult Basic Education Program (ABE) if they do not have a verified HSD, GED®, Applied Studies Diploma (ASD) credential, or proof of passing at least two HSE tests†
 - Discretionary, mandatory, and unspecified exemptions may also be granted depending on program progression, classroom performance and effort, or medical conditions that prohibit the inmate from participating**

Notes:

* Individuals with a DOC Length of Stay (LOS) of less than one year, social security eligibility, or are currently located in a hospital location are exempt from participation in the ABE program. Exceptions may also be granted for inmates in an institutional job assignment that is deemed critical by the facility unit head.

† [VADOC Operating Procedure 601.4.](#)

** [VADOC Operating Procedure 601.5.](#)

Adult Basic Education Program (ABE)

- Purpose: To provide instruction with the goal of improving basic and specific skills necessary to function adequately in society
 - Test of Adult Basic Education (TABE)
 - Aligned to the National College and Career Readiness Standards
 - Measures and assesses student achievement levels in reading, math, and language arts
 - First step in determining the educational path of students and also aids in determining eligibility for GED® and Career and Technical Education (CTE) programs
 - After initial assessment, students are re-tested throughout their incarceration to determine gains until they reach GED® eligibility
 - TABE Battery Average: average of the reading and math tests and used as the measure of student achievement in this study
 - Education Functioning Levels are determined via TABE scale scores
 - TABE Initial Participation (required, as of 2007)
 - Special Education eligible inmates and Hispanic inmates to be deported upon release have other educational requirements and opportunities*

Note:

* [VADOC Operating Procedure 601.5](#).

Adult Basic Education Program (ABE): Education Functioning Levels

ABE I

- Grade Equivalent: 0 to 1.9
- Little ability to read or provide basic information
- **Basic entry level jobs:** no written communication or technical knowledge

ABE II

- Grade Equivalent: 2 to 3.9
- Able to read and provide simple information
- **Entry level jobs:** minimal literacy skills

ABE III

- Grade Equivalent: 4 to 5.9
- Able to handle basic reading, writing, and computation
- **Entry level jobs:** basic literacy and computation skills

Adult Basic Education Program (ABE): Education Functioning Levels

ABE IV

- Grade Equivalent: 6 to 8.9
- Can handle basic life skills, read simple material, and follow multistep diagrams
- **Jobs:** able to follow written instructions and diagrams; can use basic software and technology

ABE V

- Grade Equivalent: 9 to 10.9
- Able to read most documents and follow multistep directions and diagrams
- **Jobs:** can interpret information from multiple sources; proficient in using computers and technology

ABE VI

- Grade Equivalent: 11 to 12
- Able to read and interpret technical information as well as complex materials
- **Jobs:** can function in situations that involve higher order thinking; proficient with computers; can learn new software and technology

General Education Development Program (GED®)

- Purpose: Provide individuals who have not graduated from high school the opportunity to demonstrate attainment of necessary skills and earn an HSE credential
 - A research study (Pompoco et al., 2017) shows that attainment of a GED® while incarcerated has a positive impact on three-year recidivism rates
 - Resulting in increased employment, advanced training, and higher education opportunities
 - Meeting minimum proficiency requirements
 - Increased earning potential for GED® credential earners versus those without GED®
- GED® Tests
 - Test version evolution
 - 1978 & 1988: Tests = writing, social studies, science, interpreting literature and the arts, math
 - 2002: Tests = reading, writing, science, social studies, math; informed by Bloom's Taxonomy;* paper and pencil
 - 2014: Tests = language, science, social studies, math; informed by Webb's Depth of Knowledge,** Common Core State Standards,† and College and Career Readiness Standards; computer-based

Notes:

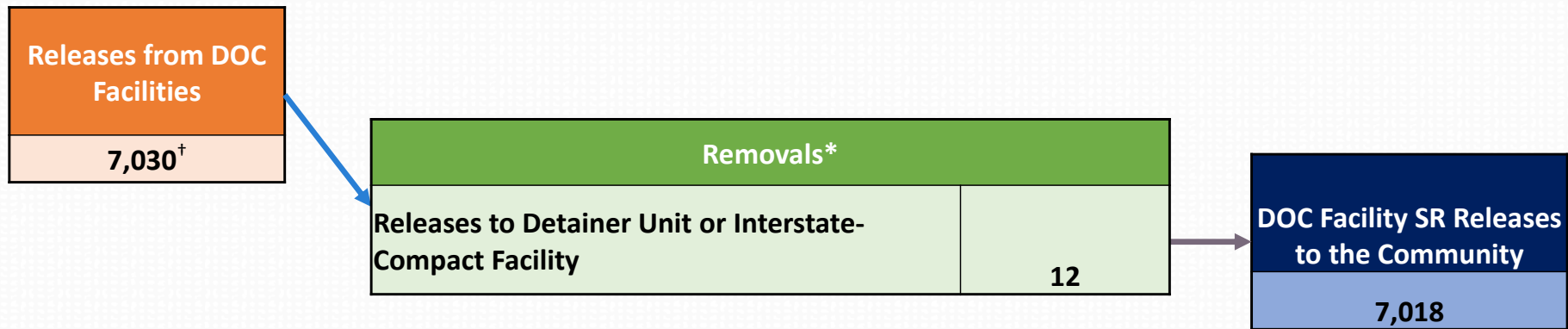
* A hierarchal framework used by educators to distinguishing different levels of cognition.

** A framework for measuring levels of knowledge demonstrated on assessments.

† Standards for what students are supposed to learn from kindergarten through high school.

Sources: Pompoco, A., Wooldredge, J., Lugo, M., Sullivan, C., & Latessa, E. J. (2017). Reducing inmate misconduct and prison returns with facility education programs. *Criminology & Public Policy*, 16(2), 515-547. <https://doi.org/10.1111/1745-9133.12290>; GED Test Comparison: https://ged.com/score_scale/

FY2018 State Responsible (SR) Releases from DOC Facilities: Correctional Education Program Eligible



- FY2018 SR Releases from DOC facilities included **7,030** inmates
- After reviewing the overall release group, we removed **12** inmates*
- The resulting group used for analysis has **7,018** inmates
 - Eligible inmates had the potential to participate in Correctional Education programs

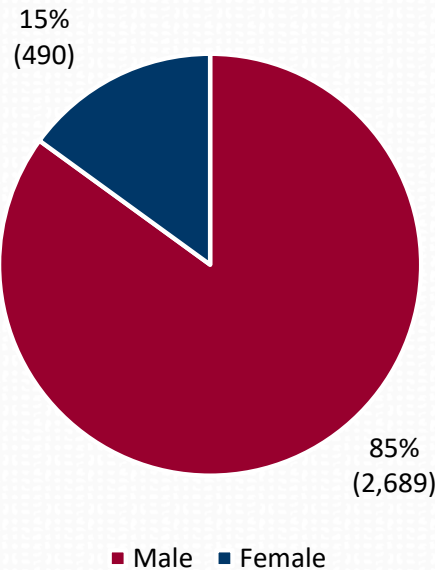
Notes:

[†]Deaths in Custody (n=101) were already removed from the original release file. Additionally, inmates that spent one day or less in a DOC facility (n=33) were removed. Two inmates who escaped from a local/regional jail prior to transfer to a DOC facility were excluded from the analysis.

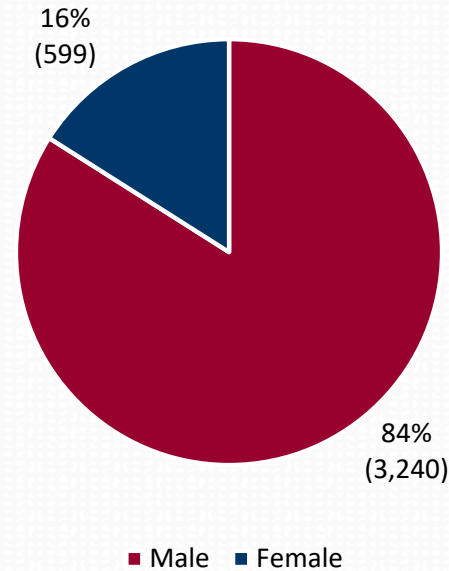
* 6 inmates were released to the Detainer Unit and 6 to Interstate-Compact Facilities. These inmates were excluded because we do not have the ability to track their recidivism information.

Characteristics of Education Program Participants* (N = 3,179) vs. Non-Participants† (N = 3,839): Gender

Academic* Correctional Program Participants: Gender



Program Non-Participants: Gender



- The program participant and non-participant groups had similar percentages for males (85% and 84%, respectively) and females (15% and 16%, respectively)

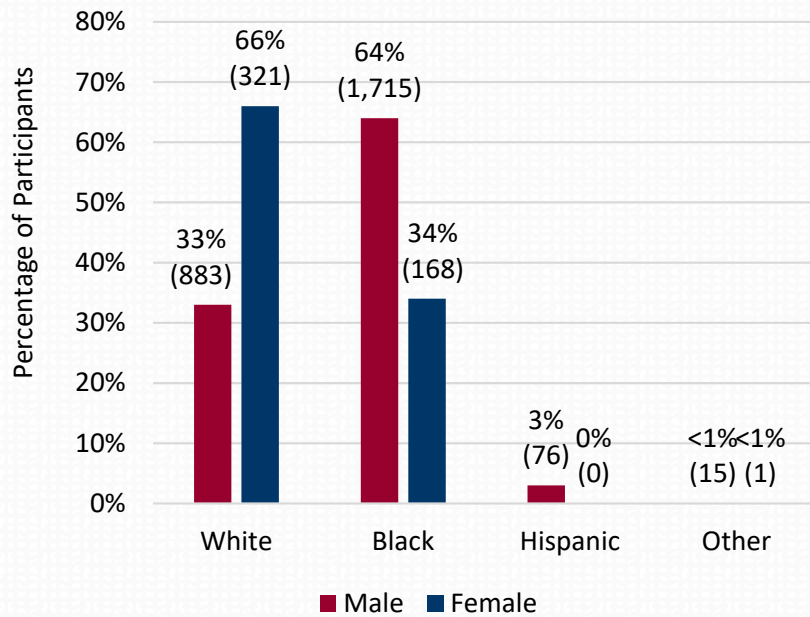
Notes:

* Academic correctional program participants include inmates that had taken a GED exam or a TABE exam during the release term of incarceration.

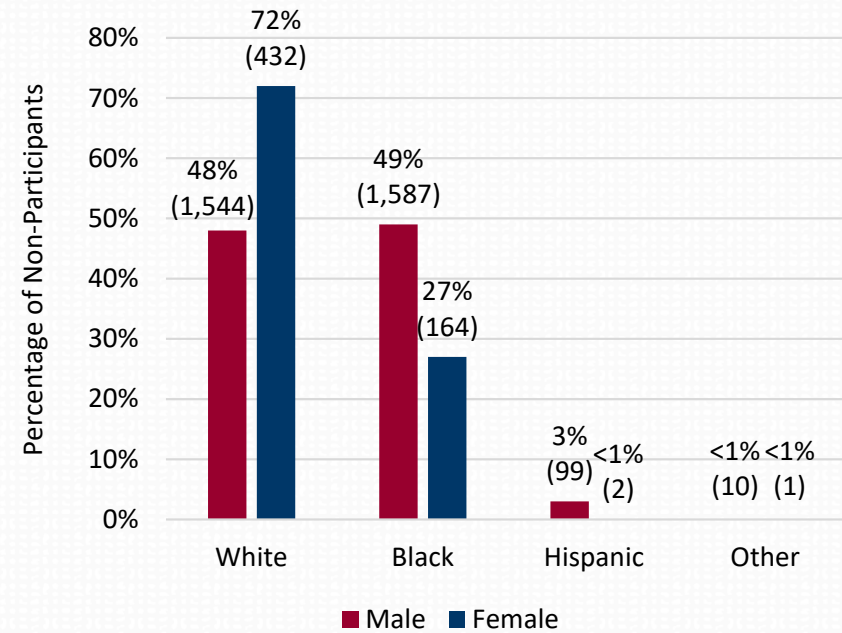
† Non-participants are inmates that did not take a TABE or GED test during the release term of incarceration and/or have a non-verified education level. 79% (n=3,027) of non-participants had an HSD/GED or partial GED prior to the start of the release term of incarceration, 14% (n=527) had non-verified education levels, and 7% (n=285) were TABE exempt for being Social Security eligible, having a DOC LOS of less than 12 months, or being in a hospital location.

Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): Race/Ethnicity

Academic Correctional Program Participants Race/Ethnicity

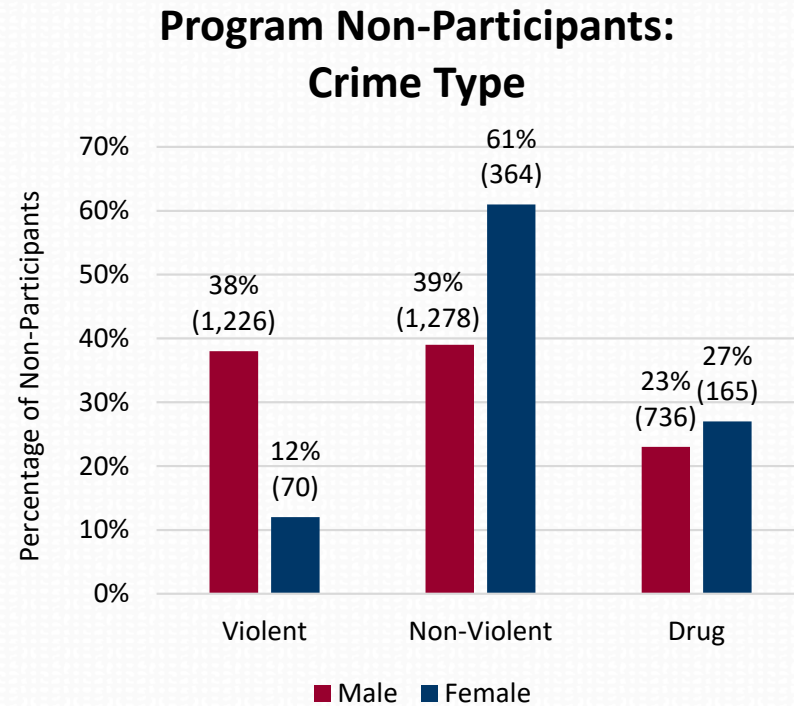
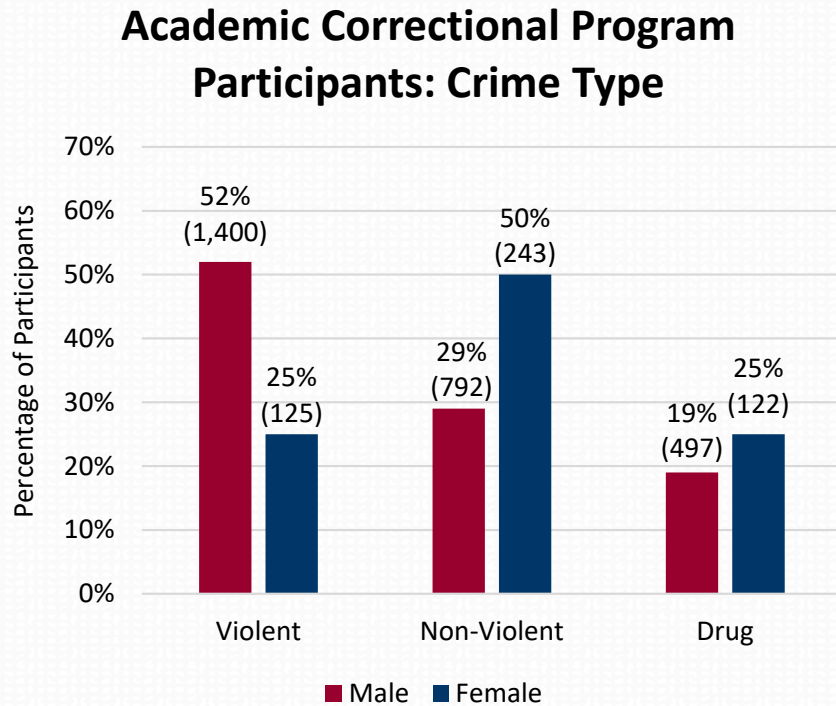


Program Non-Participants: Race/Ethnicity



- The largest percentage of males for both participant and non-participant groups were Black (64% and 49%, respectively)
- Over two-thirds of female participants and non-participants were White (66% and 72%, respectively)

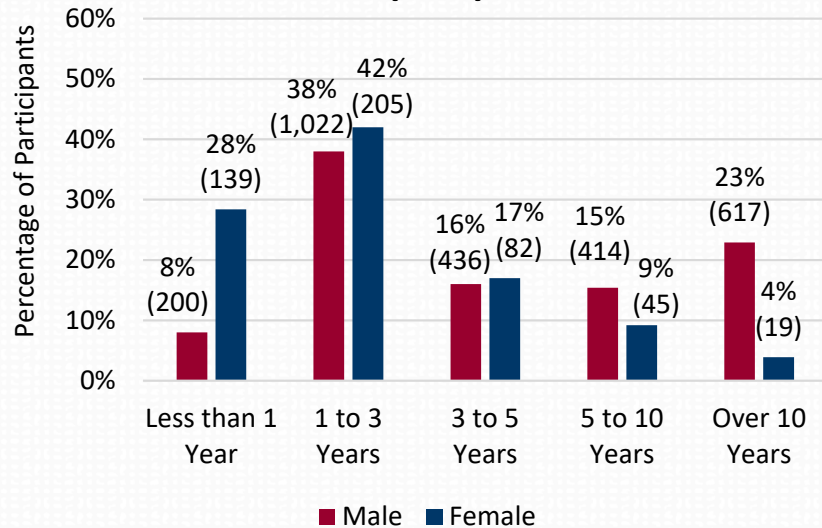
Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): Crime Type



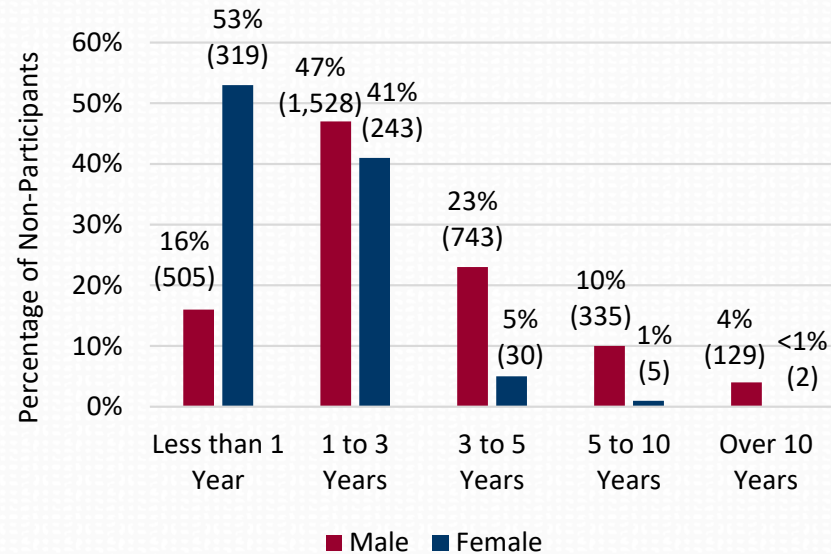
- A majority of male participants committed violent offenses (52%) and the largest percentage of female participants committed non-violent offenses (50%)
- Most male non-participants committed either non-violent (39%) or violent (38%) offenses. Most female non-participants committed non-violent offenses (61%)

Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): DOC Length of Stay

Academic Correctional Program Participants: DOC Length of Stay (LOS)



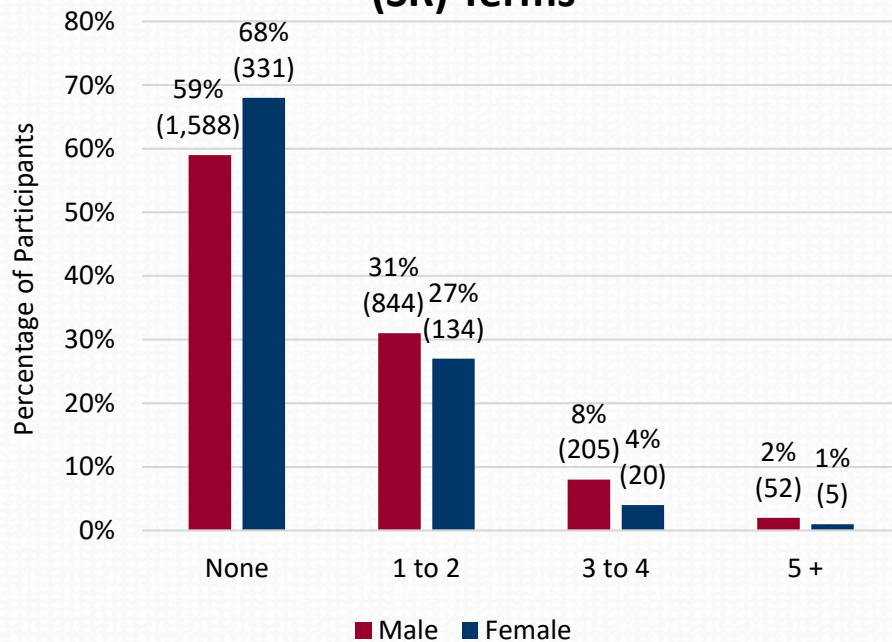
Program Non-Participants: DOC Length of Stay (LOS)



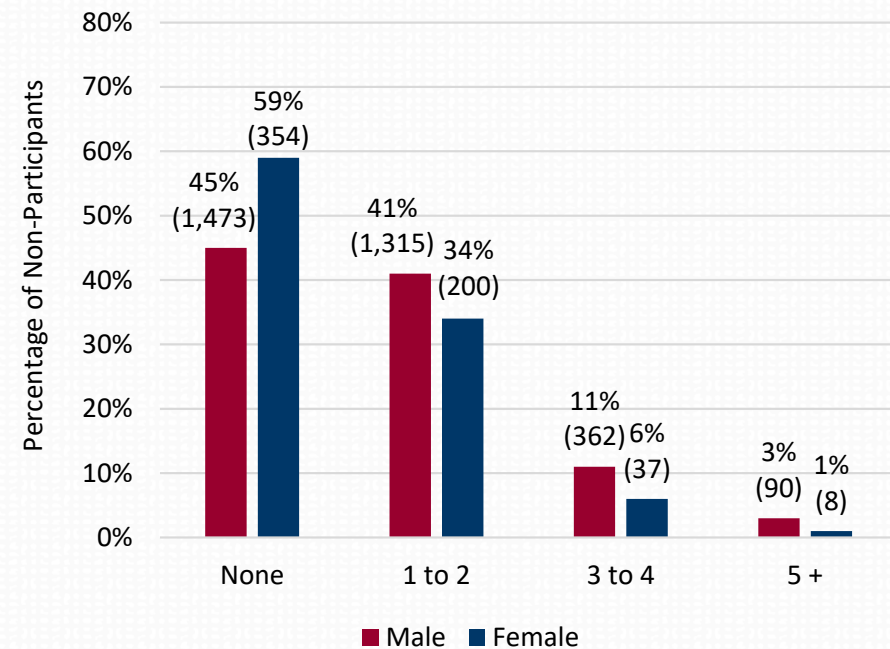
- DOC Length of Stay (LOS) is the total amount of time spent in DOC facilities
 - The largest percentage of male program participants and non-participants had a length of stay of 1 to 3 years (38% and 47%, respectively)
 - The largest percentage of female program participants had a length of stay of 1 to 3 years (42%), whereas the majority of female non-participants had a length of stay of less than 1 year (53%)

Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): Prior State Responsible Terms

Academic Correctional Program Participants: Prior State Responsible (SR) Terms



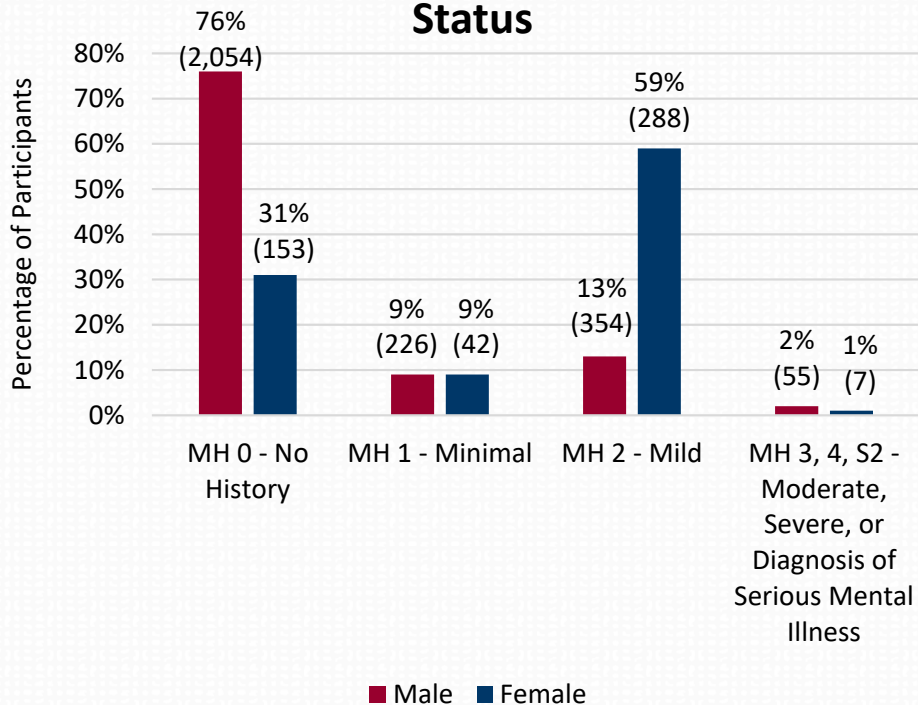
Program Non-Participants: Prior State Responsible (SR) Terms



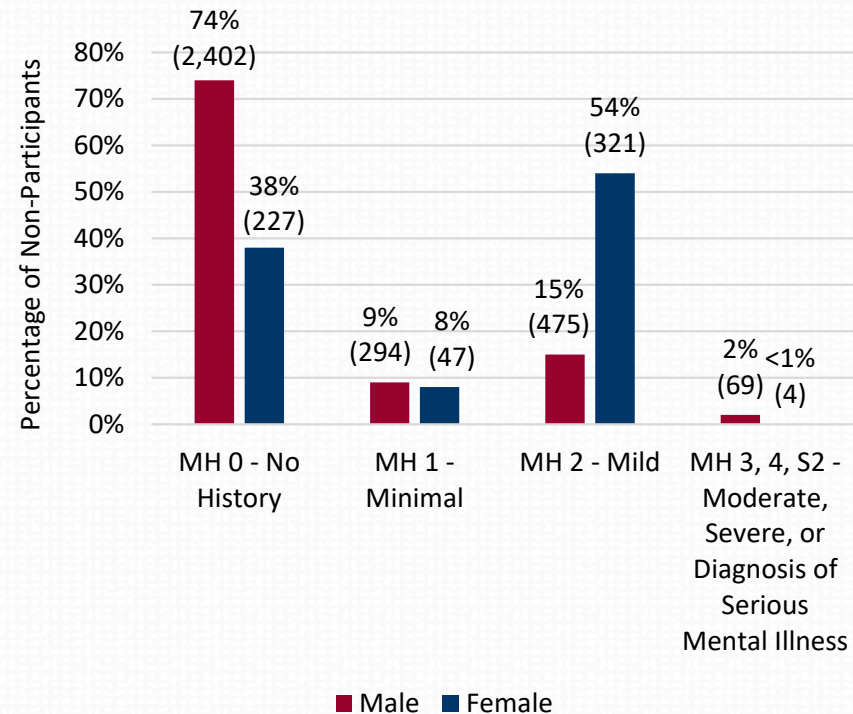
- A majority of male participants had no prior SR terms (59%), while most male non-participants had either no prior SR terms or 1 to 2 prior SR terms (45% and 41%, respectively)
- Most female program participants and non-participants had no prior SR terms (68% and 59%, respectively)

Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): Mental Health Status

Academic Correctional Program Participants: Mental Health (MH) Status



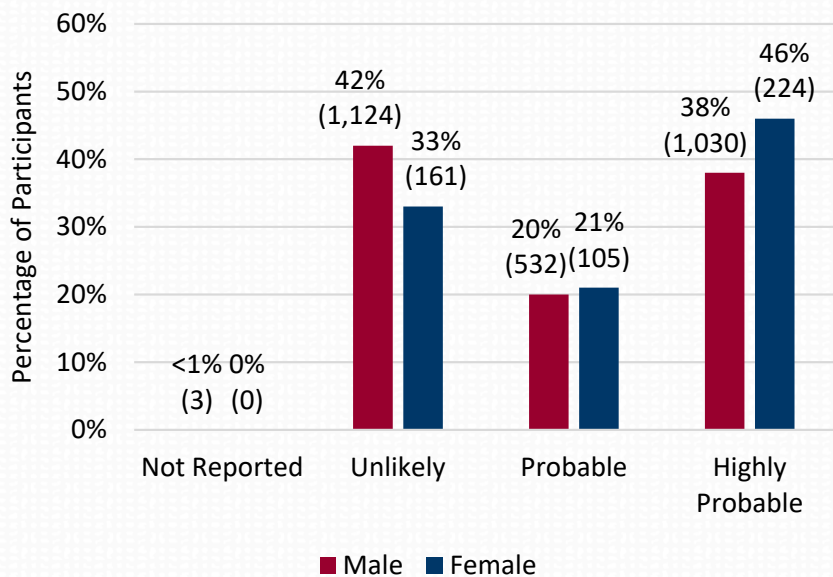
Program Non-Participants: Mental Health (MH) Status



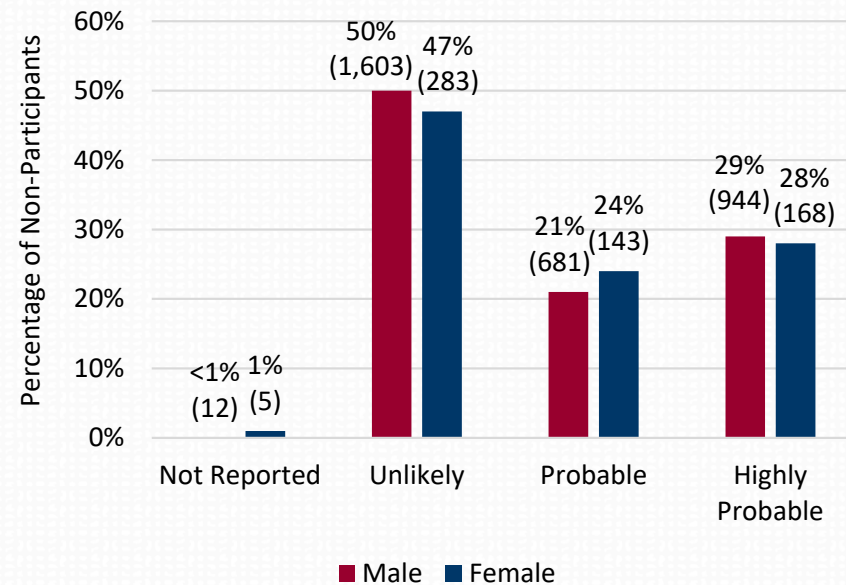
- Three-quarters of male participants (76%) and non-participants (74%) had no evidence of impairment (MH 0)
- Over one-half of female program participants (59%) and non-participants (54%) had mild levels of impairment (MH 2)

Characteristics of Education Participants (N = 3,179) vs. Non-Participants (N = 3,839): COMPAS Vocational and Education Needs Scale

**Academic Correctional Program
Participants: COMPAS Vocational and
Education Needs Scale***



**Program Non-Participants: COMPAS
Vocational and Education Needs Scale***

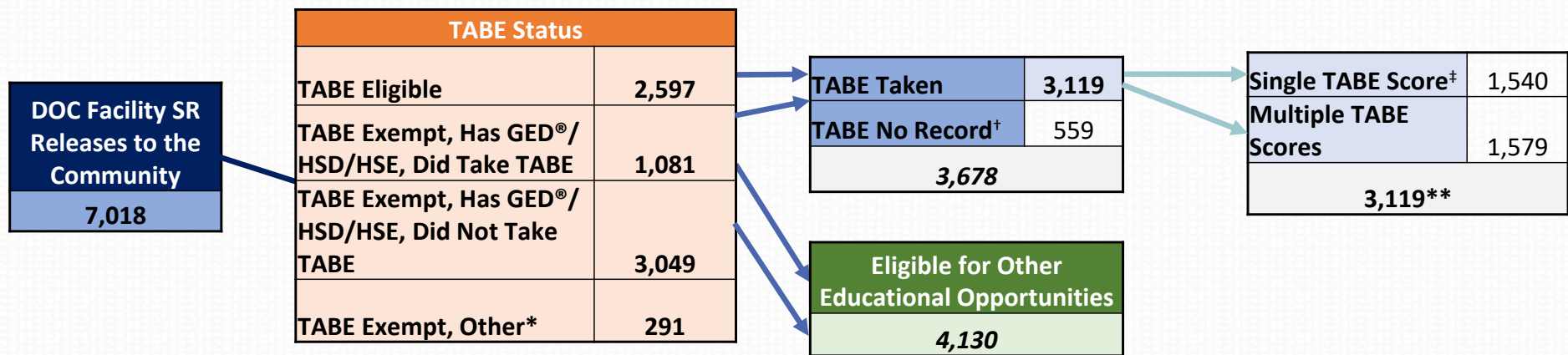


- Over one-half of both participants and non-participants scored ‘Probable’ or ‘Highly Probable’ on the COMPAS Vocational and Education Needs Scale
- A higher percentage of male and female participants scored ‘Highly Probable’ (38% and 46%, respectively) than male and female non-participants (29% and 28%, respectively)

Note:

* The initial COMPAS Vocational and Education Needs Scale scores during the current release term of incarceration were used in order to determine if inmates received services for vocational and education needs before being released.

FY2018 State Responsible (SR) Releases from DOC Facilities: Adult Basic Education Status



- FY2018 SR Releases from DOC facilities included **7,018** inmates potentially eligible for Academic Correctional Education programs
- We identified **3,340** TABE Exempt inmates who did not participate in TABE testing
- The resulting group used for analysis has **3,678** inmates
 - 3,119 of these individuals have taken the TABE and 96% (3,009) have received a Battery Average score

Notes:

* Individuals with: DOC Length of Stays (LOS) of less than 1 year; social security eligibility, or a hospital location.

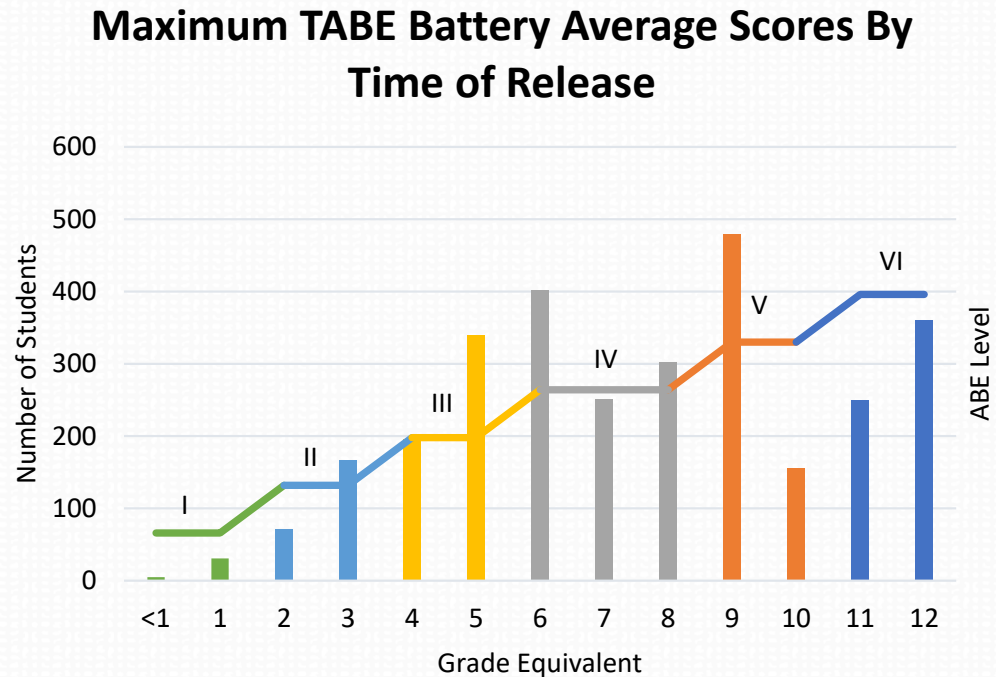
[†] Lack of TABE scores may be due to: data conversion issues during 2012 transition from DCE to DOC (1,541 had NCC Dates before 12/31/11); education taken prior to DCE data system; TABE administered during jail stay, but information not provided to DOC after transfer; or refusals to participate.

[‡] Individuals may have been fast-tracked into more advanced education opportunities but cannot confirm due to transition.

** 110 took the TABE test but had missing TABE Battery Average scores.

Adult Basic Education Profile: TABE Scores

| Grade Level Equivalent† | TABE Takers |
|-------------------------|-------------|
| 0 to 1.9 | 36 (1%) |
| 2 to 3.9 | 238 (8%) |
| 4 to 5.9 | 535 (18%) |
| 6 to 8.9 | 955 (32%) |
| 9 to 10.9 | 635 (21%) |
| 11 to 12.9 | 610 (20%) |



- One-half of the inmates (51%) who took the TABE test and had valid scores (n=3,009*) scored a Battery Average at or above 8th grade level (ABE Levels: partial IV through VI)
- More than one-quarter (27%) of the release group had a Battery Average below the 6th grade level (ABE Levels: III and below)

Notes:

* 110 took the TABE test but had missing TABE Battery Average scores.

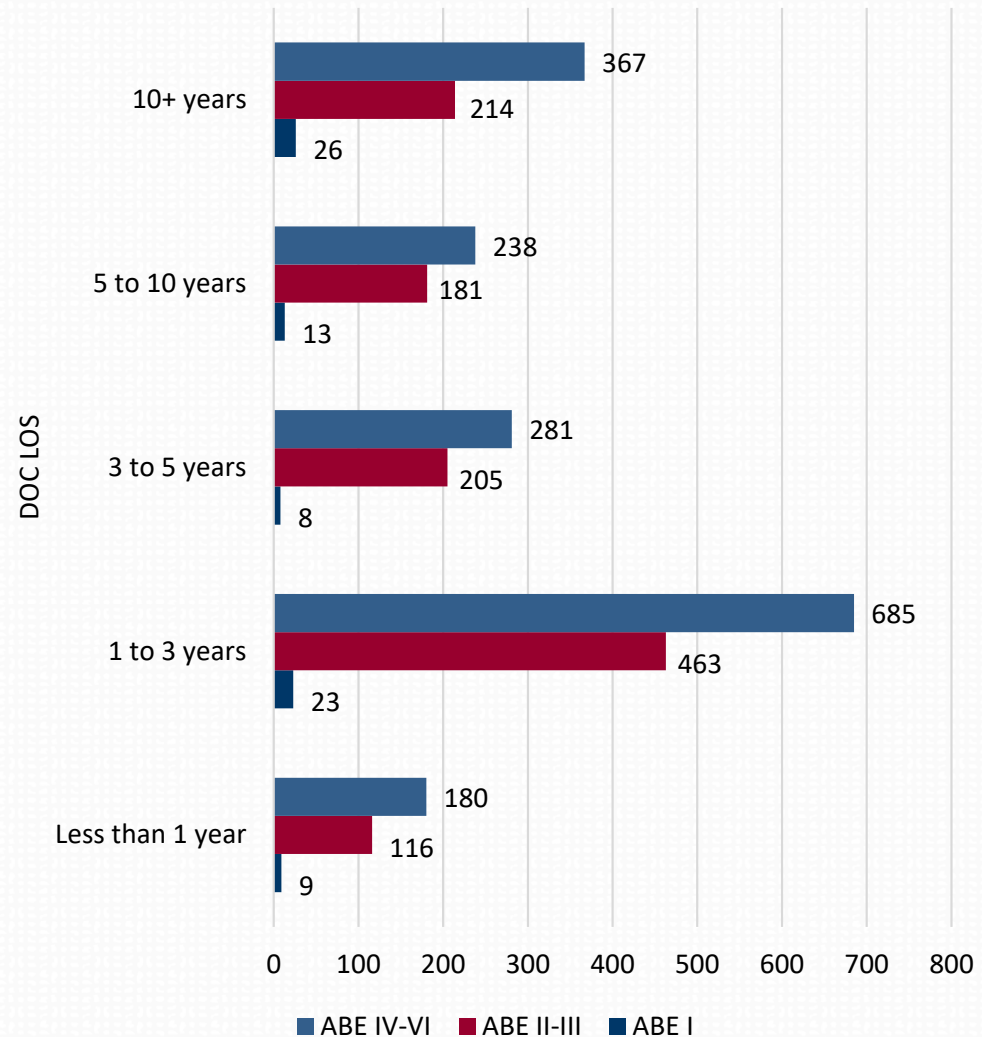
† Grade Equivalent score indicates the level (school year and month) at which a student performed in a given subject area.

Time Required for GED® Readiness

- Approximate time to GED readiness:
 - Non-Readers move to ABE III = 5 years
 - ABE II/III to GED® Testing = 3-5 years
 - ABE IV/V/VI to GED® Testing = usually less than 3 years
- In the current study group of TABE takers (n=3,009*), 49% had a Length of Stay (LOS) less than 3 years,† regardless of their initial ABE Level

| DOC LOS | TABE Takers |
|------------------|-------------|
| Less than 1 year | 305 (10%) |
| 1 to 3 years | 1,171 (39%) |
| 3 to 5 years | 494 (17%) |
| 5 to 10 years | 432 (14%) |
| 10+ years | 607 (20%) |

Initial ABE Level By DOC Length of Stay (LOS)



Notes:

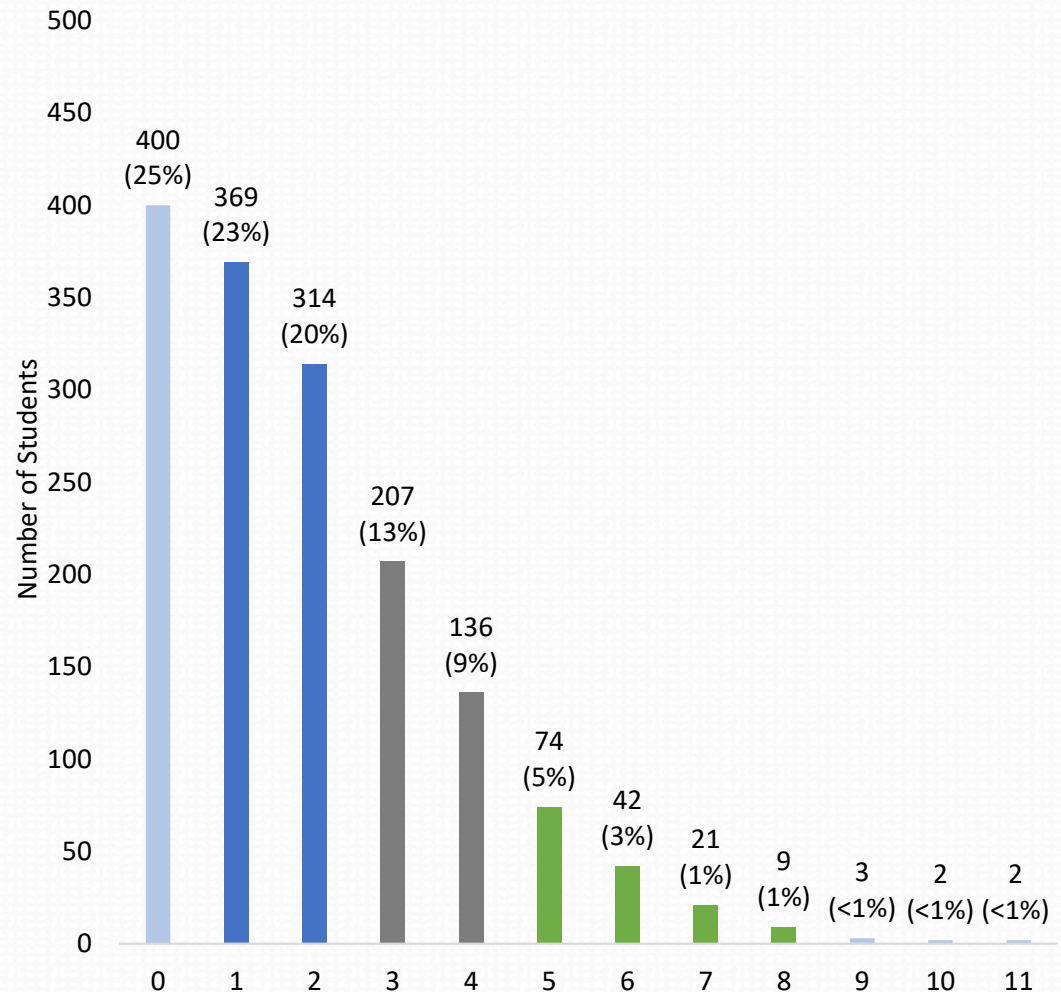
* 110 took the TABE test but had missing TABE Battery Average scores.

† Although sentences are all one year or more, pre-sentence jail credits and time to entry into a DOC facility may impact the amount of time available to provide educational services.

Change in TABE Scores Trend

- Analysis limited to those with multiple TABE Battery Average scores (n = 1,579)
 - Gains were calculated between the initial and maximum TABE Battery Average scores for students
- Three-quarters (75%) of inmates' TABE Battery Average scores improved by at least one grade equivalent level
 - Gains:
 - 1-2 GE: 683 (43%)
 - 3-4 GE: 343 (22%)
 - 5+ GE: 153 (10%)
- The average grade level improvement was **1.9 GE (median = 2.0 GE)**

Gains in TABE Battery Average Scores by Grade Equivalents



Change in ABE Levels

| Initial ABE Level vs. Highest ABE Level (Prior to Release*) | | | | | | | | | |
|---|---------|--|--------|---------|--------|-------|--------|---------------------|-------|
| | | ABE Level from Highest Battery Average Score | | | | | | Students with Gains | Total |
| | | ABE I | ABE II | ABE III | ABE IV | ASE V | ASE VI | N (%) | |
| ABE Level from Initial Battery Average Score | ABE I | 9 | 19 | 7 | 12 | 3 | 2 | 43 (83%) | 52 |
| | ABE II | | 93 | 112 | 59 | 22 | 8 | 201 (68%) | 294 |
| | ABE III | | | 169 | 238 | 85 | 20 | 343 (67%) | 512 |
| | ABE IV | | | | 279 | 239 | 69 | 308 (52%) | 587 |
| | ABE V | | | | | 59 | 39 | 39 (40%) | 98 |
| | ABE VI | | | | | | 36 | | 36 |
| Total | | 9 | 112 | 288 | 588 | 408 | 174 | 934 (61%) | 1,579 |

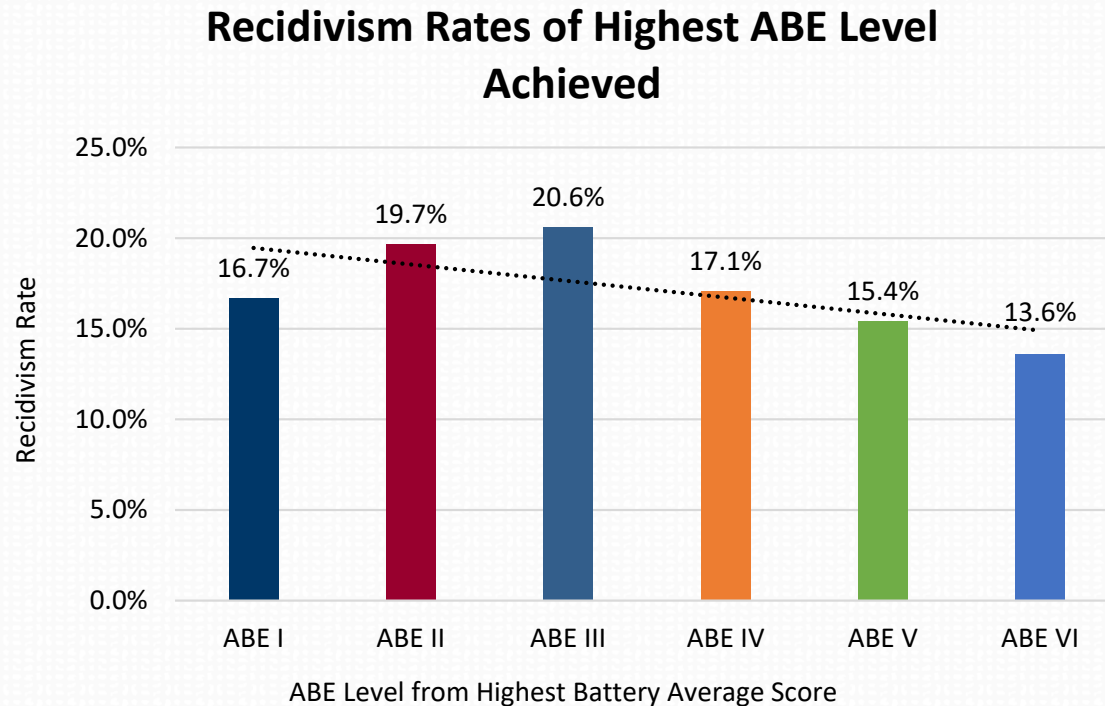
- The data above show several instances of ABE Level improvement between the inmates' initial TABE Battery Average scores and their highest Battery Average scores (prior to release)
 - 61% (934 of 1,543[†]) of eligible students showed gains in their ABE Levels
 - For example, ABE I (little or no ability to read basic signs or maps) moving to ABE II (able to read simple directions, signs and maps) have already improved the 19 individuals' ability to function in society
- Although inmates may not spend enough time in a VADOC facility to obtain a GED prior to release, any increase in their education level would improve their functionality in society

Notes:

* Exams taken during the Current Term are those that fall between the New Court Commitment Date and the Release Date.

† Individuals at initial ABE Level VI were not counted since they would not be able to gain any additional levels (n=36).

Overall Recidivism[†] Rates Three Years After Release by ABE Level

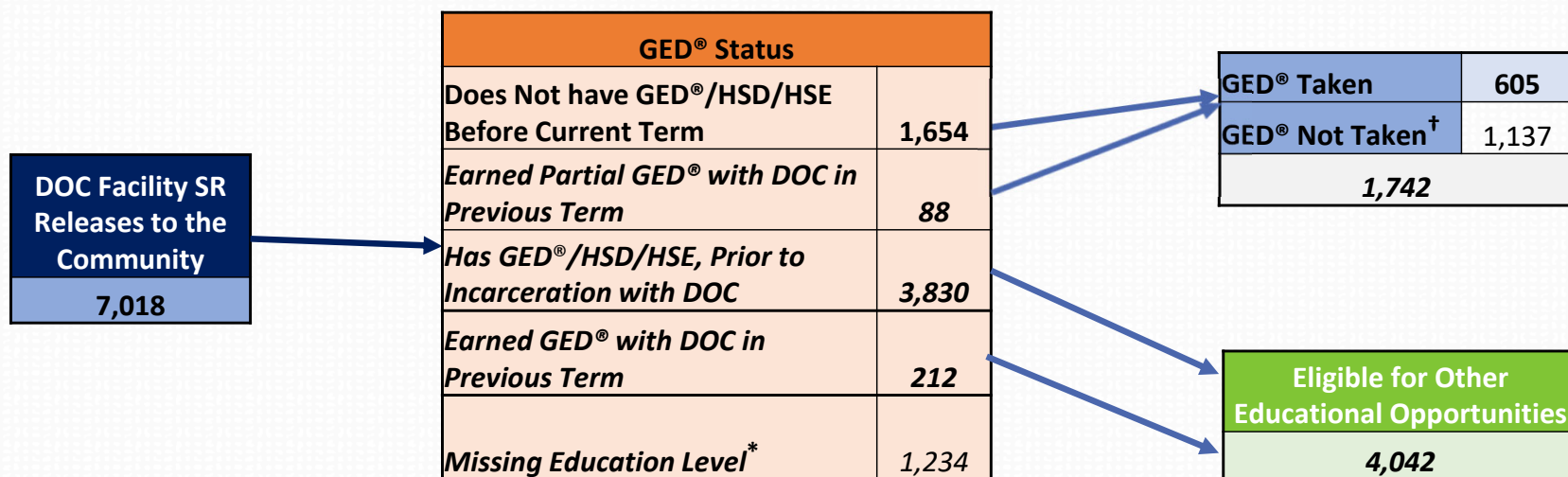


- Recidivism rates decreased as ABE level increased
- Inmates who reached an ABE level of VI had a recidivism rate seven percentage points lower than inmates who reached an ABE level of III
- Since all eligible inmates are required to participate, a matched comparison group is not possible for inmates who participate in TABE testing

Note:

[†] Recidivism for this study is defined as a new state responsible term of re-incarceration occurring within three years of an individual's release.

FY2018 State Responsible (SR) Releases from DOC Facilities: GED® Status



- FY2018 SR Releases from DOC facilities included **7,018** inmates potentially eligible for Academic Correctional Education programs
- We identified **4,042** inmates who had their GED®/HSD/HSE either prior to incarceration or earned it during a previous term
- The resulting group used for analysis has **1,742** inmates
 - 35% (605) were determined to have reached GED® readiness criteria and participated in GED® testing

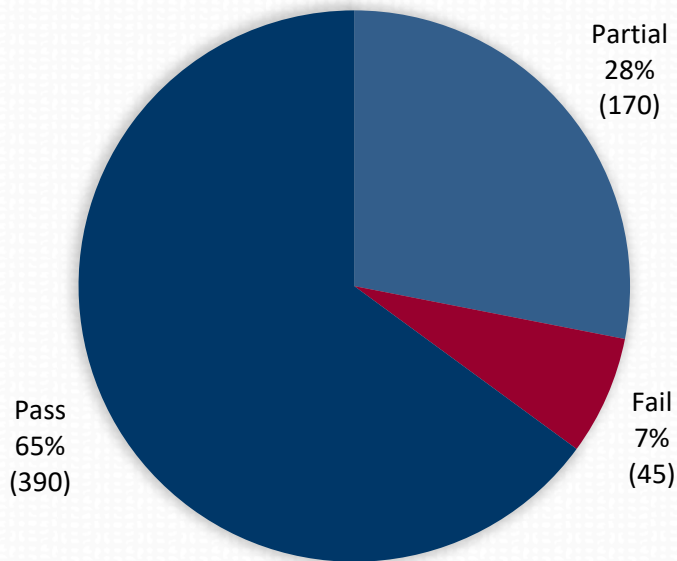
Notes:

* Lack of Missing Education Information may be due to: data conversion issues during 2012 transition from DCE to DOC or that education was taken prior to DCE data system.

[†] The Correctional Education group determines when inmates have met GED® readiness criteria, so these individuals may not have shown enough improvement to meet the necessary ABE level to qualify for GED® testing.

GED® Testing Results for Current Term

Current Term GED® Testing



| | Partial* | Fail* | Pass* | Total |
|--------|--------------|------------|--------------|-------|
| Male | 144 (27%) | 40 (7%) | 352 (66%) | 536 |
| Female | 26 (38%) | 5 (7%) | 38 (55%) | 69 |
| Total | 170 (28%) | 45 (7%) | 390 (65%) | 605 |

- GED® testing group: 89% (536) were male versus 11% (69) female
- Overall, 65% (390) of the inmates who took the GED® in their current term passed
 - When passing rates were examined by gender, males had a higher rate of passing (66%) than females (55%)

Note:

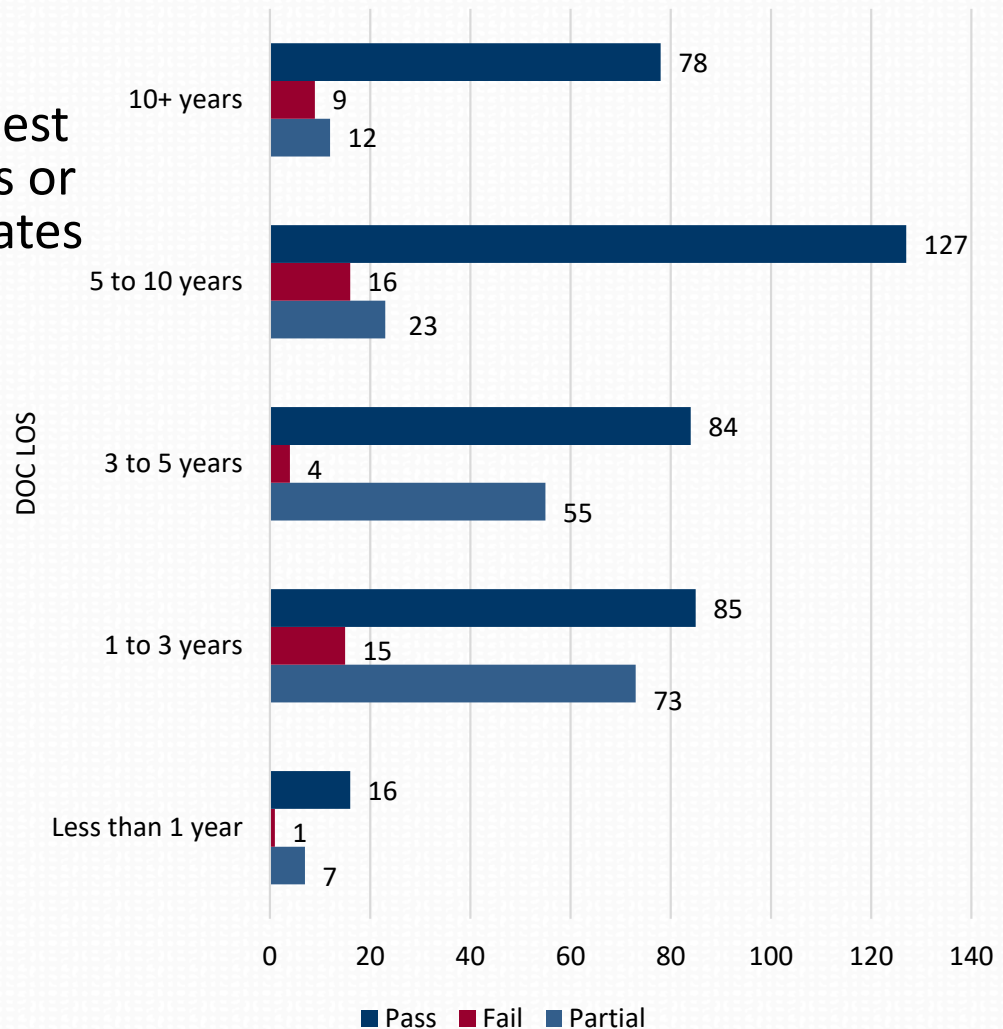
* Inmates in the 'Pass' column have passed all GED® exams and obtained a GED®. Inmates in the 'Partial' column have taken at least one subject exam but have not taken all exams in all subjects. Inmates in the 'Fail' column have taken all subject exams but have failed to pass at least one of them.

GED® Testing Results and LOS for Current Term

- In the current study group of GED® takers, 67% had an LOS of 3 years or greater, regardless of their GED® testing results
- GED® passing rates were the highest for inmates with an LOS of 5 years or greater (77%) and lowest for inmates with an LOS of 1 to 3 years (49%):
 - Less than 1 year: 67%
 - 1 to 3 years: 49%
 - 3 to 5 years: 59%
 - 5 to 10 years: 77%
 - 10+ years: 79%

| DOC LOS | GED® Takers |
|------------------|-------------|
| Less than 1 year | 24 (4%) |
| 1 to 3 years | 173 (29%) |
| 3 to 5 years | 143 (24%) |
| 5 to 10 years | 166 (27%) |
| 10+ years | 99 (16%) |

GED® Results By DOC Length of Stay



Overall Recidivism[†] Rates Three Years After Release for GED Earners

| Correctional Education Status for Current Term | N | Recidivism Rate |
|--|------------|-----------------|
| Overall GED Earners:* | | |
| Male | 352 | 15.9% |
| Female | 38 | 26.3% |
| <i>Overall</i> | <i>390</i> | <i>16.9%</i> |

- Overall recidivism rates for GED passers was 16.9%
- Female GED earners had a higher recidivism rate than male GED earners (26.3% and 15.9%, respectively)

Note:

[†] Recidivism for this study is defined as a new state responsible term of re-incarceration occurring within three years of an individual's release.

Case-Control Matching Process

- In order to match inmates that earned a GED with a comparison group with similar characteristics, case-control matching is used
- The existing study group is matched with a case-control created comparison group with user-defined tolerances for each matching variable
- The variables the study and comparison group were matched on include:
 - Gender
 - Age at release (± 3 years)
 - Crime type
 - Number of prior SR terms (± 1 SR term)
 - DOC Length of Stay (± 12 months)
 - Initial ABE Level
 - Mental health status
 - Confirmed gang status at release
- The matches between the study and comparison groups are random and are as close to a randomized control trial as possible
- Individuals in the study group that are unable to be matched with the comparison group are removed from the study
 - 255 inmates that passed a GED exam were removed
- Outcomes of the comparison are analyzed for significant group differences

Recidivism[†] Rates Three Years after Release: Matched* Cases and Comparison Groups – GED

| Correctional Education Status for Current Term | N | Study | Comparison |
|--|------------|-----------------|------------|
| GED Earners:[‡] | | | |
| Male | 127 | 10.2%** | 24.4% |
| Female | 8 | 37.5% | 12.5% |
| <i>Overall</i> | <i>135</i> | 11.9%*** | 23.7% |

- Overall and male GED earners in the study group had significantly lower recidivism rates than the comparison group
- Having a smaller number of female GED earners may be the reason why the differences were not significant

Notes:

[†] Recidivism for this study is defined as a new state responsible term of re-incarceration occurring within three years of an individual's release.

* Case and Comparison individuals were matched on the following: gender, age at release (± 3 yrs.), crime type, prior SR terms (± 1 SR term), DOC length of stay (± 12 months), initial ABE level, mental health status, and confirmed gang status.

** Chi-Square Test was significant ($p < .01$).

*** Chi-Square Test was significant ($p < .05$).

[‡] 255 GED Pass cases have been removed due to difficulty in identifying an appropriate match.

Case-Control Matching Process

- A second round of case-control matching was done to see if the results of the significance testing would hold for a larger group
- DOC length of stay was removed as a matching criteria
- The variables the study and comparison group were matched on include:
 - Gender
 - Age at release (± 3 years)
 - Crime type
 - Number of prior SR terms (± 1 SR term)
 - Initial ABE Level
 - Mental health status
 - Confirmed gang status at release
- Individuals in the study group that are unable to be matched with the comparison group are removed from the study
 - 112 inmates that passed a GED exam were removed

Recidivism[†] Rates Three Years after Release: Matched* Cases and Comparison Groups – GED

| Correctional Education Status for Current Term | N | Study | Comparison |
|--|------------|-----------------------|--------------|
| GED Earners:[‡] | | | |
| Male | 259 | 13.1%** | 22.8% |
| Female | 19 | 31.6% | 42.1% |
| <i>Overall</i> | <i>278</i> | <i>14.4%**</i> | <i>24.1%</i> |

- Overall and male GED earners in the study group had significantly lower recidivism rates than the comparison group
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Notes:

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* Case and Comparison individuals were matched on the following: gender, age at release (± 3 yrs.), crime type, prior SR terms (± 1 SR term), initial ABE level, mental health status, and confirmed gang status.

** Chi-Square Test was significant ($p < .01$).

[‡] 112 GED Pass cases have been removed due to difficulty in identifying an appropriate match.

Recidivism Rate Comparison

Current Study (FY2018 Releases)

| Full Release Group (n = 7,018) | GED® Completers (n = 390) |
|-----------------------------------|------------------------------|
| 18.2% | 16.9% |

Previous Study (FY2016 Releases)

| Full Release Group (n = 6,352) | GED® Completers (n = 633) |
|-----------------------------------|------------------------------|
| 21.0% | 19.3% |

- The overall recidivism rate for FY2018 was 2.8 percentage points lower than FY2016 VADOC facility releases
- Inmates released from a VADOC facility in FY2018 who earned a GED® had a lower recidivism rate (16.9%) than their FY2016 counterparts (19.3%)

Summary

- Correctional Education students vary greatly in Adult Basic Education (ABE) Functioning Levels
 - 61% of students with initial ABE Levels of less than VI (n=1,543) improved by at least one ABE level
 - Even small levels of improvement can increase an individual's ability to function in the community
- Recidivism rates decrease and function increases with higher ABE levels
- GED® Readiness criteria may not be met for those individuals with DOC LOS less than 3 years, especially if initial ABE Levels are low
 - GED® Pass: <3 year = 51% versus 3+ years = 71%
- Overall and male GED® earners had lower recidivism rates than the comparison group, the differences were statistically significant

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