

Case Study: Insights on the Incarcerated Adult ADHD Population

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Objectives:

- Explain the structure of the research being conducted through the ADHD Corrections Project; introductory information, population parameters, methodology, etc.
- Review the results of the research- both the empirical statistical data and any qualitative findings.
- Analyze the significance of the research results to both the target population and our society.

Attention Deficit Hyperactivity Disorder (ADHD) occurs in **5%** of the general adult population in the United States, but has been found in **over 25%** of our adult incarcerated population.

ADHD incidences in correctional facilities may **range from 20% to greater than 50%.**¹

As demonstrated by its prevalence within the prison population, the role ADHD plays in one's decision-making process is particularly relevant to issues of criminal justice.

Distractibility

Selective Attention: focusing on one task at a time
Sustained Attention: staying on task until complete
Working Memory Deficit: forgetfulness

Increased difficulty achieving mainstream success can lead to **esteem issues**, a sense of feeling **misunderstood** and a tendency toward **alternative pathways** for finding acceptance and achievement- e.g. gangs.

Impulsivity

People with ADHD have problems inhibiting their *prepotent responses*: responses that favor short-term reinforcement at the cost of long-term outcomes.
Sense of time impairment: “Now” vs. “Not Now”
Reward Deficit: focus on immediate gratification

The need for more frequent and intense rewards can lead to **sensation-seeking behaviors**, such as **substance abuse**.
(Also as a means of self-medication.)

Hyperactivity

AD/HD has been linked to an increased likelihood of developing **Oppositional Defiant Disorder** and **Conduct Disorder**, characterized by behaviors such as:

- Defiance, stubbornness, temper problems (ODD)
- Aggression, theft, destruction of property (CD)
- Other serious violations of societal rules

Initial Contact:

ADHD symptoms may set off red flags:

- Irritability, restlessness, defiance of authority, inability to prioritize what's immediately important and follow instructions.
- Offer elaborate explanations- **unconvincing**.
- Trouble keeping story straight- **suspicious**.

Court & Judgment:

Attention impairments may make one appear unconcerned or uncooperative- **bad attitude**.

Probation & Parole:

The challenges facing all inmates upon reentry are significantly amplified for those with ADHD.

- *Working-memory deficit*: **forgetfulness**, difficulty holding events in mind.
- *Sense-of-time impairment*: impacts ability to prepare for upcoming events, judge the passing of time, and accurately assess time requirements- problematic **procrastination**.

ADHD impairments result in increased difficulty completing tasks and fulfilling obligations, which can result in serious problems, e.g. missed appointments.

People with untreated ADHD may enter the criminal justice system because of neurological differences. Although ADHD is not an excuse for law-breaking or inappropriate behaviors, those with ADHD are **more prone to engaging in criminal activity when exposed to a criminogenic environment.**

Once in the system, these deficits will often “snowball” into progressively worse outcomes. Inability to follow requirements set by police, attorneys, parole officers and judges can escalate legal troubles.

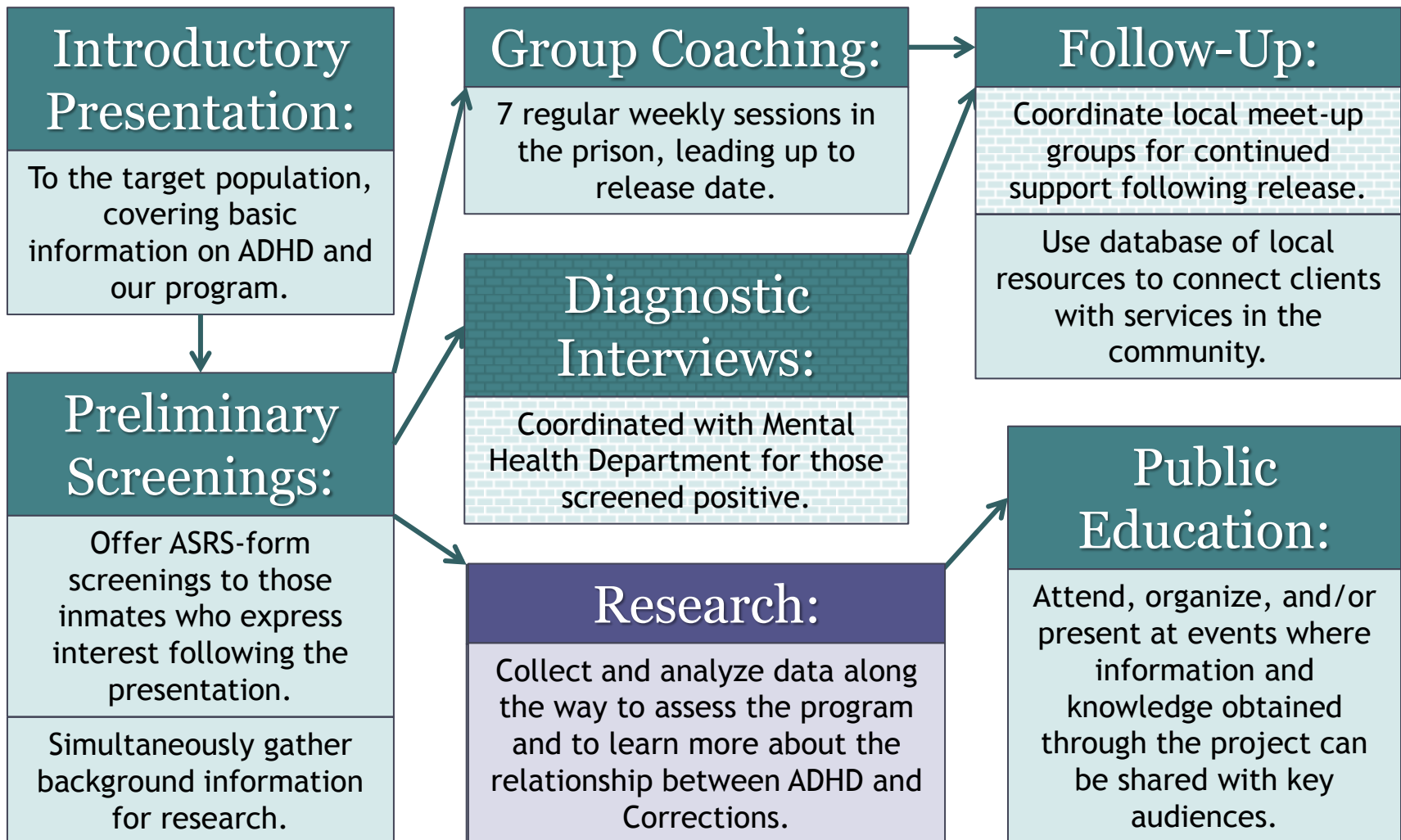
The challenges facing all inmates upon re-entry are significant amplified for those with the disorder. Thus, ADHD not only increases the likelihood that an individual finds themselves in corrections, but also makes it more difficult for them to successfully return to the community.

The ADHD Corrections Project

In 2010, ADDA partnered with the Delaware Center for Justice (DCJ) to create a pilot project that would address the issue of undiagnosed and/or untreated ADHD in our correctional system.

- The project targets the reentry population of local prisons in Wilmington, Delaware.
- Howard R. Young Correctional Institution (also known as Gander Hill Prison) is a Level 5 men's facility in the northeast section of Wilmington.
- Head Start is a reentry program with its own housing unit, which accommodates approximately 60 inmates and operates on a 3 month cycle.

The ADHD Corrections Project: Structure



Although ADHD is not an excuse for law-breaking or inappropriate behaviors, those with ADHD are **more prone to engaging in criminal activity when exposed to a criminogenic environment.**

Research: Data Collection

Research data gathered during the screening process is analyzed to further assess the influence of ADHD in Delaware's correctional institutions.

- Methodology: Self-report survey
- Data is current as of our most recent round of interviews in May, 2013.

*NB: Because participation in the survey and preliminary screening was offered to all interested inmates following an introductory presentation on ADHD and our program, these statistics are not intended to represent incidence of AD/HD among a random sample pool, but rather represent patterns in relevant background information among informed participants.

Statistics are based on a survey of **140** male inmates.
The average age of participants was **30.12** years old.

62.1% of participants screened positive for ADHD,
compared to **24.3%** screened negative.

(**13.6%** of results were deemed inconclusive.)

Only **55%** of those screened positive for ADHD had
ever been diagnosed. At the time, none were receiving
pharmacological or behavioral treatment.

Research: Findings

	Positive	Negative	Borderline
Ever Diagnosed as having ADHD?	0.553	0.118	0.375
* Immediate Family Member with ADHD	0.583	0.000	0.667
* Extended Family Member with ADHD	1.000	0.200	0.667
Issues During Pregnancy/Delivery	0.208	0.118	0.333
Mother Used Alcohol/Drugs during Pregnancy?	0.243	0.133	0.125
Mother Used Cigarettes during Pregnancy?	0.473	0.276	0.188
Significant Developmental Delays?	0.115	0.061	0.118
Serious Childhood Medical Issues?	0.314	0.353	0.368
Serious Childhood Head Injuries?	0.372	0.353	0.222

ADHD is a hereditary disorder which may be negatively impacted throughout life by brain trauma and injury. (Barkley) It is estimated that 80% of individuals with AD/HD are born with it, while 20% may acquire it later on. (Kramer)

Research Findings: Educational Background

	Positive	Negative	Borderline
Highest Educational Level Completed	11.511	11.985	10.889
Ever Repeated Grades?	0.488	0.500	0.421
* Ever Skipped Grade(s)?	0.200	0.000	0.000
Considered “Problem Student”?	0.611	0.667	0.769
* Praised for Creativity	0.709	0.394	0.684
Ever Suspended/Expelled?	0.897	0.853	1.000
Ever Discontinued Courses/Dropped Out?	0.663	0.485	0.579
Average Grades (GPA Scale)	2.257	2.657	2.231

Majority are above average intelligence; however because of ADHD are less likely to “work/perform to their potential.”

Research Findings: Employment

	Positive	Negative	Borderline
Employment Status Prior to Incarceration:			
• <i>Full Time</i>	0.379	0.706	0.579
• <i>Part Time</i>	0.218	0.176	0.000
• <i>Unemployed</i>	0.276	0.118	0.263
• <i>Student/Other</i>	0.115	0.000	0.158
Length of most recent job (in months)	32.882	41.963	33.813
Ever Fired?	0.410	0.353	0.529
# of Times Fired	3.121	1.591	1.333
Ever Served in the Military?	0.047	0.061	0.000

While there was very little difference between positive and negative groups in terms of whether or not they had ever been fired from a job, there was a significant difference in the **NUMBER** of terminations between the two groups. Those screened positive were fired on average **twice as many times** as than those who screened negative.

Research Findings: Driving History

	Positive	Negative	Borderline
Have, or have ever had, a License	0.632	0.794	0.556
License Ever Suspended?	0.797	0.793	0.750
* Number of Speeding Tickets?	3.025	2.177	1.235
Ever Stopped for OUI?	0.289	0.242	0.158
Number of OUI's	1.875	1.625	2.833
Arrested on those occasions?	0.700	0.778	0.667
Number of Accidents ever involved in?	2.488	1.574	1.368

Although there was a 21% discrepancy between the positive and negative groups in terms of possession of a driver's license, there was a difference of only 6% in whether or not their licenses had ever been suspended. It is possible to have one's license suspended even if one does not technically possess a license. For example, one can have their license suspended for driving without a license, or for criminal charges.

More members of the positive group reported having had their driver's licenses suspended than actually possessed driver's licenses.

Research Findings: Social

	Positive	Negative	Borderline
Marital Status:			
• <i>Single</i>	0.609	0.529	0.526
• <i>Partnered</i>	0.184	0.265	0.316
• <i>Married</i>	0.092	0.088	0.053
• <i>Separated/Divorced</i>	0.115	0.118	0.105
Trouble Making Friends	0.186	0.061	0.053
* Excel Making Friends	0.632	1.000	0.692
Trouble Keeping Friends	0.414	0.059	0.118
Relationship Trouble	0.598	0.294	0.579
* Excel in Relationships	0.765	0.875	0.923

ADHD can lead to social difficulties, such as trouble with self-esteem.

Research Findings: Mood

	Positive	Negative	Borderline
General Mood:			
• <i>Cheerful/Happy</i>	0.253	0.382	0.211
• <i>Sad/Depressed</i>	0.023	0.000	0.053
• <i>Angry/Irritable</i>	0.034	0.000	0.000
• <i>Anxious/Nervous</i>	0.034	0.088	0.105
• <i>Bland/Unfeeling</i>	0.034	0.059	0.053
• <i>Content</i>	0.000	0.059	0.053
• <i>Changes All The Time</i>	0.356	0.265	0.368
• <i>Multiple/Other/NA</i>	0.264	0.147	0.158
Mood Changes Unpredictably/Frequently	0.795	0.394	0.789
Trouble with Temper	0.779	0.529	0.941

Research Findings: Medications, Substance Use & Incarceration

	Positive	Negative	Borderline
Took Medications as Child	0.554	0.333	0.579
On Medication Prior to Incarceration	0.452	0.235	0.474
Currently on Medication	0.453	0.353	0.474
History of Recreational Drug Use?	0.831	0.774	1.000
History of Addiction?	0.658	0.533	0.579
# of Incarcerations- Total	7.010	3.368	4.658
# of Incarcerations- Sentenced	4.574	2.917	3.250

- Individuals with AD/HD have a higher predisposition for **substance abuse**, both as a means of **self medication** & due to a propensity for **sensation-seeking behavior**.
- Sometimes the impact of ADHD is more visible in the **number of offenses** than simply whether or not a violation occurred. Individuals with ADHD experience greater difficulty avoiding repeat offenses, thus making successful reentry even more challenging for them.

- Adults with ADHD who are incarcerated for the first time, usually have less serious offenses including misdemeanors compared to others who are incarcerated for the first time or have a significant juvenile record.
- Adults with ADHD who have multiple incarcerations are much more likely to also have a co-occurring disability or mental illness.
- ADHD frequently exists as comorbid with other disorders, and may often be masked by more obvious or visible problems.

Research Findings: Medical History

	Positive	Negative	Borderline
Head Injury	0.517	0.500	0.421
• <i>Childhood</i>	0.345	0.294	0.263
• <i>Past as Adult</i>	0.230	0.294	0.263
• <i>Current Issue</i>	0.034	0.029	0.053
Injury Resulting in Loss of Consciousness	0.517	0.441	0.421
• <i>Childhood</i>	0.253	0.206	0.263
• <i>Past as Adult</i>	0.299	0.294	0.368
• <i>Current Issue</i>	0.034	0.000	0.053
Epilepsy/Seizures	0.126	0.000	0.053
• <i>Childhood</i>	0.046	0.000	0.000
• <i>Past as Adult</i>	0.080	0.000	0.053
• <i>Current Issue</i>	0.034	0.000	0.000
Migraine Headaches	0.575	0.618	0.421
• <i>Childhood</i>	0.230	0.176	0.105
• <i>Past as Adult</i>	0.391	0.353	0.211
• <i>Current Issue</i>	0.425	0.353	0.316

Research Findings: Medical History

	Positive	Negative	Borderline
Heart Problems	0.080	0.147	0.105
• <i>Childhood</i>	0.034	0.059	0.053
• <i>Past as Adult</i>	0.057	0.059	0.053
• <i>Current Issue</i>	0.023	0.029	0.053
High Blood Pressure	0.264	0.176	0.211
• <i>Childhood</i>	0.057	0.029	0.000
• <i>Past as Adult</i>	0.115	0.118	0.053
• <i>Current Issue</i>	0.172	0.029	0.211
Diabetes	0.034	0.030	0.000
• <i>Childhood</i>	0.000	0.030	0.000
• <i>Past as Adult</i>	0.034	0.000	0.000
• <i>Current Issue</i>	0.023	0.000	0.000
Lead Poisoning	0.023	0.000	0.000
• <i>Childhood</i>	0.023	0.000	0.000
• <i>Past as Adult</i>	0.000	0.000	0.000
• <i>Current Issue</i>	0.000	0.000	0.000

Research Findings: Medical History

	Positive	Negative	Borderline
Problems with Vision	0.391	0.412	0.368
• <i>Childhood</i>	0.161	0.176	0.158
• <i>Past as Adult</i>	0.264	0.294	0.263
• <i>Current Issue</i>	0.379	0.412	0.368
Problems with Hearing	0.172	0.059	0.158
• <i>Childhood</i>	0.069	0.000	0.158
• <i>Past as Adult</i>	0.080	0.059	0.053
• <i>Current Issue</i>	0.149	0.059	0.053
Allergies	0.460	0.618	0.421
• <i>Childhood</i>	0.333	0.382	0.316
• <i>Past as Adult</i>	0.322	0.500	0.368
• <i>Current Issue</i>	0.402	0.559	0.421
Asthma	0.241	0.118	0.421
• <i>Childhood</i>	0.172	0.088	0.368
• <i>Past as Adult</i>	0.138	0.029	0.316
• <i>Current Issue</i>	0.161	0.059	0.263

Research Findings: Medical History

	Positive	Negative	Borderline
Sadness/depression	0.770	0.588	0.947
• <i>Past</i>	0.161	0.118	0.211
• <i>Present</i>	0.046	0.176	0.316
• <i>Both</i>	0.563	0.294	0.421
Anxiety	0.782	0.500	0.579
• <i>Past</i>	0.161	0.147	0.263
• <i>Present</i>	0.069	0.059	0.105
• <i>Both</i>	0.552	0.294	0.211
Phobias	0.425	0.235	0.526
• <i>Past</i>	0.069	0.029	0.053
• <i>Present</i>	0.057	0.059	0.158
• <i>Both</i>	0.299	0.147	0.316
Panic/Anxiety attacks	0.471	0.206	0.368
• <i>Past</i>	0.115	0.088	0.053
• <i>Present</i>	0.069	0.029	0.105
• <i>Both</i>	0.287	0.088	0.211

Research Findings: Medical History

	Positive	Negative	Borderline
Obsessions	0.506	0.265	0.579
• <i>Past</i>	0.046	0.059	0.158
• <i>Present</i>	0.057	0.029	0.105
• <i>Both</i>	0.402	0.176	0.316
Compulsions	0.540	0.235	0.421
• <i>Past</i>	0.034	0.000	0.000
• <i>Present</i>	0.057	0.000	0.053
• <i>Both</i>	0.448	0.235	0.368
Delusions	0.138	0.059	0.053
• <i>Past</i>	0.080	0.029	0.000
• <i>Present</i>	0.000	0.000	0.000
• <i>Both</i>	0.057	0.029	0.053
Hallucinations	0.161	0.000	0.105
• <i>Past</i>	0.057	0.000	0.105
• <i>Present</i>	0.034	0.000	0.000
• <i>Both</i>	0.069	0.000	0.000

Research Findings: Medical History

	Positive	Negative	Borderline
Appetite	0.563	0.294	0.579
• <i>Past</i>	0.069	0.029	0.000
• <i>Present</i>	0.161	0.118	0.263
• <i>Both</i>	0.333	0.147	0.316
Sleep	0.747	0.588	0.684
• <i>Past</i>	0.023	0.029	0.105
• <i>Present</i>	0.230	0.265	0.368
• <i>Both</i>	0.494	0.294	0.211
Manic Episodes	0.345	0.059	0.368
• <i>Past</i>	0.034	0.000	0.211
• <i>Present</i>	0.057	0.000	0.000
• <i>Both</i>	0.253	0.059	0.158

By simultaneously collecting relevant background information and tracking outcomes for our participants, we continue to increase our understanding of the relationship between this disorder and the criminal justice system. The results of this research not only demonstrate the significant (and often overlooked) connection between ADHD and corrections, but also provide valuable insights as to how we can better help our participants overcome the additional challenges to successful re-entry posed by this disorder.

In Barkley's research of youth over 10 years, matched for socioeconomic setting:

- 20% of his control group were arrested, compared to 48% of the ADHD group
- Control group arrested on average 2.1 times, compared to 6.4 for ADHD group

Washington State's CHOICES Program- Consistently reduced recidivism by ~40% over 20 years

Unfortunately, the initial mental health screenings now used by the mental health staff in United States correctional facilities do not specifically identify those with ADHD or learning disabilities.



Questions?