IN THE SUPREME COURT OF THE STATE OF NEVADA

* * * * * * * * * *

JAMES MONTELL CHAPPELL, Appellant, v. WILLIAM GITTERE, et al., Respondents.	No. 77002 District Court Case No. (Death Penalty Case)

APPELLANT'S APPENDIX

Volume 29 of 31

Appeal From
Eighth Judicial District Court, Clark County
The Honorable Valerie Adair, District Judge

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CERTIFICATE OF SERVICE

I hereby certify that this document was filed electronically with the Nevada Supreme Court on the 2nd day of May, 2019. Electronic Service of the foregoing Appellant's Appendix shall be made in accordance with the Master Service List as follows:

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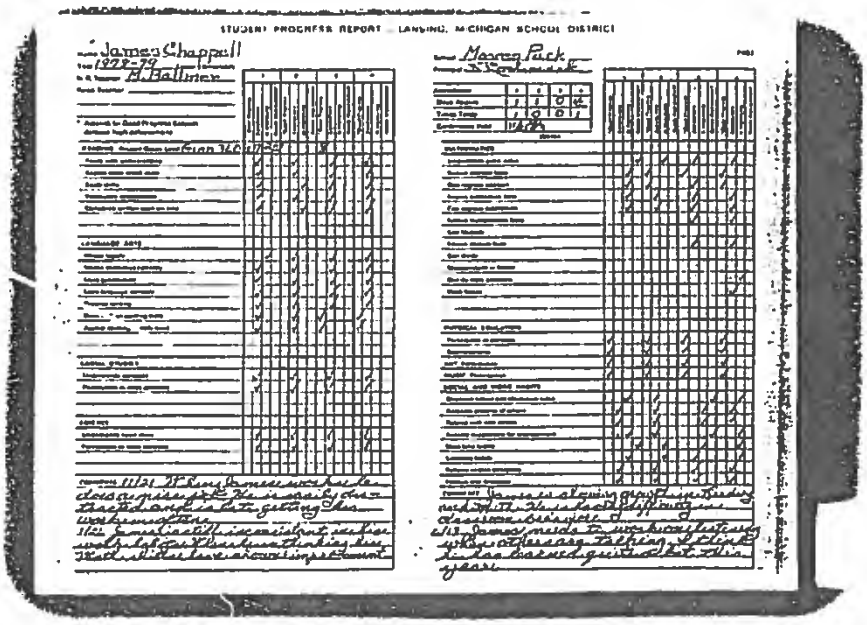
/s/ Sara Jelinek
An Employee of the
Federal Public Defender
District of Nevada



JChappell CORA011118

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JChappell CORA011119

LANSING SCHOOL DISTRICT
SPECIAL EDUCATION DEPARTMENT

REPORT OF INDIVIDUALIZED EDUCATIONAL PLANNING COMMITTEE (IEPC)
AND NOTICE OF SCHOOL DISTRICT ACTION

Purpose of IEPC:

- ☐ Initial
- ☐ IEP Review
- ☒ 3 Year Redetermination of Eligibility
- ☐ Change of Educational Status
- ☐ Other: ____

Date of Report: 11/13/86
Date of Last IEPC: 1/30/85
Date of Last MET—IEPC: 11/13/86

STUDENT IDENTIFICATION

Student's Name: James Chappell
School: Sexton
Student ID Number: 100998 B.D. 12/27/[redacted]
School District: Lansing
Phone: 882-5524 Sex: M Grade: 10
Race or Ethnic Group: 2
Address (Residence): 3321 Wedgewood Dr.
Teacher/Counselor: ____
City: Lansing, MI 48911
Parent—Name: Clara Akers
Guardian—Name: ____
Address: Same
Address: ____

COMMITTEE MEMBERS (Signatures indicate attendance)

Clara Akers — Parent/Guardian
[signature] — Student's Teacher
Gave Benne — District Representative
Theresa Abed, Social Worker — *Multidisciplinary Eval. Team Rep.

*MET Representative required at initial and 3-year redetermination of eligibility IEPC's.

NOTIFICATION

Parent/Guardian notified of this meeting by Paul Pierce (Name) on 11/5/86 (Date)

Means of Parent/Guardian Notification: Letter

Dominate Language of Home: English Name of Interpreter: ____

EVALUATION (Additional tests and evaluations not contained in MET report)

TEST/OBSERVATIONS RESULTS	EVALUATOR, TITLE & DATE
See MET Report 10/23/86	psych – psych
	Abed – S.S.W.

ELIGIBILITY: Based on the above information, the committee determines this person to be (Check one)

☒ ELIGIBLE

PRIMARY Disability: Emotionally Impaired Rule No. 340.1706 a, b

SECONDARY Disability: ____ Rule No. ____
Disability: ____ Rule No. ____
Disability: ____ Rule No. ____

☐ NOT ELIGIBLE — As: ____

Lansing School District
Special Education Department

REPORT OF IEPC (Page 3)
INDIVIDUALIZED SPECIAL EDUCATION PLAN

Student Name: James Chappell DOB: 12/27/[redacted] Date: 11/13/86
Student I.D. No.: 100998
School Attending: Sexton Service Provider – Name/Title: SE Staff
Annual Concern: Work Completion Annual Goal: Pass all Class
Present Level of Performance: not attending all classes, not turning in homework, failing classes

SHORT TERM INSTRUCTIONAL OBJECTIVES	METHOD OF MEASUREMENT	CRITERION FOR SUCCESS	EXPECTED TIME OF ACHIEVEMENT	COMMENTS
Turn in homework in a	timely manner	passing grade	1 yr	

PERFORMANCE OBJECTIVES

Expected Achievement/Behavior	Criteria for Success	Special Education Instructional Strategies/Material	Measurement Procedures	Date Reviewed	Review: Continued	Review: Revised	Review: Achieved

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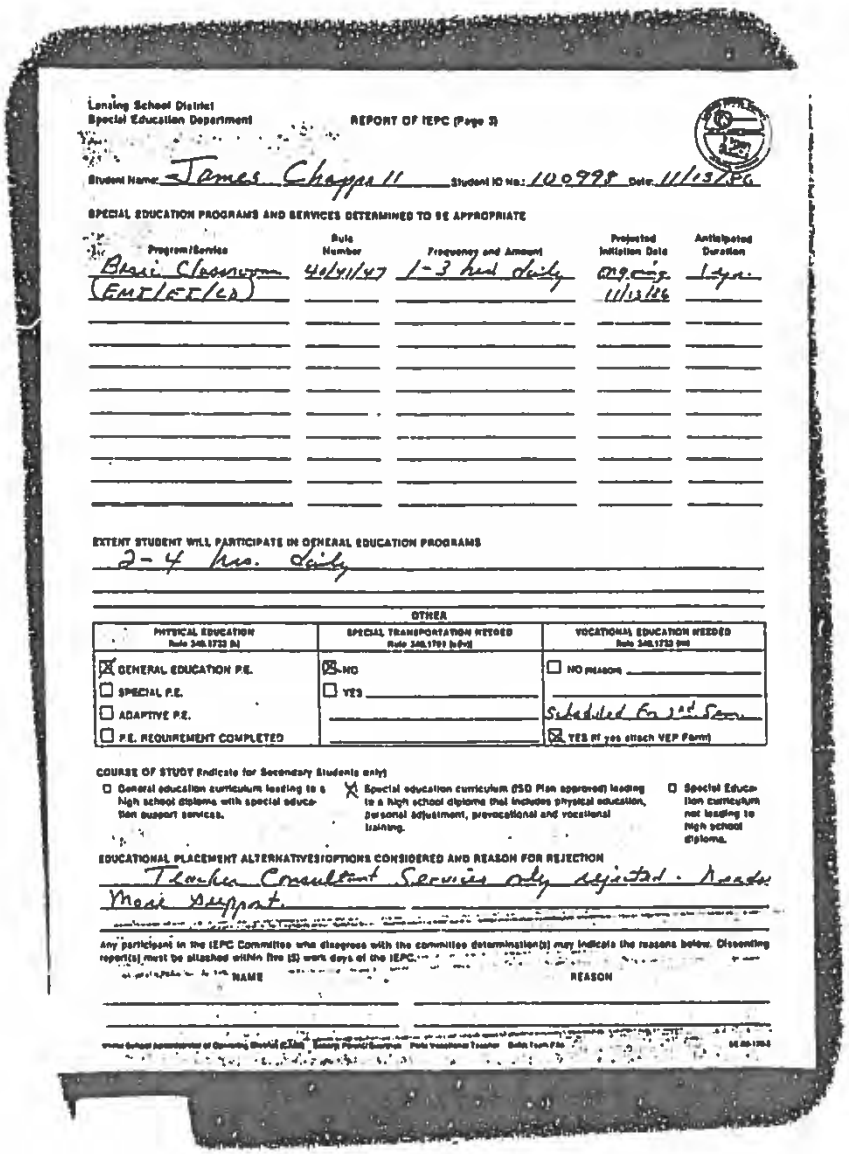

Lansing School District
Special Education Department

REPORT OF IEPC (Page 3)

Student Name: James Chappell II Student ID No: 100998 Date: 11/13/26

SPECIAL EDUCATION PROGRAMS AND SERVICES DETERMINED TO BE APPROPRIATE

Program/Service	Rule Number	Frequency and Amount	Projected Initiation Date	Anticipated Duration
Basic Classroom (EMI/LEP/Ld)	46/47/47	1-3 hrs daily	ongoing 11/13/26	1 yr.

EXTENT STUDENT WILL PARTICIPATE IN GENERAL EDUCATION PROGRAMS

2-4 hrs. daily

OTHER

PHYSICAL EDUCATION Rule 340.1732 (b)	SPECIAL TRANSPORTATION NEEDED Rule 340.1791 (a-h)	VOCATIONAL EDUCATION NEEDED Rule 340.1732 (m)
☒ GENERAL EDUCATION P.E.	☒ NO	☐ NO (REASON)
☐ SPECIAL P.E.	☐ YES	Scheduled for 2nd Sem.
☐ ADAPTIVE P.E.		☒ YES (If yes attach VEP Form)
☐ P.E. REQUIREMENT COMPLETED		

COURSE OF STUDY (Indicate for Secondary Students only)

☐ General education curriculum leading to a high school diploma with special education support services.

☒ Special education curriculum (ISD Plan approved) leading to a high school diploma that includes physical education, personal adjustment, prevocational and vocational training.

☐ Special Education curriculum not leading to high school diploma.

EDUCATIONAL PLACEMENT ALTERNATIVES/OPTIONS CONSIDERED AND REASON FOR REJECTION

Teacher Consultant Services only rejected - needs more support.

Any participant in the IEPC Committee who disagrees with the committee determination(s) may indicate the reasons below. Dissenting report(s) must be attached within five (5) work days of the IEPC.

NAME REASON

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JChappell CORA011122

LANSING SCHOOL DISTRICT
SPECIAL EDUCATION DEPARTMENT
Report of IEPC (Page 4)

NOTICE AND CONSENT FOR IMPLEMENTATION OF IEPC REPORT

Name: James Chappell Student ID No: 100598 Date 11/13/96

RESIDENT DISTRICT: _____

☐ This student's resident district concurs with this Individualized Educational Program and requests its implementation.

☐ This student's resident district requests a hearing on the matter related to _____

_____ _____
Date Signature of Resident District Superintendent or Designee
(Not necessary when the resident district is the operating district or when the student's special education program is paid for with Section 53 funds.)

OPERATING DISTRICT: Lansing

☐ The operating district agrees that this student is not eligible for special education programs and services.

☐ The operating district does not agree with the determination of this committee and requests a hearing on the matter related to _____

☒ The operating district intends to implement this Individualized program as presented in this report.

The person responsible to implement this IEP is Carol Jensen - Coordinator (Presently Sexton)
Name and Title

Student School Assignment Hom. H.S. Effective Date of this IEP 11/13/96

11/13/96 Vivian Anthony (GAS)
Date Signature of Operating District Superintendent or Designee

PARENT/GUARDIAN

☒ I have been fully informed of my rights.

☒ I request that the educational programs and services described in this IEPC report be implemented.

☐ I do not agree with the determination of this committee and request a conference with the appropriate Special Education Administrator.

☐ I request a hearing or arbitration on the matter related to _____

11/13/96 Clara James
Date Parent/Legal Guardian

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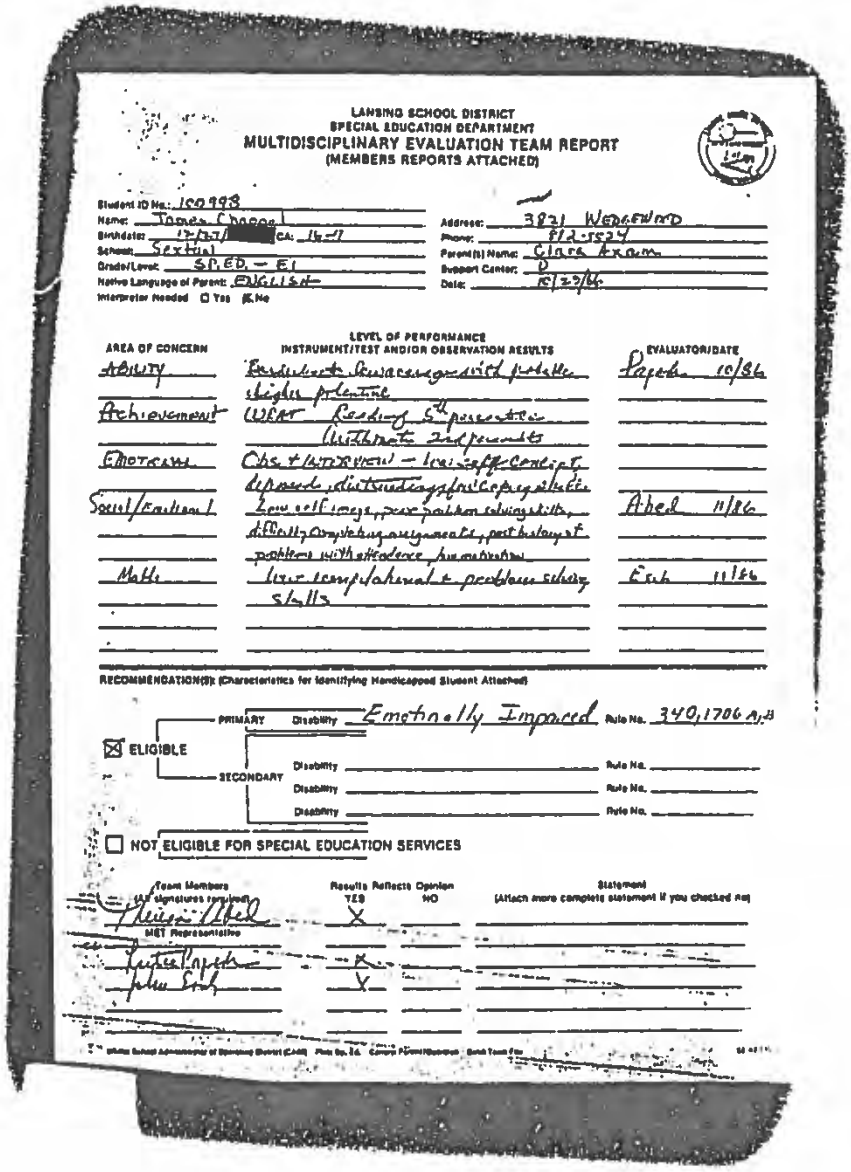
JChappell CORA011123



LANSING SCHOOL DISTRICT
SPECIAL EDUCATION DEPARTMENT
MULTIDISCIPLINARY EVALUATION TEAM REPORT
(MEMBERS REPORTS ATTACHED)

Student ID No.: 100993
Name: James Chacon
Birthdate: 12/27/[redacted] CA: 14-7
School: Sexton
Grade/Level: SP.ED. - E.I
Native Language of Parent: ENGLISH
Interpreter Needed ☐ Yes ☒ No

Address: 3821 WEDGEWOOD
Phone: 512-1524
Parent(s) Name: Clara Arcos
Support Center: D
Date: 5/29/96

AREA OF CONCERN	LEVEL OF PERFORMANCE INSTRUMENT/TEST AND/OR OBSERVATION RESULTS	EVALUATOR/DATE
ABILITY	Functions low average range with potential to higher potential	Popek 10/96
Achievement	WRAT Reading 5th percentile Arithmetic 2nd percentile	
EMOTIONAL	Obs + INTERVIEW - low self-concept, depressed, distractibility, poor coping skills	
Social/Emotional	Low self image, poor problem solving skills, difficulty completing assignments, past history of problems with attendance, [illegible]	Abed 11/96
Math	Low comp/achieve problem solving skills	Esh 11/96

RECOMMENDATION(S): (Characteristics for Identifying Handicapped Student Attached)

☒ ELIGIBLE
PRIMARY Disability: Emotionally Impaired Rule No. 340,1706 A,B
SECONDARY Disability: _____ Rule No. _____
Disability: _____ Rule No. _____
Disability: _____ Rule No. _____

☐ NOT ELIGIBLE FOR SPECIAL EDUCATION SERVICES

Team Members (All signatures required)	Results Reflects Opinion YES	NO	Statement (Attach more complete statement if you checked No)
Theresa Abed MET Representative	X		
Patricia Popek	X		
John Esh	X		

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JChappell CORA011124

Ingham Intermediate School District

CHARACTERISTICS FOR IDENTIFYING HANDICAPPED STUDENTS

☐ Composite Report ☐ Member Report

Date 11/96

Student Name James Chappell Birth Date 12-27-[redacted]

Characteristic Standard	Source of Information
R 340.1706 EMOTIONALLY IMPAIRED	
(1) The emotionally impaired shall be determined through manifestation of behavioral problems primarily in the affective domain,	SW Psych-mem Sch Records, SW Rpt/Psy
over an extended period of time,	
which adversely affects the person's education to the extent that the person cannot profit from regular learning experiences without special education support.	
The problems result in behaviors manifested by one or more of the following characteristics:	
(a) Inability to build or maintain satisfactory interpersonal relationships within the school environment,	SW Rpt / Psych Rpt
(b) Inappropriate types of behavior or feelings under normal circumstances.	SW Rpt / Psych Rpt
(c) General pervasive mood of unhappiness or depression.	
(d) Tendency to develop physical symptoms or fears associated with personal or school problems.	
(2) The term "emotionally impaired" also includes persons who, in addition to the above characteristics, exhibit maladaptive behaviors related to schizophrenia, autism, or similar disorders.	
The term "emotionally impaired" does not include: persons who are socially maladjusted unless it is determined that they are emotionally impaired.	
(3) The emotionally impaired shall not include persons whose behaviors are primarily the result of intellectual, sensory or health factors.	
(4) A determination of impairment shall be based on data provided by a multidisciplinary team which shall include a comprehensive evaluation by both of the following:	
(a) A psychologist or psychiatrist.	Psych 11/96
(b) A school social worker.	Dist 11/96
(5) A determination of impairment shall not be based solely on behavior relating to environmental, cultural or economic differences.	

(OVER)

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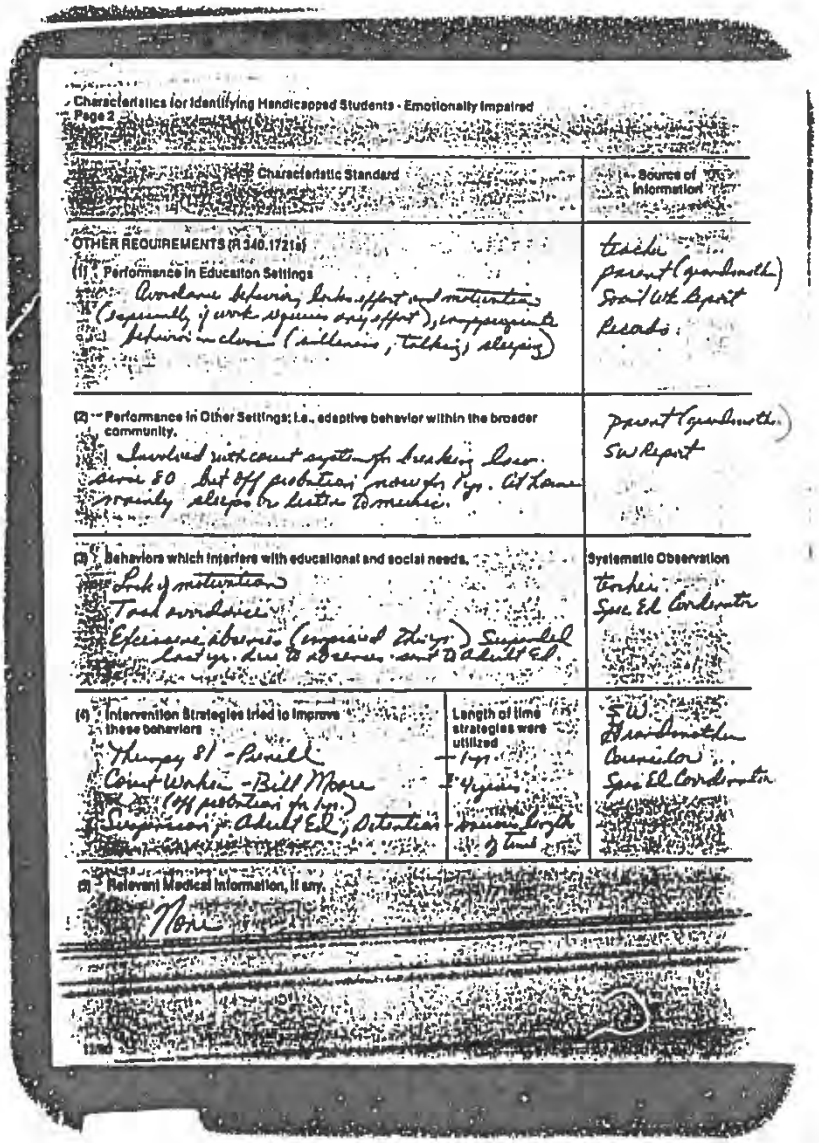
JChappell CORA011125



Characteristics for Identifying Handicapped Students - Emotionally Impaired
Page 2

Characteristic Standard	Source of Information
OTHER REQUIREMENTS (R 340.1721e) (1) Performance in Education Settings Avoidance behavior, lack effort and motivation (especially if work appears easy for), inappropriate behavior in class (silliness, talking), sleeping	teacher parent (guardian) Social Work Specialist Records
(2) Performance in Other Settings; i.e., adaptive behavior within the broader community. Involved with court system for breaking & entering 80 but off probation now for 1 yr. At home usually sleeps or listens to music.	parent (guardian) SW Report
(3) Behaviors which interfere with educational and social needs. Lack of motivation Poor attendance Excessive absences (suspended 3 days) Suspended last yr. due to absences and to Adult Ed.	Systematic Observation teacher Special Ed Coordinator
(4) Intervention Strategies tried to improve these behaviors Therapy at - Powell Court Worker - Bill Moore (on probation for 1 yr.) Suspension; Adult Ed; Detention	Length of time strategies were utilized - 1 yr. - 4 years - various length - 2 times	SW Psychologist Counselor Special Coordinator
(5) Relevant Medical Information, if any. None	

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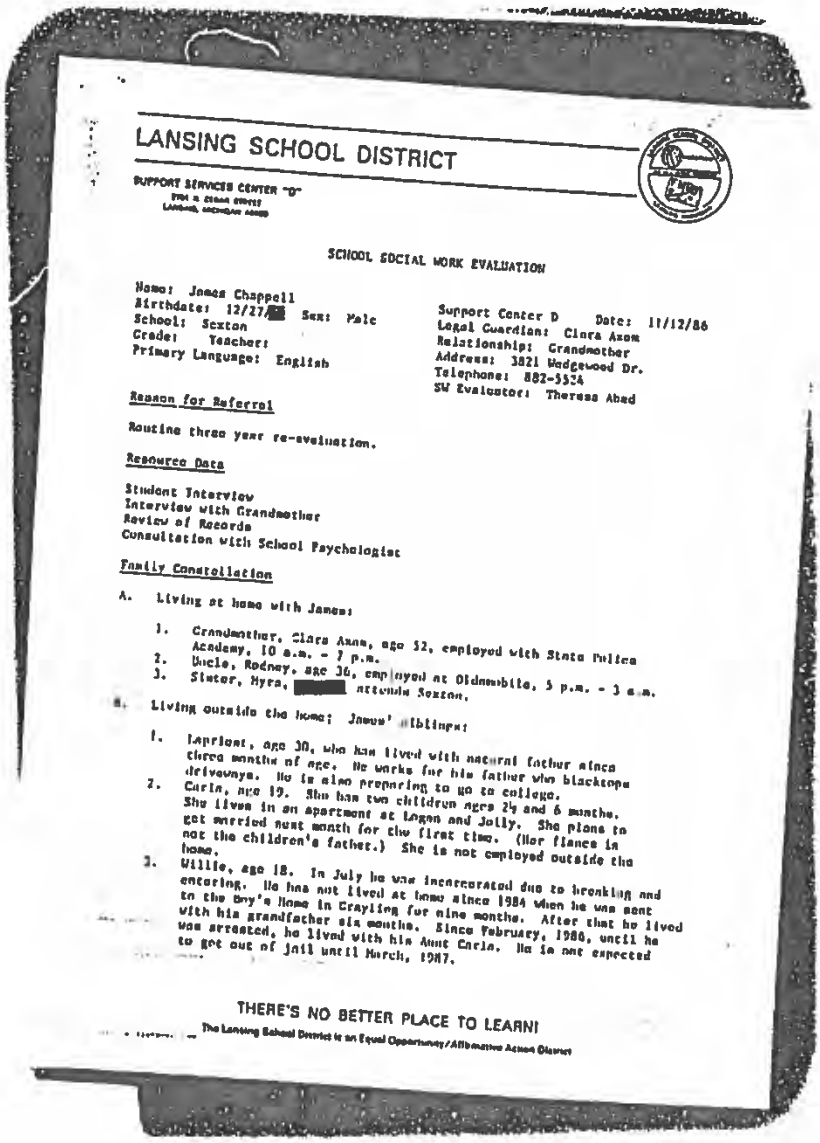

LANSING SCHOOL DISTRICT

SUPPORT SERVICES CENTER "D"
[illegible] CEDAR STREET
LANSING, MICHIGAN 48909

SCHOOL SOCIAL WORK EVALUATION

Name: James Chappell
Birthdate: 12/27/[redacted] Sex: Male
School: Sexton
Grade: Teacher:
Primary Language: English

Support Center D Date: 11/12/86
Legal Guardian: Clara Axom
Relationship: Grandmother
Address: 3821 Wedgewood Dr.
Telephone: 882-5324
SW Evaluator: Theresa Abad

Reason for Referral

Routine three year re-evaluation.

Resource Data

Student Interview
Interview with Grandmother
Review of Records
Consultation with School Psychologist

Family Constellation

A. Living at home with James:

1. Grandmother, Clara Axom, age 52, employed with State Police Academy, 10 a.m. - 7 p.m.
2. Uncle, Rodney, age 36, employed at Oldsmobile, 5 p.m. - 3 a.m.
3. Sister, Myra, [redacted] attends Sexton.

B. Living outside the home: James' siblings:

1. Lapriest, age 30, who has lived with natural father since three months of age. He works for his father who blacktops driveways. He is also preparing to go to college.
2. Carla, age 19. She has two children ages 2½ and 6 months. She lives in an apartment at Logan and Jolly. She plans to get married next month for the first time. (Her fiance is not the children's father.) She is not employed outside the home.
3. Willie, age 18. In July he was incarcerated due to breaking and entering. He has not lived at home since 1984 when he was sent to the Boy's Home in Grayling for nine months. After that he lived with his grandfather six months. Since February, 1986, until he was arrested, he lived with his Aunt Carla. He is not expected to get out of jail until March, 1987.

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C. Clara Azam's offspring (besides Rodney):

1. Anthony Azam: In 1981 he was stabbed 27 times and died. He and James had just started forming a close relationship.
2. Daughter (James' mother) was killed by a police car while walking across the street in August, 1973.
3. Sharon, age 31, lives in an apartment and has one child, 7 years old, who frequently spends weekends at Clara's home. She is not married and is currently a homemaker. At one time she worked for Oldsmobile.

Before James' natural mother died, he and his siblings spent much time at their grandmother's house and, in fact, were already living with her at the time of his mother's death. However, mother had frequently visited the children and was especially close to James. Her death was a very difficult adjustment for the children and in particular, James. He was only 2½ years old at the time. James does not have contact with his natural father except for the times he has seen him on the street. His father is frequently in jail for drugs and other violations.

James and his siblings are not eligible for Social Security benefits because their mother had not worked long enough before her death to qualify. The children have Medicaid benefits.

Clara has encountered many problems with James and his siblings. She took all four children to Ernst Ground for counseling for a year but she felt it was not helpful. She was then going to pursue petitioning the court for incorrigibility on all four grandchildren but this was never followed through on. Myra has been involved with the courts since the age of ten when she was caught stealing. She has also run away from home. Her current caseworker was able to get Myra into private counseling five weeks ago with Dr. Joan Jackson Johnson on Grand River in East Lansing. The court is paying the cost. Improvement was noted since therapy began, however, last week she was caught shoplifting. Clara Azam refused to go down to the police stating because she is disgusted and refuses to rescue her anymore. Instead, she gave the police officer, Carla's caseworker's name (Bill Moore).

In 1983 James was caught shoplifting and was placed in a juvenile home for one night. He was then placed on probation for two years. December of 1985 his probation ended. His case worker was also Bill Moore. Clara feels Bill Moore was very influential in turning James around. In 1981, James saw a therapist in East Lansing, Dr. Powell, for a year. He stopped going right around the same time his cousin Anthony was killed.

Myra and James do not get along. They continually put each other down, however, they do worry about each other. James is described as quiet. He rarely shares his feelings or discusses issues. He sleeps a lot and spends most of his time listening to music or watching T.V. He has two close friends. One, who is 16, is a good influence. The other boy is 19 and is continually in trouble with the law. Most of the time James stays at home.

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School Information

Clara states that James has had behavior problems in school the last three years. He tries to get attention by acting "silly". He has difficulty completing assignments. Last year James skipped school for 28 days from September to November. He was sent to Harry Hill for the rest of the year in the Adult Education program. Because of his improvement, he was sent back to Sexton for the 1986-87 school year.

For the past two summers James has been involved with the summer work program. During the summer of 1985 he worked in a janitorial capacity at Sexton. During the summer of 1986 he cooked at the cafeteria at Hill Vocational Center. James enjoys cooking and hopes to make a career of food management.

James stated he did very well the first three weeks of school this year but then got "tired" and started skipping and not completing work. If he has one more absence he will be suspended from school. Grandmother has warned him that if he is suspended he has to leave the house and is not allowed back. James is pessimistic about not skipping school for the rest of the year. James does not like to dress for PE and so is failing.

Health Information

James had his last physical in August, 1985. Medicaid now pays for a physical every two years. James is described as a very healthy child with no significant past illnesses or injuries. He should be wearing glasses all the time. The eye doctor was last seen in September, 1985 when a new pair of glasses were prescribed. The only time he will wear them is to watch T.V.

Grandmother has diabetes and a heart murmur. She has to see the doctor every three months. In 1972, she became very ill and was diagnosed as have SBE (inflamation of the membrance lining the chambers of the heart and surface of the valves). She was hospitalized for two months for treatment and has not had a reoccurrence.

Conclusion

From the information gathered, review of records and interview with James and his grandmother, James appears to continue to meet the criterion for Emotionally Impaired. He exhibits poor self image, avoidance behaviors, poor problem solving skills, inadequate coping skills and low academic motivation.

Thurman Abed, M.S.W.
School Social Worker

JChappell CORA011129

CA-60

LANSING SCHOOL DISTRICT

SUPPORT SERVICES CENTER "D"
3700 S. CEDAR STREET
LANSING, MICHIGAN 48910

PSYCHOLOGICAL REPORT

Name:	James Chappell
Student #:	160998
B.D.:	12/27[redacted]
C.A.:	16-9
Sex:	Male
School:	Sexton High School
Grade:	Special Education - EI
Evaluation Date:	10/23/86
Psychologist:	Lutie Papoah

Referral

James was referred for a routine three year re-evaluation to determine if he continued to qualify for a Special Education program.

School History

James has always attended school in the Lansing School District. He was referred for an evaluation when he was in the fourth grade at Moore's Park School because of disruptive behavior, aggressive responses and low academic achievement. As a result of that evaluation he was placed in a Special Education program for the Emotionally Impaired and School Social Work service was recommended. That program continued and he was re-certified in the seventh grade for Special Education placement and School Social Work services. James presently attends Sexton High School where he has all Special Education classes with the exception of art and gym.

Sources of Data

Review of CA-60
Review of Team File
Consultation with Special Education Coordinator
Consultation with Team Members
Observations
Clinical Interview
Selected WAIS-R Sub-tests
Wide Range Achievement Test - Revised

Interpretation of Data

Background Information See School Social Worker report on file.

THERE'S NO BETTER PLACE TO LEARN!

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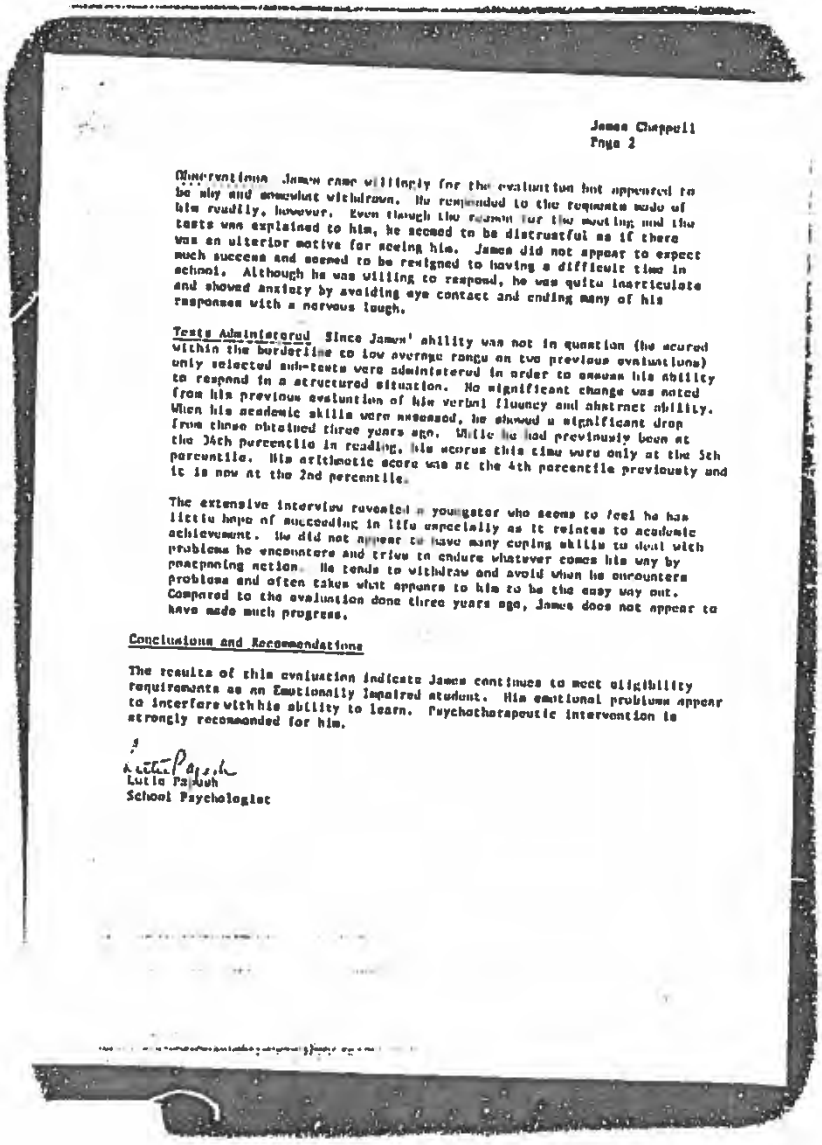
AA07012



Observations James came willingly for the evaluation but appeared to be shy and somewhat withdrawn. He responded to the requests made of him readily, however. Even though the reason for the testing and the tests was explained to him, he seemed to be distrustful as if there was an ulterior motive for seeing him. James did not appear to expect much success and seemed to be resigned to having a difficult time in school. Although he was willing to respond, he was quite inarticulate and showed anxiety by avoiding eye contact and ending many of his responses with a nervous laugh.

Tests Administered Since James' ability was not in question (he scored within the borderline to low average range on two previous evaluations) only selected sub-tests were administered in order to assess his ability to respond in a structured situation. No significant change was noted from his previous evaluation of his verbal fluency and abstract ability. When his academic skills were assessed, he showed a significant drop from those obtained three years ago. While he had previously been at the 34th percentile in reading, his scores this time were only at the 5th percentile. His arithmetic score was at the 4th percentile previously and it is now at the 2nd percentile.

The extensive interview revealed a youngster who seems to feel he has little hope of succeeding in life especially as it relates to academic achievement. He did not appear to have many coping skills to deal with problems he encounters and tries to endure whatever comes his way by postponing action. He tends to withdraw and avoid when he encounters problems and often takes what appears to him to be the easy way out. Compared to the evaluation done three years ago, James does not appear to have made much progress.

Conclusions and Recommendations

The results of this evaluation indicate James continues to meet eligibility requirements as an Emotionally Impaired student. His emotional problems appear to interfere with his ability to learn. Psychotherapeutic intervention is strongly recommended for him.

Lutie Pagsh
School Psychologist

JChappell CORA011131

REQUEST FOR STUDENT SCREENING AND TEAM CONSULTATION

TEACHER REPORT

Name: [illegible] Support Center: [illegible] Date: [illegible]
Birthdate: 12/27/[redacted] Sex: M Legal Guardian: Mrs [illegible]
School: [illegible] Park Relationship: Grandmother
Grade: 4 Teacher: [illegible] Address: 1527 [illegible] Ct Zip: 48310
Primary Language of Child: English Home: English Phone: 489-7876
Current Sp.Ed. Placement: [illegible] Disability: [illegible]

Other Children in the Home

Full Name	Sex	Birthdate	Grade	School	Full Name	Sex	Birthdate	Grade	School
[illegible]	[illegible]	[redacted]	6	[illegible]					
[illegible]	[illegible]	[redacted]	5	[illegible]					
[illegible]	[illegible]	[redacted]	7	[illegible]					

Please answer the following questions: (re-evaluations require starred items)

* 1. Reason for referral: disruptive behavior, aggressive responses [illegible]

* 2. List and date any previous individual testing which has been done: [illegible] June 1977 [illegible]

3. Indicate S.A.T. Scores:

	Date	Grade Level	Percentile	Stanine
Total Reading	May 77	[illegible]	[illegible]	[illegible]
Total Math	May 77	[illegible]	[illegible]	[illegible]

4. Circle the following services that have been provided:

Building Team — Instructional Aides — Classroom Change
Parent Conference — Speech Therapist — School Transfer
Reading Teacher — Previous Special Ed. Placement — School Social Worker
Compensatory Education — School Nurse — Teacher-Consultant
School Counselor — Psychological — Discipline Code
Current Sp.Ed. Placement — Other Services/Agencies

5. How many schools has the child attended? [illegible] Grades Repeated: [illegible]

* 6. Attendance Pattern: [illegible]

7. Pertinent health information:
Family Physician: [illegible] Medication: [illegible]
Hearing Test: [illegible] Normal [illegible] Vision Test: 78/79 [illegible]
(Date/Results) (Date/Results)

8. Describe fine and gross motor skills: [illegible]

9. Current Academic Functioning (grade level): Reading: [illegible] Math: [illegible]
Specific skills (identify strengths and weaknesses):
Readiness Skills: [illegible]
Handwriting: [illegible]
Comprehension: Reading [illegible] Oral [illegible]
Phonics: [illegible]
Sight Vocabulary: [illegible]
Addition: [illegible]
Subtraction: [illegible]

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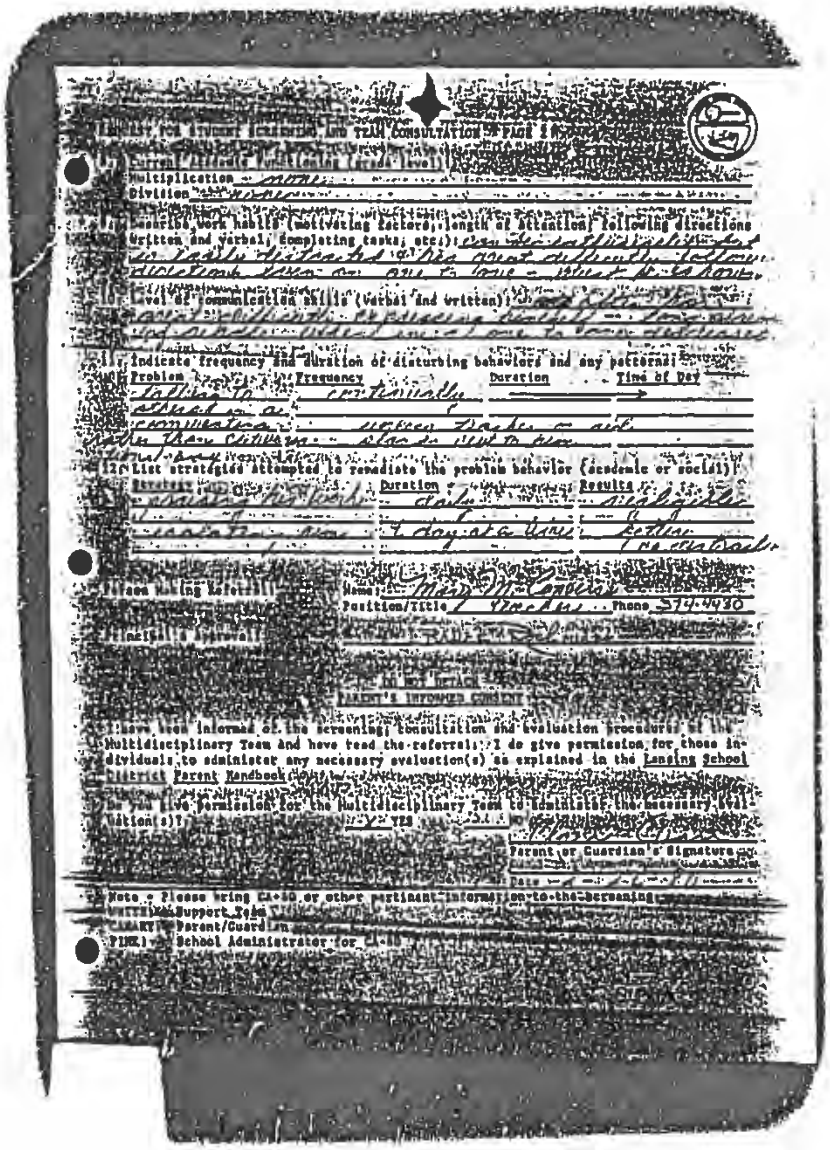

Multiplication – none
Division none

Describe work habits (motivating factors, length of attention) following directions (written and verbal), completing tasks, etc.):

Level of communication skills (verbal and written):

Indicate frequency and duration of disturbing behaviors and any patterns:

Problem	Frequency	Duration	Time of Day
talking to	continually		
about a			
conversation			

List strategies attempted to remediate the problem behavior (academic or social):

Strategy	Duration	Results
	daily	negligible
	1 day at a time	better

Please Bring Referral!

Name: Mary M. Conklin

Position/Title Teacher Phone 374-4430

PARENT'S INFORMED CONSENT

I have been informed of the screening, consultation and evaluation procedures of the Multidisciplinary Team and have read the referral. I do give permission for those individuals to administer any necessary evaluation(s) as explained in the Lansing School District Parent Handbook.

Do you give permission for the Multidisciplinary Team to administer the necessary evaluation(s)? YES

Parent or Guardian's Signature

Date

Note - Please bring CA-60 or other pertinent information to the Screening

Support Team

Parent/Guardian

School Administrator for CA-60

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JChappell CORA011133

FORM 1

INGHAM INTERMEDIATE SCHOOL DISTRICT

INDIVIDUALIZED EDUCATION PROGRAM

☒ Initial I.E.P. Date of E.P.P.C./Cert. 5-14-80 /EI   ☐ Annual Review/I.E.P. Date of last I.E.P. ______

Student's Name: James Chappell   Resident District: Lansing

Birthdate: 12-27-[redacted]   Attending Dist./Bldg.: Lansing/Moores Park

Committee Members (name, title, and chairperson):

1. James [illegible] Prog Spec. — District's Representative
3. Clara [illegible] — Parents
5. [illegible]
2. [illegible] Kathleen Brown [illegible] — Teacher or Consultant
6. ______

Meeting Date: 5-14-80

Parents notified of this meeting by: [illegible] T/C (Name)   5-7-80 (Date)

Means of parent notification: Phone - letter

PRESENT LEVEL OF PERFORMANCE

Primary Areas of Concern	Level of Performance
withdrawal from people	will not verbalize concerns to others
poor emotional controls	inconsistent/sometimes disruptive
self-concept	low
general social interaction	inappropriate (varies from withdrawal to aggression)

SPECIAL EDUCATIONAL PROGRAMS AND SERVICES

Program/Service	Person Responsible	Projected Initiation Date	Review Date
Basic Special Ed Classroom (EI/[illegible]/EMI certified teacher) with minimum integration	Program Spec.	By June 5, 1980	05/81
School Social Work Svc.	Sch. Soc. Worker	"	5/81
Special Transportation	Program Spec.	Transport to & from home school	5/81

Extent of participation in regular education: Minimal - non academics (small group)

Approximate date of next IEP: 5/81   to be arranged by: Special Ed. Coord. (Name and/or position)

ANNUAL GOALS AND SHORT TERM OBJECTIVES MUST BE COMPLETED AND ATTACHED. IEP FORM 2 OR EQUIVALENT FORMAT MUST BE USED.

Components of IEP are subjected to revision as necessary. Each revision must be documented and kept on file with teacher.

WHITE: School Administrator of Operating District (for CA60)   PINK: Ingham Intermediate School District
CANARY: Parent/Guardian   GOLD: Resident District

JChappell CORA01134

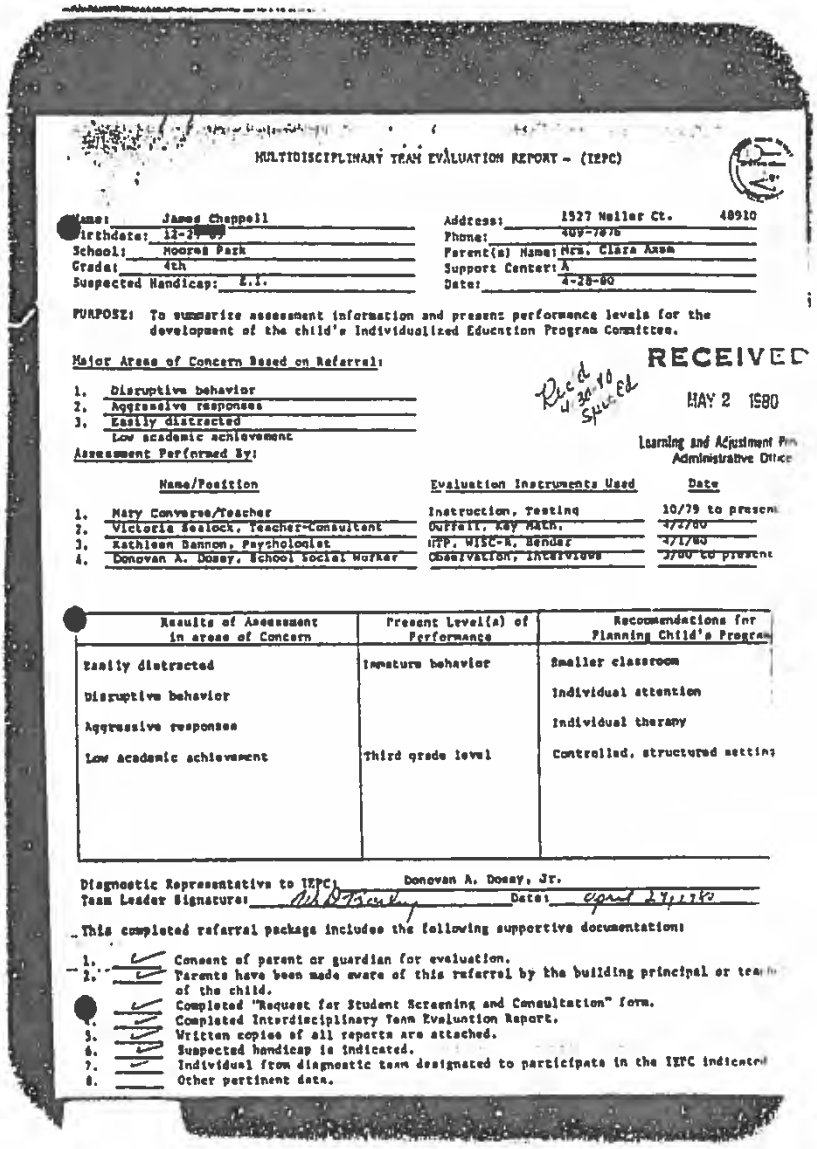
INGHAM INTERMEDIATE SCHOOL DISTRICT

Student Name James Chappell
Date of Birth 12/27/[redacted]
Page 1 of

I.E.P. Form 2
Individualized Curriculum Plan
Date of Plan October 1990

Annual Goals	Short Term Instructional Objectives			
	Expected Achievement/Behavior	Expected Time of Achievement	Criteria for Success	How It Will Be Measured
Increase interpersonal Interactions	Voices concerns to teachers and peers	October 1990 - June 1991	At appropriate times	Teacher Observation
Self-Concept	Verbally stating appropriate behavior rules when rules have been broken	October 1990 - June 1991	Will voice appropriate behavior rule to teacher upon request / 80%	Teacher Observation

JChappell CORA01135



MULTIDISCIPLINARY TEAM EVALUATION REPORT - (IEPC)

Name: James Chappell
Birthdate: 12-2[redacted]
School: Hoover Park
Grade: 4th
Suspected Handicap: E.I.

Address: 1527 Weller Ct. 48910
Phone: 485-7876
Parent(s) Name: Mrs. Clara Axen
Support Center: A
Date: 4-28-80

PURPOSE: To summarize assessment information and present performance levels for the development of the child's Individualized Education Program Committee.

Major Areas of Concern Based on Referral:

1. Disruptive behavior
2. Aggressive responses
3. Easily distracted
   Low academic achievement

Rec'd 4-30-80 Spec Ed

RECEIVED
MAY 2 1980
Learning and Adjustment Pro
Administrative Office

Assessment Performed By:

	Name/Position	Evaluation Instruments Used	Date
1.	Mary Converse/Teacher	Instruction, Testing	10/79 to present
2.	Victoria Sealock, Teacher-Consultant	Duffell, Key Math,	4/22/80
3.	Kathleen Bannon, Psychologist	ITPA, WISC-R, Bender	4/1/80
4.	Donovan A. Dossy, School Social Worker	Observation, Interviews	3/80 to present

Results of Assessment in areas of Concern	Present Level(s) of Performance	Recommendations for Planning Child's Program
Easily distracted	Immature behavior	Smaller classroom
Disruptive behavior		Individual attention
Aggressive responses		Individual therapy
Low Academic achievement	Third grade level	Controlled, structured setting

Diagnostic Representative to IEPC: Donovan A. Dossy, Jr.
Team Leader Signature: [signature] Date: April 29, 1980

This completed referral package includes the following supportive documentation:

1. ✓ Consent of parent or guardian for evaluation.
2. ✓ Parents have been made aware of this referral by the building principal or team of the child.
3. ✓ Completed "Request for Student Screening and Consultation" form.
4. ✓ Completed Interdisciplinary Team Evaluation Report.
5. ✓ Written copies of all reports are attached.
6. ✓ Suspected handicap is indicated.
7. ✓ Individual from diagnostic team designated to participate in the IEPC indicated
8. ___ Other pertinent data.

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LANSING SCHOOL DISTRICT

519 W. Kalamazoo Street
Lansing, Michigan 48933

SCHOOL SOCIAL WORK EVALUATION

Name: JAMES CHAPPELL
Birthdate: 12-17[redacted] Sex: M
School: Moores Park
Grade: 4 Teacher: M. Converse
Primary Language: English

Support Center: A Date: 4-28-80
Legal Guardian: Clara Axam
Relationship: Grandmother
Address: 1527 Keller Ct, 48910
Phone: 489-7076

Date of SW Evaluation: 3/80 to present SW Evaluator: Donovan A. Dosey, Jr.

PROBLEM

James was originally referred for supportive services on June 13, 1977. At that time, the teacher stated, "I have talked to the grandmother several times and a conference was held with the principal, teacher and grandmother. James has a wetting problem and he sucks his fingers. His actions and reactions are very slow. He asks unrelated questions and will not respond when spoken to. His grandmother wants what is best for James and also wants him to do well in school." At that time, James was in the second grade but functioning at a first grade level. There was no action taken on that referral.

On February 26, 1980, James was again referred for supportive services. The referral stated, "Disruptive behavior, aggressive responses which are unwarranted. He is in the fourth grade and functioning at a second grade level.

FAMILY HISTORY

James is presently living with his grandmother, Mrs. Clara Axam, and three siblings. James' mother is deceased and his father is in prison. Mrs. Axam is a cook at the Michigan State Police Commisary.

Mrs. Axam is aware of James' difficulties but feels that this may be due to the loss of his mother when he was two and a half years old. He is slow about doing his chores, but Mrs. Axam feels this is normal. He has a good relationship with his siblings, but is a constant tease. In the past few years, he has been playing with the other children in the neighborhood where formally, he did not join in their games, but stood on the sidelines.

DEVELOPMENTAL HISTORY

James was a full term, six and a half pound baby at birth. There appeared to be no difficulties during pregnancy or birth. His early development appeared to be normal, but at the age of two and a half years, his mother died, and James would not talk to anyone. His grandmother enrolled him in Head Start where he would not play with anyone or talk to anyone. He finally built a relationship with a new teacher, and when she left suddenly, he regressed to his old behavior, not talking to anyone.

After entering kindergarten, he began to relate to his teacher and some of the other children, but did not get involved in playing with them, usually playing by himself or standing on the sidelines.

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SCHOOL HISTORY

In the second grade, James was referred for service but nothing was done at that time. Since then, James has received services from the building team, reading teacher, instructional aides, school counselor, school nurse (received eye glasses), compensatory education, the discipline code and conferences with the grandmother.

None of these have been effective, and his behavior seems to be deteriorating. James is in constant conflict with several of the other students and is quite often isolated to get his work done, and to keep him away from the other boys.

RECOMMENDATIONS

James has had a great deal of difficulty adjusting in school, both socially and academically. I feel that he has a great deal of difficulty forming meaningful relationships and recommend that he be placed in a smaller classroom situation and should receive individual therapy outside the school setting.

Donovan A. Dossy, Jr., C.S.W.
School Social Worker

DAD:sk

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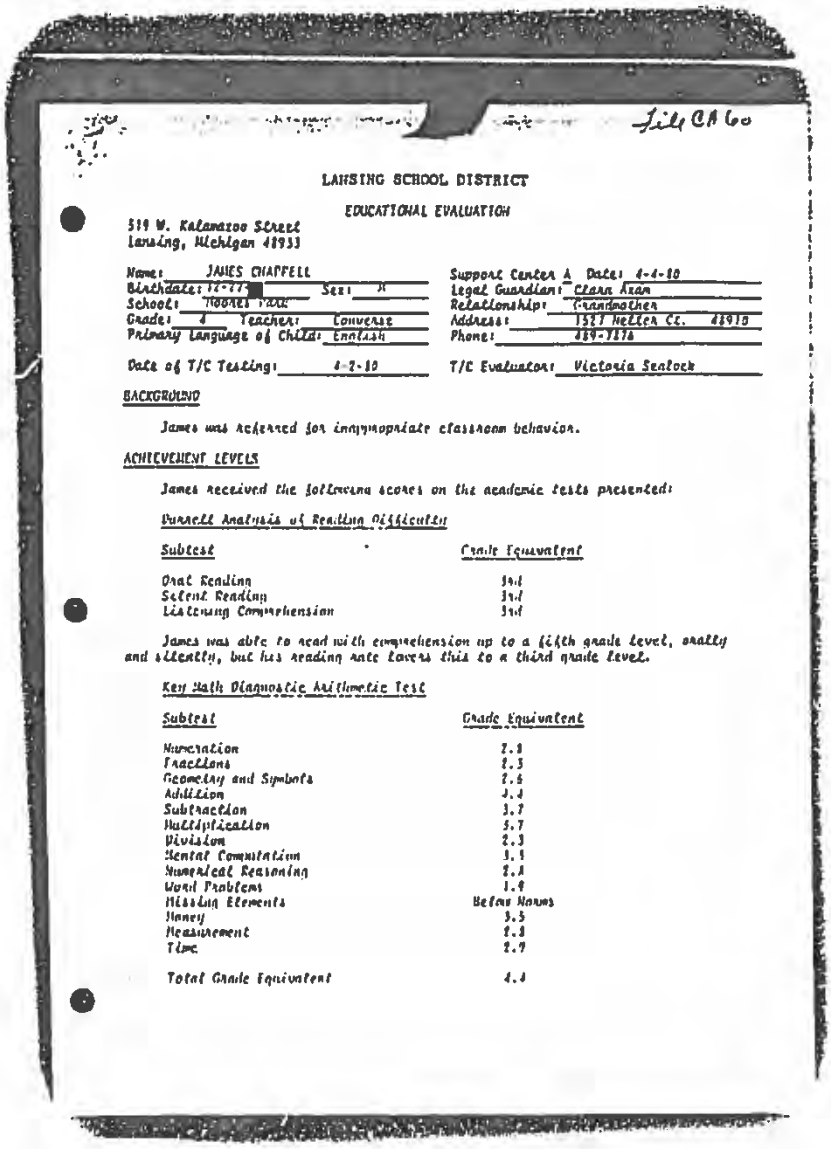
JChappell CORA011138



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LANSING SCHOOL DISTRICT

EDUCATIONAL EVALUATION

519 W. Kalamazoo Street
Lansing, Michigan 48933

Name: JAMES CHAPPELL
Birthdate: 12-27-[redacted] Sex: M
School: MOORES PARK
Grade: 4 Teacher: Converse
Primary Language of Child: English

Support Center A Date: 4-6-80
Legal Guardian: Clara Axan
Relationship: Grandmother
Address: 1317 Heller Ct. 48910
Phone: 484-7176

Date of T/C Testing: 4-2-80 T/C Evaluator: Victoria Seatock

BACKGROUND

James was referred for inappropriate classroom behavior.

ACHIEVEMENT LEVELS

James received the following scores on the academic tests presented:

Durrell Analysis of Reading Difficulty

Subtest	Grade Equivalent
Oral Reading	3rd
Silent Reading	3rd
Listening Comprehension	3rd

James was able to read with comprehension up to a fifth grade level, orally and silently, but his reading rate lowers this to a third grade level.

Key Math Diagnostic Arithmetic Test

Subtest	Grade Equivalent
Numeration	2.8
Fractions	1.3
Geometry and Symbols	2.6
Addition	3.3
Subtraction	3.7
Multiplication	3.7
Division	2.3
Mental Computation	3.1
Numerical Reasoning	2.8
Word Problems	1.9
Missing Elements	Below Norms
Money	3.5
Measurement	2.8
Time	2.9
Total Grade Equivalent	4.4

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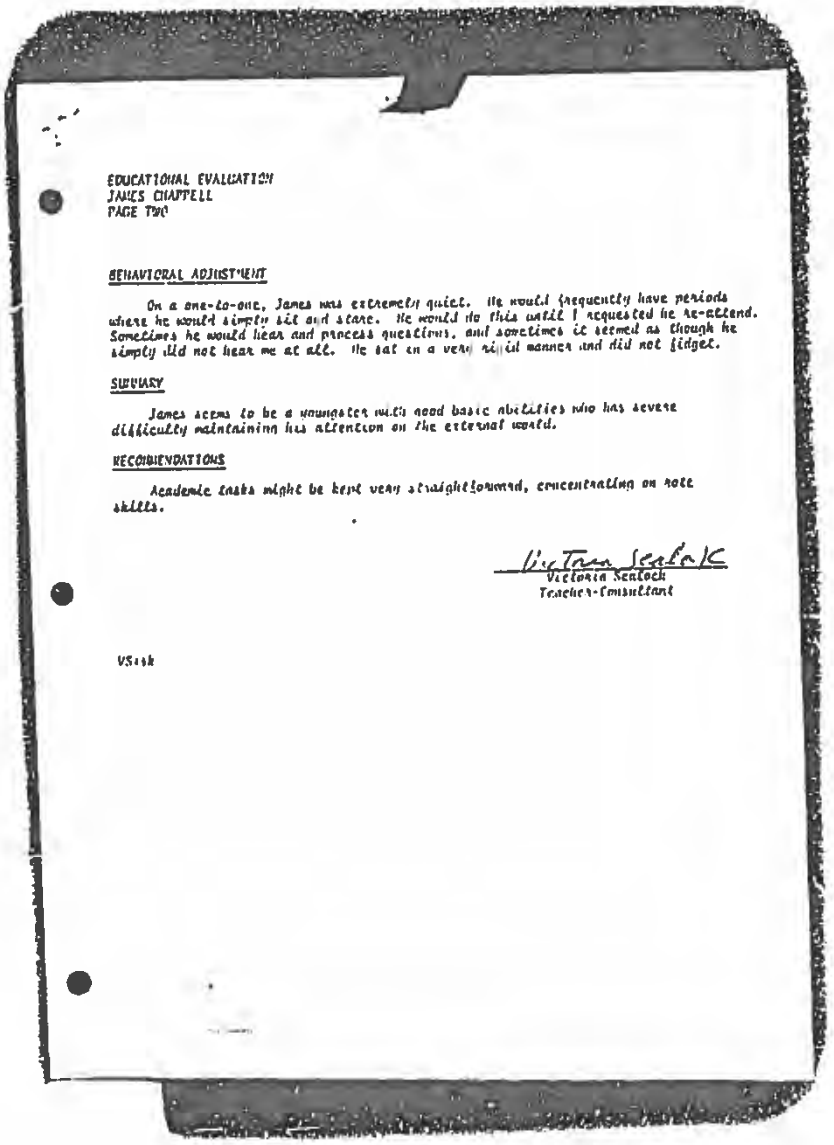
JChappell CORA011139



EDUCATIONAL EVALUATION
JAMES CHAPPELL
PAGE TWO

BEHAVIORAL ADJUSTMENT

On a one-to-one, James was extremely quiet. He would frequently have periods where he would simply sit and stare. He would do this until I requested he re-attend. Sometimes he would hear and process questions, and sometimes it seemed as though he simply did not hear me at all. He sat in a very rigid manner and did not fidget.

SUMMARY

James seems to be a youngster with good basic abilities who has severe difficulty maintaining his attention on the external world.

RECOMMENDATIONS

Academic tasks might be kept very straightforward, concentrating on rote skills.

Victoria Sentock
Teacher-Consultant

VS:sk

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LANSING SCHOOL DISTRICT

SCHOOL PSYCHOLOGICAL EVALUATION

519 W. Kalamazoo Street
Lansing, Michigan 48933

Name: JAMES CHAPPELL
Birthdate: 2-27-[illegible] Sex: M
School: Moores Park CA: 10-1
Grade: 4 Teacher: M. Converse
Primary Language: English

Support Center: A Date: 4-16-80
Legal Guardian: Mrs. Axam
Relationship: Grandmother
Address: 1527 Heller Ct. 48910
Phone: 489-7876

Date of Psychological Testing: 4-1-80 Psychological Evaluator: Kathleen Ramsey

REFERRAL

James was referred because of his disruptive behavior and aggressive responses which are unwarranted. He does not communicate well with the teacher or the aide and he often has great difficulty expressing himself. There are long periods of silence even in a one-to-one situation.

EVALUATION

James is a tall, slender, attractive looking ten year, three month old boy. His gross and fine motor coordination are very good. He was not cooperative, and consequently, the results of the verbal section of the test are unreliable. He refused to answer questions on comprehension. There were frequent occurrences where he would not give a response and later would be able to give an adequate response. There are indications that this boy has a basically pretty good intellectual ability, but is functioning at a dull normal level. On general information, he gave additional responses above the ceiling and the same thing was true on block design, where he doubles his raw score after reaching a ceiling. On the coding, visual memory and visual-motor speed, he would just stop and look at all the symbols instead of the one he needed. Any responses he did give were very laconic. Throughout the whole time he was being tested, he sat with his back turned towards the examiner and refused to look around except once when he was told directly, and another time when he was talking about sports.

The Bender-Gestalt indicates an extremely constricted sort of suspicious personality who has a very poor self-concept and who does not relate well to other people. This is further confirmed in the House-Tree-Person, where it seems there is a real split here between his feelings and his cognitive awareness. He seems to be a very rigid, hostile person who over-controls by withdrawal. He does not seem to have relationships with other people that are very meaningful to him. In talking with James, there is some indication of some slight thought disorder. He is aware of reality but does not pay attention to it.

SUMMARY AND RECOMMENDATIONS

James is a ten year old boy who at the present time is functioning in the low average level of intellectual ability where basically he seems to have good intellectual capacity. He does not relate. He is very withdrawn and uses withdrawal as a defense. He has a poor self-concept and there seems to be some rather brittle intellectual controls which will not carry him through in terms of relating to other people.

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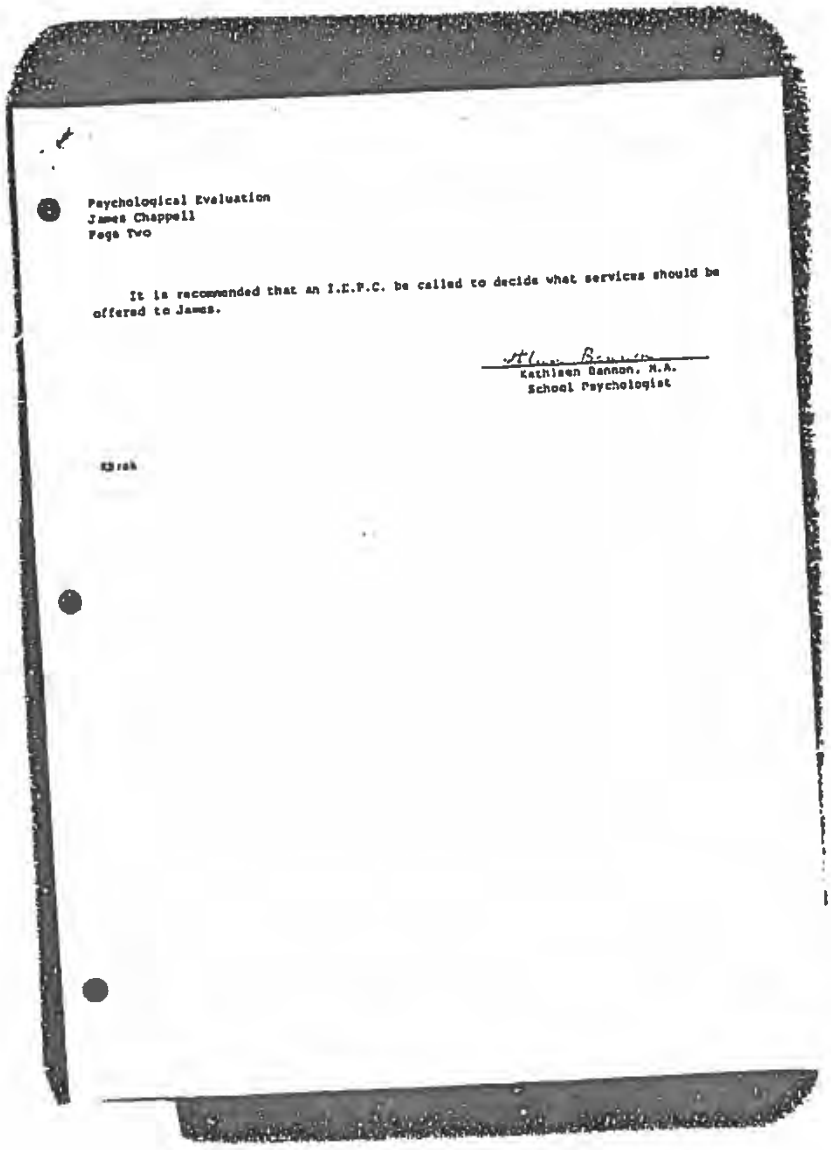

Psychological Evaluation
James Chappell
Page Two

It is recommended that an I.E.P.C. be called to decide what services should be offered to James.

Kathleen Gannon, M.A.
School Psychologist

kgrsh

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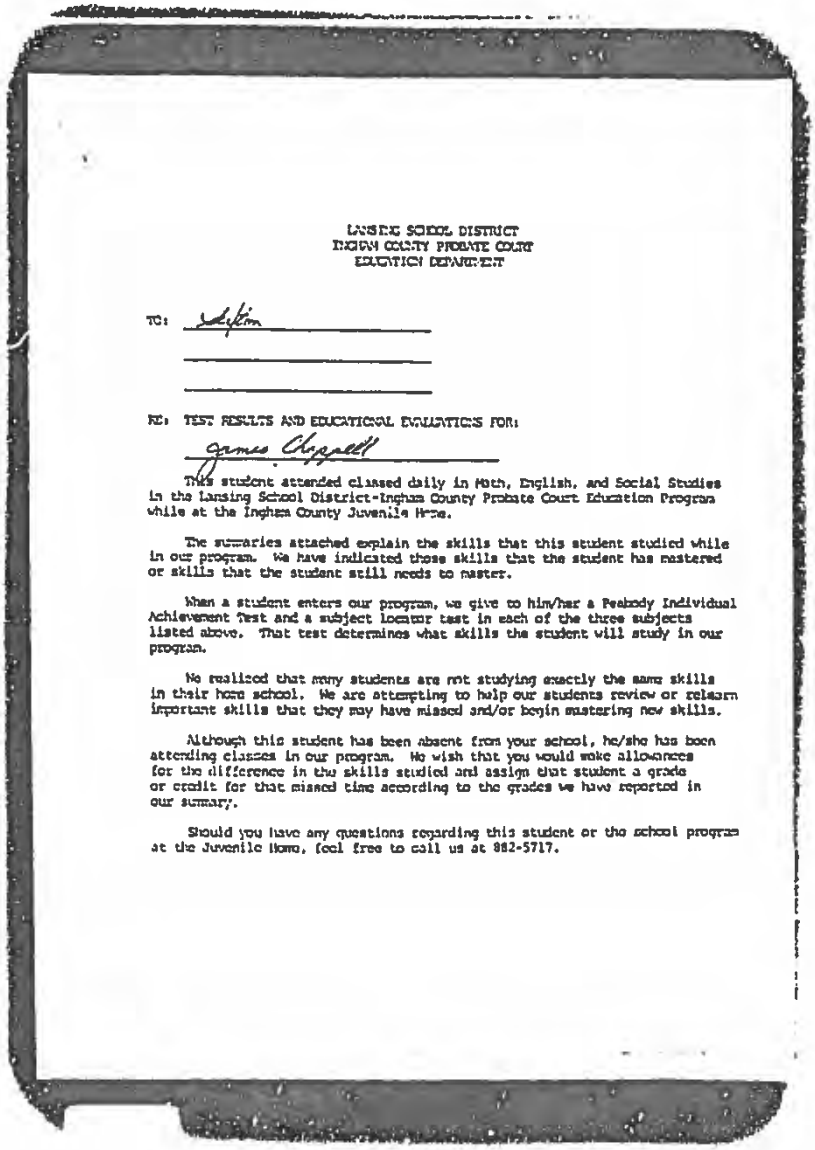
JChappell CORA011142



LANSING SCHOOL DISTRICT
INGHAM COUNTY PROBATE COURT
EDUCATION DEPARTMENT

TO: Mytin

RE: TEST RESULTS AND EDUCATIONAL EVALUATIONS FOR:
James Chappell

This student attended classes daily in Math, English, and Social Studies in the Lansing School District-Ingham County Probate Court Education Program while at the Ingham County Juvenile Home.

The summaries attached explain the skills that this student studied while in our program. We have indicated those skills that the student has mastered or skills that the student still needs to master.

When a student enters our program, we give to him/her a Peabody Individual Achievement Test and a subject locator test in each of the three subjects listed above. That test determines what skills the student will study in our program.

We realized that many students are not studying exactly the same skills in their home school. We are attempting to help our students review or relearn important skills that they may have missed and/or begin mastering new skills.

Although this student has been absent from your school, he/she has been attending classes in our program. We wish that you would make allowances for the difference in the skills studied and assign that student a grade or credit for that missed time according to the grades we have reported in our summary.

Should you have any questions regarding this student or the school program at the Juvenile Home, feel free to call us at 882-5717.

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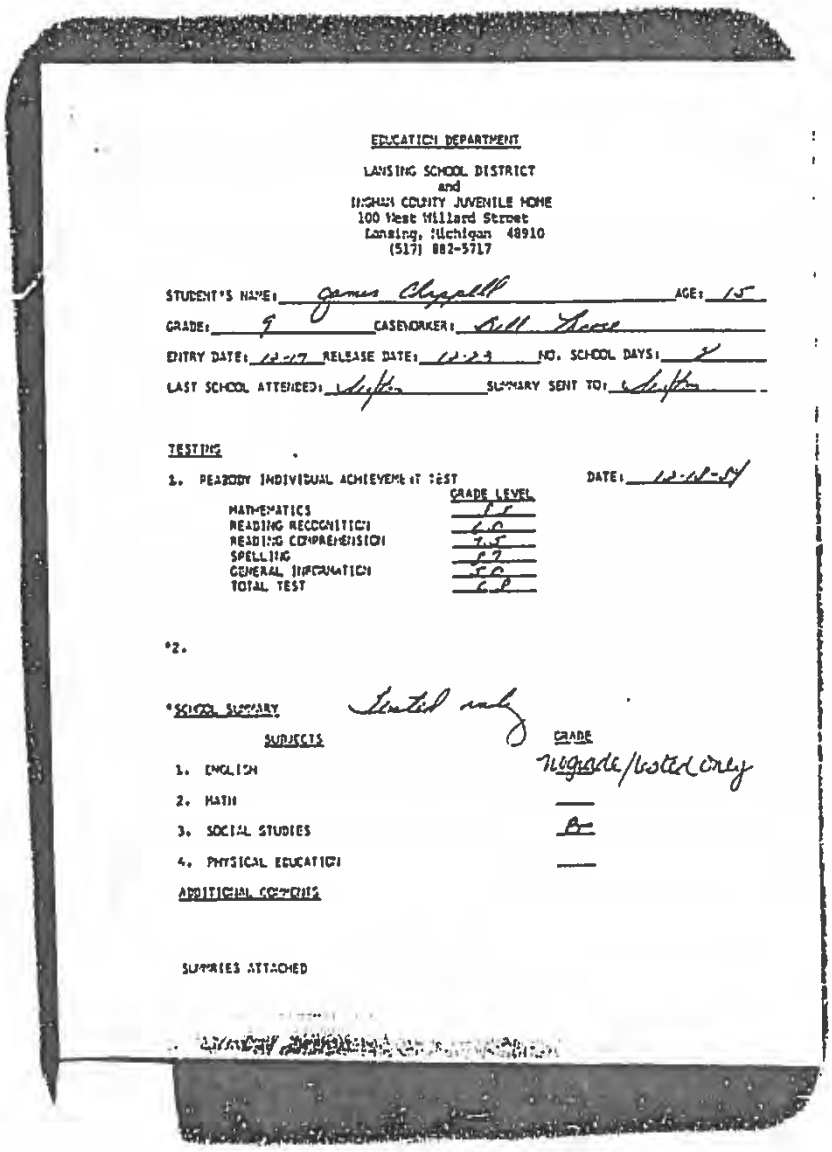
AA07025

JChappell CORA011143



EDUCATION DEPARTMENT

LANSING SCHOOL DISTRICT
and
INGHAM COUNTY JUVENILE HOME
100 West Hillard Street
Lansing, Michigan 48910
(517) 882-5717

STUDENT'S NAME: James Chappell AGE: 15

GRADE: 9 CASEWORKER: Bill Hess

ENTRY DATE: 12-17 RELEASE DATE: 12-23 NO. SCHOOL DAYS: 2

LAST SCHOOL ATTENDED: Sifton SUMMARY SENT TO: Sifton

TESTING

1. PEABODY INDIVIDUAL ACHIEVEMENT TEST DATE: 12-18-84

	GRADE LEVEL
MATHEMATICS	5.5
READING RECOGNITION	4.0
READING COMPREHENSION	4.5
SPELLING	5.2
GENERAL INFORMATION	5.0
TOTAL TEST	4.8

*2.

*SCHOOL SUMMARY Tested only

SUBJECTS	GRADE
1. ENGLISH	Ungraded/Tested Only
2. MATH	—
3. SOCIAL STUDIES	B-
4. PHYSICAL EDUCATION	—

ADDITIONAL COMMENTS

SUMMARIES ATTACHED

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Lansing School District

LANSING, MICHIGAN

This is to certify that James Chappell

has been promoted to the 2nd grade for the school year 1976-1977

6	33	B. Canen
Days Absent	Times Tardy	Teacher

Moores Park	A. Sutures
School	Principal

P5ABA

MOORES PARK SCHOOL

1/28/77

LANSING SCHOOL DISTRICT — REPORT SINCE LAST CONFERENCE — SEMESTER REPORT

NAME Chappell, James TEACHER B. Canen PRINCIPAL [illegible signature]

KEY: VG - Very Good S - Satisfactory N - Needs Improvement

	VG	S	N
Citizenship			X
Work Habits			X
Effort			X

	VG	S	N
Reading		S-	
Language Arts		X	
Spelling		S-	
Mathematics			X

	VG	S	N
Science		X	
Social Studies		X	
Music		X	
Art		X	
Phys. Ed.		X	

COMMENTS:

James needs not settle down and do his own work. He is having in Reading and Math. He sometimes puts papers in his desk that need to be finished.

ATTENDANCE:

Days Absent 5½

Times Tardy 12

AA07027

LANSING SCHOOL DISTRICT -- End of Year Report Year 76-77

NAME James Chappell Attendance - Days Absent 6

Times Tardy 33

TEACHER B. Canen September Placement 2nd Grade

Key: VG - Very Good S - Satisfactory I - Improving N - Needs Improving

	VG	S	I	N
Citizenship				X
Work Habits				X
Effort				X
Reading Readiness			X	
Mathematics				X
Music Effort		X		
Art Effort		X		
Phys. Ed. Effort		X		

Suggestions for Help: (if needed)

James needs to work on addition & subtraction facts. He also needs to read books over the summer. James is having trouble with missing addends. (3+□=7)

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Lansing State Journal (Lansing, Michigan) · Fri, Aug 24, 1973 · Page 12

City's 13th Auto Fatality

Car Victim Identified

Lansing police have identified the woman who was killed by a sheriff's car early Thursday morning as Mrs. Shirley Chappell, 24, of 3021 Beau Jardin, Meadowbrook Trace Apartments.

Mrs. Chappell was struck by an Ingham County Sheriff's Department patrol car on I-496 near Dunckel, east of the apartment complex around 4:25 a.m.

ACCORDING TO Lansing police, a Lansing police sergeant saw her walking on Dunckel about 10 minutes before the accident and warned her about walking in the dark toward the expressway. She said she was out for a breath of fresh air and he assumed she was staying in the Hospitality Inn nearby.

Dep. Daniel Shepler, 28, told police he was traveling along I-496 northbound when he looked into his rear-view mirror to check a car coming up behind him. When he looked back onto the roadway in front of him he saw the woman and swerved to avoid her but was unable to do so.

Mrs. Chappell was the 13th traffic fatality in the city this year. Last year there were six during the entire year.

Mrs. Chappell is survived by her husband, Willie R.; two daughters, Carla and Myra; three sons, Lapriest Blocker, Willie Jr., and James, all at home; her mother, Mrs. Clara Axam and her father, Arthur Axam; two sisters, Shauneen and Sharon Axam, two brothers, Rodney and Anthony Axam, and her grandparents, Mr. and Mrs. William Underwood, all of Lansing.

Services will be held Monday at 11 a.m. at the Riley Funeral Home.

Paul D. Connor, Ph.D.
Neuropsychological Assessment Services
22517 7th Avenue South
Des Moines, WA 98198
206-940-1106 Fax 206-400-2764

NEUROPSYCHOLOGICAL REPORT

NAME: James Chappell
DATE OF BIRTH: 12/27/
DATE OF EXAM: 05/23/2016 & 05/24/2016
DATE OF REPORT: 07/13/2016
PATIENT'S AGE AT TESTING: 46
LAST GRADE COMPLETED: 9

IDENTIFYING INFORMATION / REASON FOR REFERRAL

James Chappell is a 46-year-old right-handed African American man. He was referred to me by his current federal post-conviction attorneys, the Office of the Federal Public Defender, District of Nevada. There is evidence that Mr. Chappell's biological mother used alcohol and heroin during the course of her pregnancy with him. Therefore, this neuropsychological evaluation was requested to determine if Mr. Chappell's current cognitive functioning was consistent with the diagnostic guidelines for Fetal Alcohol Spectrum Disorders (FASD). This information would be used by Julian Davies, M.D. in determining a final medical diagnosis on the fetal alcohol spectrum, if appropriate. It would also be used by Natalie Novick Brown, Ph.D. in her life-long functional and psychological assessment that addresses the impact of prenatal alcohol exposure on behavior.

Mr. Chappell was seen privately at Ely State Prison in Ely, Nevada over the course of two days. Though initially introduced to me by one of Mr. Chappell's attorneys, no members of the defense team or jail staff were present during the interview and assessment. The purpose of the current evaluation and the limits upon its confidentiality were explained to Mr. Chappell, that a copy of this report would be submitted to his defense team, and that all parties involved in the case would have access to it. He was amenable to this and agreed to proceed with the assessment.

I am a clinical psychologist with a specialization in neuropsychology and licensed within the states of Washington and Oregon. I obtained a Bachelor's Degree from the University of Washington, majoring in psychology. I received a Ph.D. in clinical psychology with a specialization in neuropsychology from Brigham Young University and completed an internship at Henry Ford Health System, specializing in neuropsychology. Following the receipt of my Ph.D., I received post-doctoral training in neuropsychology and FASD at the University of Washington. For nearly 20 years, I have been involved in and conducted research focusing on the effects of prenatal alcohol exposure as it pertains to neuropsychological and mental health functioning and the structural and functional brain anomalies often seen in these disorders. I am currently in private practice, conducting neuropsychological evaluations in clinical and forensic settings, utilizing a battery of cognitive tests that have been shown to be sensitive to the effects

D POSED
E

of prenatal alcohol exposure in over 40 years of research on this subject. A copy of my CV is attached to this report.

DIAGNOSTIC FEATURES OF FASD

Fetal Alcohol Spectrum Disorders (FASD) is an umbrella term used to denote the presence of significant damage caused by prenatal consumption of alcohol. It encompasses a number of specific diagnoses. Individuals who have been damaged by prenatal alcohol exposure have been formally and medically diagnosed since the early 1970's. However, the specific diagnostic guidelines have undergone refinement over the years since.

Fetal Alcohol Syndrome (FAS): This term was first coined in 1973 when doctors at the University of Washington began noticing children who were born to alcoholic women, had a very specific pattern of facial features, and demonstrated significant cognitive impairments. The Institute of Medicine (IOM) refined the diagnostic guidelines for diagnosis of FAS when it was published in April of 1996. This was further refined when in 2004, the Centers for Disease Control and Prevention (CDC) developed a set of guidelines for the diagnosis of FAS that included more specific criteria for the three main diagnostic features. The first diagnostic feature of FAS is a specific pattern of facial features (short palpebral fissures, smooth or flat philtrum, and thin upper lip). All three of these facial features must be present at some point in the person's life for a diagnosis of FAS. However, the facial features often ameliorate as an individual passes through puberty, such that, someone who may have had the full facial features as a child may not retain these facial features to the same degree in adulthood. The second symptom for a diagnosis of FAS is growth deficiency, defined as height and/or weight below the 10^{th} percentile at some point in the person's life, especially as a child. The third symptom group, and the one most germane to my area of practice, is evidence of central nervous system (CNS) abnormalities. This can include hard signs such as abnormal neuroimaging, microcephaly, and neurologic impairments such as motor deficiency, seizures, soft neurological signs, and functional deficits as measured by neuropsychological testing. Functional deficits are defined as intellectual functioning 2 standard deviations below average and/or deficits at least 1 standard deviation below average in at least 3 domains of cognitive functioning (e.g. motor functioning, executive functioning, memory, attention, social skills, cognitive or developmental deficits or discrepancies, etc.).

Fetal Alcohol Effects (FAE): This diagnosis was first identified in the late 1970's. It referred to individuals who had been exposed to alcohol prenatally and demonstrated the same CNS abnormalities as individuals with FAS in the presence of confirmed prenatal alcohol exposure. However, individuals with FAE had some or none of the facial features that are seen in individuals with FASD. With the development of the IOM diagnostic criteria published in April of 1996, the term FAE was replaced with the new terms of Partial Fetal Alcohol Syndrome (PFAS) and Alcohol Related Neurodevelopmental Disorder (ARND), described below.

Partial Fetal Alcohol Syndrome (PFAS): This was defined by the Institute of Medicine (IOM) in April of 1996 as an individual demonstrating some, but not all of the facial features and or growth deficiency seen in the diagnosis of FAS. However, the requirement of confirmed maternal alcohol exposure and CNS abnormalities is the same as for the diagnosis of FAS.

Alcohol Related Neurodevelopmental Disorder (ARND): Based on guidelines developed by the IOM, in ARND there are typically no physical features (facial anomalies or growth

deficiencies) in the presence of prenatal alcohol exposure. However, the same set of CNS abnormalities seen in FAS are present in ARND. Therefore, the same guidelines developed by the CDC for FAS can be applied for the diagnosis of ARND.

There has been ample research around the United States that demonstrated no difference between FAS, FAE, PFAS, and ARND in the presentation of CNS abnormalities in neurological, neuroimaging, or neuropsychological signs.

Cognitive Disorder, NOS and Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure: In 1994, the American Psychiatric Association (APA) released the 4th edition of its Diagnostic and Statistical Manual (DSM-IV). This included a diagnosis of Cognitive Disorder, NOS. This diagnosis was typically made for individuals who were demonstrating significant neuropsychological impairments but were not related to specific dementias or amnestic disorders such as Alzheimer's disease or Traumatic Brain Injury. Cognitive Disorder, NOS was routinely used as the DSM-IV diagnosis to describe the neuropsychological impairments that were associated with an FASD.

In May 2013, the 5th Edition of the Diagnostic and Statistical Manual (DSM-5) was published. Included in this edition is a diagnosis directly relevant to FASD: Other Specified Neurodevelopmental Disorder (315.8/F88). The only example provided explicitly in the text for this diagnosis is Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure (ND-PAE). This diagnosis identifies an individual as having an FASD and the neuropsychological evaluation is critical in making this diagnosis. ND-PAE does not differentiate individual FASD diagnoses, not relying on the facial features associated with FAS and PFAS in making the diagnosis.

DOCUMENTS REVIEWED

For the purposes of this report, the following records that were reviewed[1] focused on issues that were directly relevant to the current neuropsychological evaluation for consistency with FASD. Therefore, it primarily focused on prior psychological/neuropsychological assessments, school based testing, and school records. Prior test scores are compared with current testing results below. These included:

- Lansing School District Cumulative Records
- Moores Park School Records
- Forrest View School Records
- Psychological Evaluation by Lewis Etcoff, Ph.D., ABPN dated 9/28/1996
- Materials reviewed by Dr. Etcoff as part of his 1996 evaluation
- Trial Testimony of Dr. Etcoff (1996 and 2007)
- Declarations from the following individuals:
    - Benjamin Dean
    - Charles Dean
    - Georgette Sneed
    - James Ford

[1] I was given additional records to review but have highlighted these in particular as being most relevant to this assessment. A list of all the records I reviewed are attached to this Report.

- James Wells
- Joetta Ford
- Myra Chappell-King
- Rose Wells-Canon
- Terrance Wallace
- William Earl Bonds
- William Roger Moore
- Willie Richard Chappell, Sr.

NEUROPSYCHOLOGICAL TESTING RESULTS

TESTS ADMINISTERED

Psychological/Neuropsychological History Interview
Wechsler Adult Intelligence Scale – 4th Edition (WAIS-IV)
Wide Range Achievement Test – 4th Edition (WRAT-4)
California Verbal Learning Test – 2nd Edition (CVLT-2)
Rey Complex Figure Test (RCFT)
Conners' Continuous Performance Test – 3rd Edition (CPT3)
Grooved Pegboard Test (GP)
Finger Tapping Test (FT)
Wisconsin Card Sorting Test- 4th Edition (WCST)
Delis-Kaplan Executive Function System (D-KEFS) Tower and Proverbs Subtests
Controlled Oral Word Association Test (COWAT)
Ruff's Figural Fluency Test (RFF)
Stroop Color and Word Test
Trail Making Test (TMT)
Auditory Consonant Trigrams Test (ACT)
Gudjonsson Suggestibility Scale 2 (GSS2)
Neuropsychological Assessment Battery: Auditory Comprehension Test (NAB: AC)
Advanced Clinical Solutions: Social Cognition (ACS:SC)
Texas Functional Living Scale (TFLS)
Vineland Adaptive Behavior Scale – 2nd Edition (VABS-II) (Administered to James Ford, Terry Wallace, & Myra Chappell-King)
Behavior Rating of Executive Function, Adolescent Version (BRIEF) (Administered to James Ford, Terry Wallace, & Myra Chappell-King)
Advanced Clinical Solutions: Effort Assessment Scores (ACS: Effort) Word Choices & Reliable Digit Span
CVLT Forced Choice (CVLT: FC)
CPT3 Validity (CPT3: V)
The Dot Counting Test (Dots)

<u>Behavioral Observations:</u>
On both days of the assessment, Mr. Chappell presented as a friendly and polite man. On informal observation, though his upper lip appeared quite full, Mr. Chappell was noted to have a fairly smooth philtrum, a somewhat flattened midface, and eyes that appeared to be somewhat small. In addition, he was noted to have possible clinodactyly of the left pinky, somewhat large gaps between pinky and ring fingers, possible bilateral hockey stick creases, and a right ear that was noted for a possible railroad track pattern. Formal measurements were not obtained as part

of the current evaluation. This will be investigated formally by Dr. Davies as part of his evaluation. No tremor was noted during the course of the evaluation and he sat fairly still throughout. Throughout the course of both days he would ask me to purchase considerable amounts of food, which he would eat fairly quickly. Mr. Chappell tended to interact in a somewhat childlike manner that was not consistent with his chronological age. On interview he had difficulties remembering details of his history and would often talk around answers, not fully answering them. He would say things like "etc. etc." to make it seem like he had more fully answered questions. In addition, he would often use large words to give the impression of sophistication. However, several of the words chosen were not accurate to the context of the discussion. There was no indication of thought disorder, homicidal or suicidal ideation.

On testing, Mr. Chappell tended to work quite slowly, thinking for a long time while performing tasks. However, he was very persistent and would continue to work hard on tasks. When tasks became difficult for him he would often smile and chuckle. At times, it appeared as though he was confused by instructions but would not often ask for clarification. In addition, he sought little feedback on his performance.

Mr. Chappell was administered several performance validity tasks designed to measure his effort. On all tasks, his performance was nearly error free. Mr. Chappell's performance on effort tasks, combined with observations throughout the evaluation, indicated that the current assessment should be considered an accurate representation of his current neuropsychological functioning.

Intellectual Functioning:

Intellectual functioning indicated considerable variability in performance depending on the domain being assessed (see scores in Table 1). His domains of greatest strength were in Verbal Comprehension and Perceptual Reasoning where his performance was within the average range. Processing Speed was performed within the low average range. His domain of greatest weakness was in Working Memory, where his performance was within the borderline to mildly intellectually impaired range. This means that 97% of people who have taken this test performed better than Mr. Chappell in this domain. Because of the split between domain performances, Full Scale IQ, measured at 86, should not be considered an entirely accurate representation of Mr. Chappell's overall intellectual functioning. Mr. Chappell has received IQ testing in the past (see Table: 1). When he was approximately 16 or 17, though scores were not provided, it was reported that his overall intellectual functioning was within the borderline to low average range. In later testing, he demonstrated significant splits between language-based and nonlanguage-based skills similar to current testing and his overall intellectual functioning. In prior versions of the WAIS, the working memory domain was included in the VIQ instead of being split into Verbal Comprehension and Working Memory domains as it is in the current version of the test. Mr. Chappell's level of intellectual functioning as well as significant splits between domains is frequently seen in individuals with FASD.

Table 1: COMPARISON OF CURRENT AND PRIOR IQ TESTING

Year	Test	VCI/VIQ	PRI/PIQ	WMI	PSI	FSIQ
10/1986						Borderline to low average
6/1996	WAIS-R	/77	/91			80
5/2016	WAIS-IV	96	96	71	86	86

When individual subtests were analyzed, Mr. Chappell's area of greatest strength was on a visuospatial task of assembling blocks to match a picture (high average range). He performed within the average range on a visuospatial task of identifying individual components of puzzles, a task of speeded visual scanning, and language-based tasks of identifying the abstract similarity between items and informational knowledge. Mr. Chappell performed within the mildly impaired range on tasks of speeded translation of information and short-term attention and memory for number sequences. His area of greatest weakness was in orally presented arithmetic, where he was performing within the mildly to moderately impaired range. On the balance of tasks, Mr. Chappell performed within the low average range.

Academic Functioning:

Language-based academic achievement was performed at a level that was fairly consistent with Mr. Chappell's level of language-based intellectual functioning. However, he demonstrated considerably greater difficulties in arithmetic performance than might be expected based on his overall level of intellectual functioning, though quite consistent with his performance on orally based arithmetic testing from the IQ test. As can be seen in Table 2, word reading was performed at an equivalent of the middle portions of an 11th grade level while reading comprehension was performed at the equivalent of the beginning of the 12th grade level. Spelling, Mr. Chappell's area of greatest strength, was performed at an equivalent beyond the end of high school. By contrast, Mr. Chappell's arithmetic calculation skills were performed at an equivalent of the beginning of the 4th grade level. He was able to perform most addition and subtraction tasks, and was able to perform single digit multiplication. However, he was unable to perform division, multidigit multiplication, calculate fractions, or perform higher order arithmetic. His performance on math testing was considerably below expectations based on his level of formal education. However, it is consistent with school records that commented on troubles with arithmetic throughout his education, records indicating participation in special education services, and Mr. Chappell's own self-report that math was his most difficult subject. As can be seen in Table 2, Mr. Chappell's current performance on academic testing is quite consistent with prior testing in which he performed considerably more poorly on arithmetic tasks and had relatively greater sparing of language-based academic skills. Difficulties with academic functioning, especially with respect to arithmetic, are frequently seen in research on individuals with FASD.

TABLE 2: COMPARISON OF CURRENT AND PRIOR ACADEMIC TESTING
(Standard Score / %ile / Grade Equivalent)

Year	Test	Word Reading/ Total Reading	Reading Comprehension	Spelling/ Writing	Math
5/1977	SAT	/18%/			/18%/
5/1978	SAT	/40%/			/12%/
5/1979	SAT	/40%/			/23%/
5/1980	SAT	/4/			/26/
5/1982	SAT	/18%/			/11%/
12/1984	Peabody IAT	/ /6.0	/ /7.5	//8	/ /??
10/1986	WRAT	/5thº%/			/2%/
6/1996	WRAT-3	88/ /hs		89/ /8	67/ /4
5/2016	WRAT-4	91/27%/11.6	92/30%/12.0	100/50%/>12.9	72/3/4.0

Learning and Memory Functioning:
Mr. Chappell's initial performance on a list learning task was within the moderately to severely impaired range, recalling 2 of the 16 words on the first trial. He benefitted from repetition of the list, improving his recall of words over the ensuing trials such that on the 5th and final trial Mr. Chappell recalled 10 of the 16 words, performing within the low average range. Because of his poor initial learning of information, his overall performance on the learning portion of the task was within the mildly impaired range. Following a short delay, Mr. Chappell recalled 9 words, performing within the average range. Following a long delay period, he recalled 8 words, again performing within the average range.

Mr. Chappell was administered a contextual memory task in which he was read a story and asked to repeat it. His initial recall of the story was within the mildly to moderately impaired range, having difficulties recalling many components of the story. In addition, he added many details that were not in the original story, indicating some difficulties with confabulation. Following a delay, he again was unable to recall many of the components of the story, performing within the mildly to moderately impaired range. As with the short delay trial, he added several inaccurate details to the story, again indicating troubles with confabulation.

On a visuospatial learning and memory task, Mr. Chappell was first asked to copy a complex figure and then later asked to draw the figure again from memory. When copying the task, Mr. Chappell performed within the severely impaired range. His approach to copying the figure was very poorly organized. He worked from right to left in a clockwise order breaking up the majority of the components. As such he did not appear to recognize the overall shape of the figure. In addition, he failed to copy one component of the figure. Following a short delay period, Mr. Chappell's reproduction of the figure was within the moderately to severely impaired range. His approach was again quite disorganized and many of the components were broken up. In addition, he did not recall the majority of the components of the figure. After a long delay period, Mr. Chappell's performance was within the moderately impaired range. Though he was able to recall a few additional components that he had not recalled on short delay task, the majority of the components that he did draw were inaccurate and his approach was again disorganized.

Difficulties with learning and memory functioning and visuospatial construction have been reported in research on individuals with FASD.

Attention Functioning:
Mr. Chappell's performance on a task of sustained visual attention showed no significant difficulties with attention functioning. However, his pattern of performance indicated considerable slowing of processing speed with reaction times that were quite slow.

Motor Functioning:
On a task of speeded eye-hand coordination, in which Mr. Chappell was asked to insert pegs into grooved holes, he performed within the average range, bilaterally. On a task of finger speed, in which Mr. Chappell was asked to tap a key as quickly as possible, he performed within the low average range when using his dominant right hand but within the mildly to moderately impaired range when using his left hand. Mr. Chappell did not indicate a history of significant hand injury which would account for his poor performance on the speeded motor task.

Suggestibility:
Mr. Chappell was administered a test addressing his susceptibility to endorsing information, particularly in the context of interrogative questioning involving misleading cues. Mr. Chappell was read a short story and asked to repeat it. Mr. Chappell's performance on this portion of the task is reported above in the memory section. Following the recall of the story, detailed questions about the story are asked. After the first round of questions, the examinee is told that some of his answers are not correct, and the questions are then repeated. It is noted how many times the examinee succumbs to the misleading questions on the first round and how many times he changes his answers from the first to the second round. The total of the two is reported as "Total Suggestibility." When Mr. Chappell was presented with the questions for the first time, he endorsed 6 of the misleading questions, indicating performance within the average range. However, when the questions were posed to him the 2nd time, he endorsed 12 misleading questions, indicating performance within the mildly to moderately impaired range. In addition, he shifted his response on 6 questions, indicating performance within the low average to borderline range and suggesting some difficulties withstanding external pressure. Overall, his total suggestibility was within the low average range.

Executive Functioning:
Executive functions are described as the ability to problem solve, learn from past mistakes, inhibit responses, shift attention, multitask, and generate information. On a task of visual tracking, Mr. Chappell performed within the high average range. When test complexity was increased to include shifting attention during the visual tracking task, he again performed within the high average range. He performed within the low average range on a task of word generation based on a letter cue (e.g. letter "B"). When asked to name as many animals as he could, a more structured task, Mr. Chappell performed within the high average range. On a test requiring the generation of unique figural designs (analogous to the verbal fluency task), Mr. Chappell performed within the mildly to moderately impaired range. On a task of response inhibition, Mr. Chappell was first asked to read a series of words (names of colors) as quickly as possible and then asked to identify colors quickly. Finally, he was asked to identify colors of ink while ignoring the word that was printed. His reading of words was within the low average range, while his naming of colors was within the mildly to moderately impaired range. On the inhibition task, identifying the color of ink while ignoring the word, Mr. Chappell's performance was within the average range. On a working memory task in which Mr. Chappell was required to remember a series of letters while performing a distraction task (counting backwards by 3's), he performed within the low average range, overall.

On a fairly structured visual problem solving task, Mr. Chappell was asked to move a series of graduated sized disks on pegs one at a time to match an exemplar configuration. His overall performance on this task was within the average range, completing all but one of the trials and performing the task fairly quickly (average range). On a less structured task of visual problem-solving, Mr. Chappell was asked to make judgments on matching stimuli in which multiple matching criteria could be applied. His overall performance on this task was within the impaired range. It took him many trials in order to identify the initial problem solving strategy (mildly to moderately impaired range), and ultimately was only able to identify three of the six possible strategies (mildly impaired range). On this task, Mr. Chappell would become stuck on particular problem solving strategies even when they were not effective (mildly to moderately impaired range), indicating considerable difficulties with perseverative behaviors. In addition, he made many additional errors in matching (mildly impaired range). On a test in which Mr. Chappell was asked to explain both common and uncommon sayings, his overall performance was within

the average range. However, though he was typically able to correctly describe the concrete meaning of the sayings (average range), Mr. Chappell demonstrated considerably greater difficulty identifying the abstract meanings behind the sayings (mildly impaired range). School records include comments of poor problem solving skills when Mr. Chappell was 16 years old. Deficits in executive function skills, especially on tasks that have less external structure, have frequently been documented in the research literature on individuals with FASD.

Adaptive Functioning:
Two avenues were utilized to assess Mr. Chappell's day-to-day adaptive functioning skills. The first avenue included direct measures of Mr. Chappell's abilities in several aspects of daily activities in the structured environment of the testing room. The second avenue involved informant reports of his functioning on a day-to-day basis in non-structured environments.

Direct Measures: Mr. Chappell was administered a test designed to address his perception of emotional states in others. His overall social perception was within the average range. He was able to identify emotional content both based on facial expression and tone of voice.

On a receptive communication task in which he was asked to follow a series of instructions, Mr. Chappell performed within the average range, overall. He was able to follow most single and multistep step instructions accurately. However, he tended to become somewhat confused by convoluted or misleading questions (e.g. double negatives).

On a test that measured such daily living skills as communication, domestic abilities, and community skills, Mr. Chappell's overall performance was within the mildly to moderately impaired range. He demonstrated significant impairments in his ability to calculate change and communicate accurately in daily activities.

Taken as a whole, current direct testing indicates that in structured situations Mr. Chappell demonstrates impairments in communication and daily living skills.

Informant Report: The Vineland Scales of Adaptive Behavior—II (VABS-II) were administered to three people who have frequently interacted with Mr. Chappell and have known him well. The informants included his friends, James Ford and Terry Wallace, and his sister, Myra Chappell-King. The interviews were conducted by Joanne Sparrow, a psychometrist and Ph.D. clinical psychology student specially trained in administering these interviews. All three reported on his functioning when he was 25 years old. However, his sister acknowledged that she did not know him very well during this time period and as such was unable to provide complete information on his functioning. She indicated being better able to comment on his functioning between the ages of 15 and 17, though a follow-up interview regarding his functioning during these ages could not be obtained prior to the completion of this report. As part of the interview process all three informants were administered the Behavior Rating Inventory of Executive Function. One aspect of the BRIEF is that it includes several validity measures to determine the potential for bias in the informant. None of the informants' responses raised concerns about the validity of their report, and should thus be considered an accurate representation of their perceptions of Mr. Chappell's day-to-day functioning.

On the Vineland, both Mr. Ford and Mr. Wallace were able to provide sufficient information in order to calculate an overall composite score. Based on their report, Mr. Chappell obtained and Adaptive Behavior Composite Scores of 78 (7^{th} percentile) and 54 ($<1^{st}$ percentile), respectively.

This indicates day-to-day functioning that is between 1.5 and 3.1 standard deviations below average, and represents significant impairment. They also represent functioning that is below expectations based on Mr. Chappell's level of intellectual functioning, especially with respect to language-based skills. Deficits in the ability to apply cognitive skills appropriately in day-to-day activities when the levels of external structure are at their lowest, are seen extremely frequently in research on individuals with FASD. The Vineland assesses three domains of adaptive functioning: Communication; Daily Living Skills; and Socialization.

Mr. Ford indicated that his friends overall communication abilities were within the low average range while Mr. Wallace indicated communication functioning to be within the severely impaired range. This indicates a fairly significant discrepancy between the two informants' reports. Mr. Ford indicated that Mr. Chappell's only area of significant weakness was in written skills where he was reported to be functioning within the mildly impaired range. By contrast, Mr. Wallace indicated that Mr. Chappell's receptive communication skills were his area of greatest weakness with functioning that was reported to be within the moderately to severely impaired range. Mr. Wallace also indicated expressive and written skills to be within the moderately impaired range. Though Ms. Chappell-King was unable to provide sufficient information to calculate the full domain score, she was able to report on some of the subdomains when her brother was 25 years old. She agreed with Mr. Wallace that her brother's area of greatest weakness was receptive communication skills, functioning within the moderately to severely impaired range. She also indicated that his expressive language skills were within the mildly to moderately impaired range. Therefore, Ms. Chappell-King's responses to questions were quite consistent with Mr. Wallace's responses

Mr. Ford reported Mr. Chappell's overall daily living skills to be within the mildly to moderately impaired range while Mr. Wallace reported his functioning to be within the moderately impaired range. Both agreed that personal hygiene skills were an area of weakness, with functioning that was within the mildly to moderately impaired range. Mr. Ford indicated that community based skills were within the mildly to moderately impaired range while Mr. Wallace indicated that skills in this area were within the moderately to severely impaired range. All three informants agreed that domestic skills were an area of relative strength for Mr. Chappell. Both Mr. Ford and Ms. Chappell-King indicated domestic abilities that were broadly within average range while Mr. Wallace indicated abilities that were within the mildly impaired range.

Socialization skills were reported by both Mr. Wallace and Mr. Ford as being within the impaired range with Mr. Ford indicating functioning that was within the mildly impaired range while Mr. Wallace was indicating functioning within the mildly to moderately impaired range. Both agreed that his area of greatest relative strength was in coping skills where his performance was in the low average to borderline range. Mr. Ford indicated similar levels of functioning with respect to Mr. Chappell's interpersonal skills while Mr. Wallace indicated interpersonal skills that were within the mildly to moderately impaired range.

When comparing the reports of the informants, greatest discrepancy was found with respect to communication skills with Mr. Ford indicating functioning that was considerably higher than either Mr. Wallace or Ms. Chappell-King were indicating. In other aspects of daily living skills, the informants were fairly consistent in their description of Mr. Chappell.

SUMMARY OF FINDINGS

Figure 1 graphically represents Mr. Chappell's pattern of performance on the current testing where all scores are converted to standard deviations from the mean (a score of 0, green line) and the direction of deficit is made consistent (lower scores = poorer performance). Standard deviations below -2 for intellectual testing and -1 for neuropsychological testing represent areas of impaired functioning (red line). Mr. Chappell's performance is shown with the blue line.

As can be seen in Figure 1, Mr. Chappell demonstrated significant impairments in 9 domains of functioning. These included:

1. Academic functioning, especially in arithmetic
2. Learning and memory for verbal and visual information
3. Visuospatial construction and organization
4. Attention functioning
5. Processing speed
6. Executive functions, especially on tasks low external structure
7. Communication skills (based on direct testing of expressive communication and two of three informant reports)
8. Daily living skills (based on direct testing and informant reports)
9. Socialization skills (based on informant reports).

In addition, 40% of Mr. Chappell's test scores shown in Figure 1 were at or below the cutoff point for impairment, indicating quite widespread impairments. Furthermore, 28% of the scores that were in deficit were found to be at least within the moderately impaired range.

The guidelines developed by the CDC for diagnosing an FASD require that, in the presence of prenatal alcohol exposure, functioning in at least 3 domains of cognitive functioning that are at least one standard deviation below average and/or intellectual functioning that is within the intellectually disabled range. Reportedly, multiple people have indicated that Mr. Chappell's mother consumed alcohol as well as heroin during the course of her pregnancy. Mr. Chappell's pattern of current neuropsychological functioning meets the diagnostic guidelines with deficits that were identified in 9 domains of functioning.

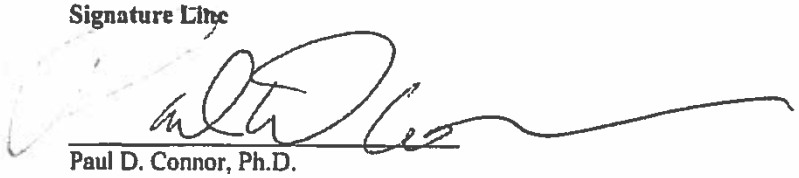
In addition, Mr. Chappell is demonstrating a pattern of functioning on current testing that is consistent with research studies on individuals with FASD. As can be seen in Figure 2, Mr. Chappell is demonstrating significant splits in performance between the various domains of IQ testing, a pattern often seen in individuals with FASD. In addition, Figure 3 compares Mr. Chappell's performance on current testing with research on individuals with FASD with respect to intellectual, academic, and adaptive functioning. As can be seen, Mr. Chappell demonstrates a descending pattern of performance between the three domains of functioning that is entirely consistent with research on individuals with FASD. This pattern can be seen as a "hallmark" feature in research on individuals with FASD. Finally, Figure 4 portrays Mr. Chappell's performance on executive functioning and adaptive functioning measures where the green line represents the average score for higher structured executive function tasks, the purple line represents the average for lower structured executive function tasks, and the red line represents the average score for the lowest level of external structure with respect to adaptive skills. As can be seen in the figure, Mr. Chappell is demonstrating a stepwise decrease in functioning as the

level of structure in the environment also decreases. Therefore, Mr. Chappell's current pattern of neuropsychological functioning is consistent with the diagnostic guidelines for an FASD.

On interview, Mr. Chappell did not report a significant medical history that could be contributory to his current pattern of neuropsychological functioning. He recalls one incident in which he fell from a moped but indicates that he does not strike his head during the incident. He also recalls a few fights with family members in which he was struck in the head. However, he reports never receiving a blow to the head that resulted in loss of consciousness or concussion-like symptoms. By contrast, Mr. Chappell reports a history of alcohol, marijuana, and crack cocaine use in his life. He first tried alcohol when 12 years old. Between the ages of 15 and 17, he indicated drinking nearly daily to the point of intoxication though not to the point of passing out or throwing up. After the age of 18, he indicates drinking at least every other day to the point of intoxication and acknowledged using alcohol up to the time of his arrest. He first tried marijuana at the age of 12 and began using on a daily basis when he was 16 or 17 years old. He reports continuing to use marijuana at least once every 3 to 4 days up until the time of his arrest at 25. He first tried crack cocaine at the age of 17. He reports that he did not use frequently until just before moving to Las Vegas, but that once there he began using approximately every other day, increasing his use over time. It is possible that using alcohol, marijuana, and crack cocaine could have a negative impact on cognitive functioning, especially during the time that a person is actively using. However, the majority of research indicates that even with chronic use of substances, ongoing abstinence typically will lead to improvements in cognitive functioning. In addition, research on animals and humans has found that those exposed to prenatal alcohol are more likely to develop alcohol and substance use problems that frequently start earlier in life. Therefore, while it is possible that these competing possibilities could have had an additive impact, Mr. Chappell's pattern of current neuropsychological functioning continues to be consistent with guidelines for the diagnosis of FASD.

Thus, Mr. Chappell's current functioning is consistent with past research and with current guidelines for diagnosis of a FASD. As such, a diagnosis of Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure (ND-PAE) based on the current DSM-5 would be appropriate. He would also have been appropriately diagnosed with Cognitive Disorder, NOS when the DSM-IV was being utilized between 1994 and 2013. However, the ultimate medical diagnosis awaits formal evaluation by Dr. Davies.

Signature Line



Paul D. Connor, Ph.D.
Licensed Psychologist/Neuropsychologist

SUMMARY SCORES

WECHSLER ADULT INTELLIGENCE SCALE – FOURTH EDITION (WAIS-IV):

Verbal Comprehension	Scaled Score	Perceptual Reasoning	Scaled Score
Similarities	9	Block Design	12
Vocabulary	8	Matrix Reasoning	7
Information	11	Visual Puzzles	9

Working Memory	Scaled Score	Processing Speed	Scaled Score
Digit Span	6	Symbol Search	9
Arithmetic	4	Digit Symbol-Coding	6

IQ	
Verbal Comprehension	96
Perceptual Reasoning	96
Working Memory	71
Processing Speed	86
Full Scale IQ	86

WIDE RANGE ACHIEVEMENT TEST – 4th EDITION:

Subtests	Standard Score	Percentiles	Grade Equivalents
Word Reading	91	27	11.6
Sentence Comprehension	92	30	12.0
Spelling	100	50	>12.9
Math Computation	72	3	4.0
Reading Composite	90	25	

CALIFORNIA VERBAL LEARNING TEST: (mean=50, sd=10)

	T-Score	Percentile
Trial 1	20	<1
Trial 5	45	31
Total of all learning trials	38	12
Short Delay Free Recall	50	50
Long Delay Free Recall	45	31
Recognition	55	69

REY COMPLEX FIGURE TEST: (mean=50, sd=10)

	T-Score	Percentile
Copy	17	<1
Immediate Recall	23	<1
Delayed Recall	26	1
Recognition Total Correct	40	16

Conner's Continuous Performance Test- 3rd Edition (mean=50, sd=10)

	T-Score	Percentile
Omissions	47	61
Commissions	39	86
Reaction Time	63	9
Variability of Reaction Time	47	61

GROOVED PEGBOARD: (mean=50, sd=10)

	T-Score	Percentile
Dominant Hand	50	50
Non Dominant Hand	50	50

FINGER TAPPING: (mean=50, sd=10)

	T-Score	Percentile
Dominant Hand	41	18
Non Dominant Hand	33	4

CONTROLLED ORAL WORD ASSOCIATION TEST: (mean=50, sd=10)

	T-Score	Percentile
Total of F-A-S Trials	42	21
Animals	56	73

RUFF'S FIGURAL FLUENCY: (mean=50, sd=10)

	T-Score	Percentile
Total Unique Designs	30.3	2.3
Perseverations	34.9	6.8

STROOP TEST: (mean=50, sd=10)

	T-Score	Percentile
Word only trial	41	18
Color only trial	31	3 (1 error)
Ink color (ignoring printed words)	53	61 (1 error)
Interference	56	73

TRAILS TEST: (mean=50, sd=10)

	T-Score	Percentile
Trials A	55	69
Trails B	57	75

CONSONANT TRIGRAMS: (mean=50, sd=10)

	T-Score	Percentile
9 Second Delay Trials	42	21
18 Second Delay Trials	48	42
36 Second Delay Trials	40	16

WISCONSIN CARD SORTING TEST: (mean=50, sd=10)

	T-Score	Percentile
Perseverative Responses	33	5
Nonperseverative Errors	36	8
Conceptual Level Responses	35	6
	Raw Score	Percentile
Categories Completed	3	6-10
Trials to Complete 1st Category	33	2-5
Set Breaks	0	>16

DELIS-KAPLAN EXECUTIVE FUNCTION SYSTEM: (mean=10, sd=3)

	Standard Score	Percentile
Tower Test		
Total Achievement	11	63
First Move Time	11	63
Time per Move	9	37
Move Accuracy	10	50
Total Rule Violations	11	63
Proverbs Test		
Total Achievement	9	37
Common Proverb Achievement	10	50
Uncommon Proverb Ach.	8	25
Accuracy Score	10	50
Abstraction Score	6	9

NAB: AUDITORY COMPREHENSION TEST: (mean=50, sd=10)

	T-Score	Percentile
Total Auditory Comprehension	55	69

ACS: SOCIAL COGNITION: (mean=10, sd=3)

	Scaled Score	Percentile
Social Perception	11	63
Affect Naming	11	63
Prosody	11	63
Social Perception Pairs	9	37

GUDJONSSON SUGGESTIBILITY SCALE 2: (mean=50, sd=10)

	Scaled Score	Percentile
Immediate Recall	34	5
Delayed Recall	30	2
Yield 1	46	34
Yield 2	34	5
Shift	40	16
Total Suggestibility	42	21

TEXAS FUNCTIONAL LIVING SCALE: (mean=50, sd=10)

	Scaled Score	Cumulative Percentile
Time		>75
Money & Calculation		3-9
Communication		3-9
Memory		17-25
Total Score	34	5

VINELAND ADAPTIVE BEHAVIOR SCALES: (Administered to James Ford re age 25)

	Standard Score (mean=100, sd=15)	Percentiles	v-Score (mean=15,sd=3)	Age Equivalent
Communication	90	25		
Receptive			15	18:0
Expressive			16	22+
Written			11	11:3
Daily Living Skills	76	5		
Personal			9	12:6
Domestic			16	22+
Community			10	17:0
Socialization	77	6		
Interpersonal Relationships			12	16:0
Play and Leisure time				
Coping Skills			12	12:6
Adaptive Behavior Composite	78	7		

VINELAND ADAPTIVE BEHAVIOR SCALES: (Administered to Terry Wallace re age 25)

	Standard Score (mean=100, sd=15)	Percentiles	v-Score (mean=15,sd=3)	Age Equivalent
Communication	29	<1		
Receptive			7	4:7
Expressive			8	5:7
Written			8	9:0
Daily Living Skills	63	1		
Personal			9	12:6
Domestic			11	15:0
Community			7	9:6
Socialization	71	3		
Interpersonal Relationships			10	11:6
Play and Leisure time				
Coping Skills			12	12:6
Adaptive Behavior Composite	54	<1		

VINELAND ADAPTIVE BEHAVIOR SCALES: (Administered to Myra Chappell-King re age 25)

	Standard Score (mean=100, sd=15)	Percentiles	v-Score (mean=15,sd=3)	Age Equivalent
Communication				
Receptive			7	4:11
Expressive			9	7:6
Written				
Daily Living Skills				
Personal				
Domestic			12	15:3
Community				
Socialization				
Interpersonal Relationships				
Play and Leisure time				
Coping Skills				
Adaptive Behavior Composite				

BRIEF-A: (mean=50, sd=10) (Administered to James Ford re age 25)

	T-Score	Raw Score
Inhibit	45	
Shift	61	
Emotional Control	45	
Self-Monitor	65	
Initiate	45	
Working Memory	58	
Plan/Organize	51	
Task Monitor	53	
Org. of Materials	51	
BRI	51	
MI	51	
GEC	52	
Negativity Scale		0
Infrequency Scale		1
Inconsistency Scale		6

BRIEF-A: (mean=50, sd=10) (Administered to Terry Wallace re age 25)

	T-Score	Raw Score
Inhibit	66	
Shift	61	
Emotional Control	45	
Self-Monitor	68	
Initiate	48	
Working Memory	74	
Plan/Organize	58	
Task Monitor	57	
Org. of Materials	44	
BRI	58	
MI	56	
GEC	57	
Negativity Scale		1
Infrequency Scale		1
Inconsistency Scale		4

BRIEF-A: (mean=50, sd=10) (Administered to Myra Chappell-King re age 25)

	T-Score	Raw Score
Inhibit	57	
Shift	53	
Emotional Control	54	
Self-Monitor	51	
Initiate	42	
Working Memory	55	
Plan/Organize	49	
Task Monitor	57	
Org. of Materials	51	
BRI	54	
MI	50	
GEC	52	
Negativity Scale		0
Infrequency Scale		1
Inconsistency Scale		4

CALIFORNIA VERBAL LEARNING TEST – FORCED CHOICE:

	Total Correct
Correct choices	16/16

CONNERS' CONTINUOUS PERFORMANCE TEST - VALIDITY:

Overall Validity:	Valid

ADVANCED CLINICAL SOLUTIONS – EFFORT ASSESSMENT SCORE:

	Raw Score
Reliable Digit Span	7
Word Choice	49/50

THE DOT COUNTING TEST:

	Score
E-Score	8

Figure 1:

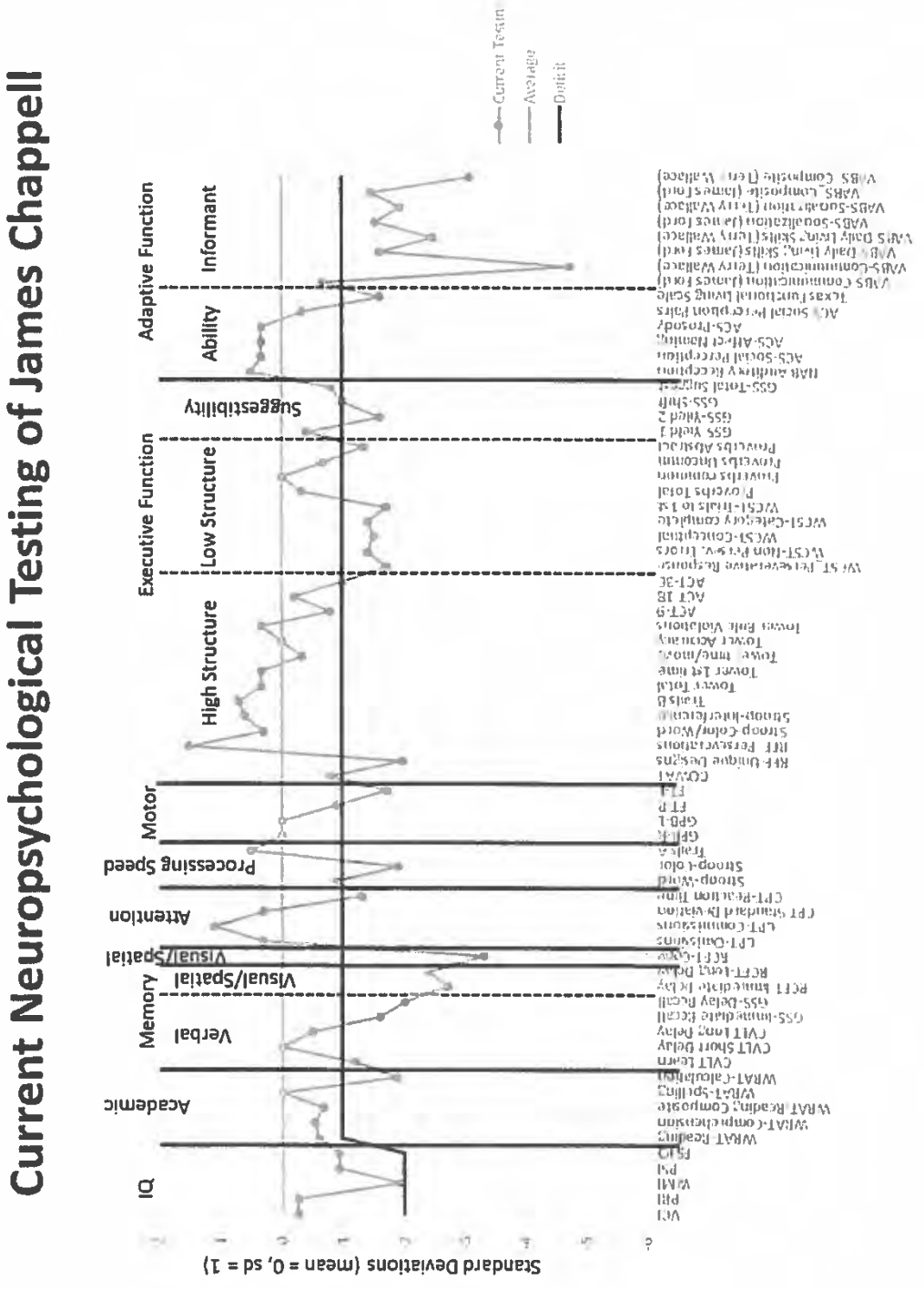

Current Neuropsychological Testing of James Chappell
Current Testin
Average
Deficit
Adaptive Function
Informant
Ability
Executive Function
Low Structure
Suggestibility
High Structure
Motor
Processing Speed
Attention
Visual/Spatial
Memory
Visual/Spatial
Verbal
Academic
IQ
Standard Deviations (mean = 0, sd = 1)

Figure 2:

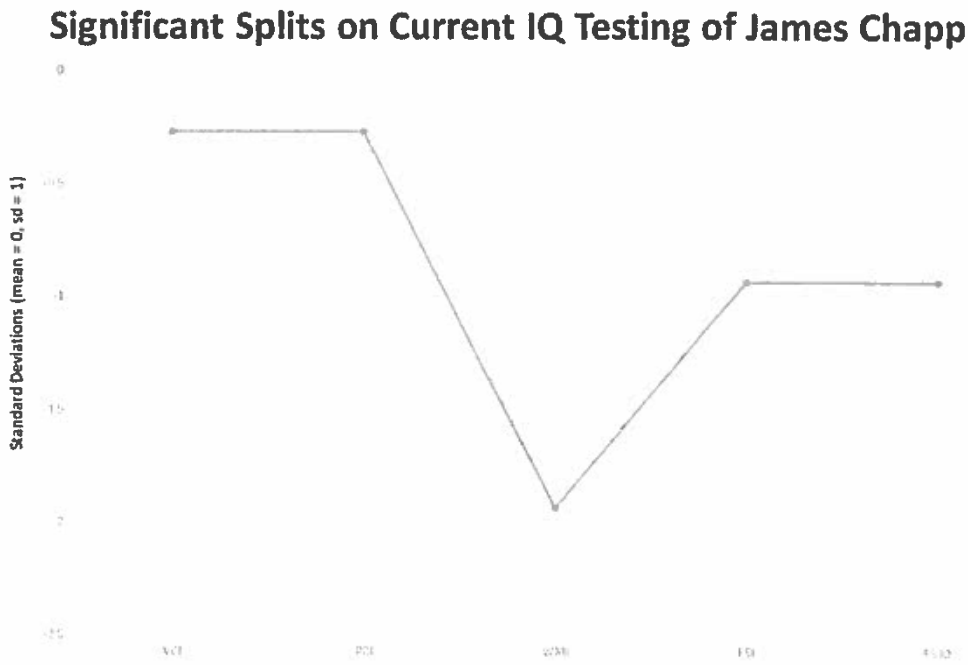

Significant Splits on Current IQ Testing of James Chappell
Standard Deviations (mean = 0, sd = 1)

Figure 3:

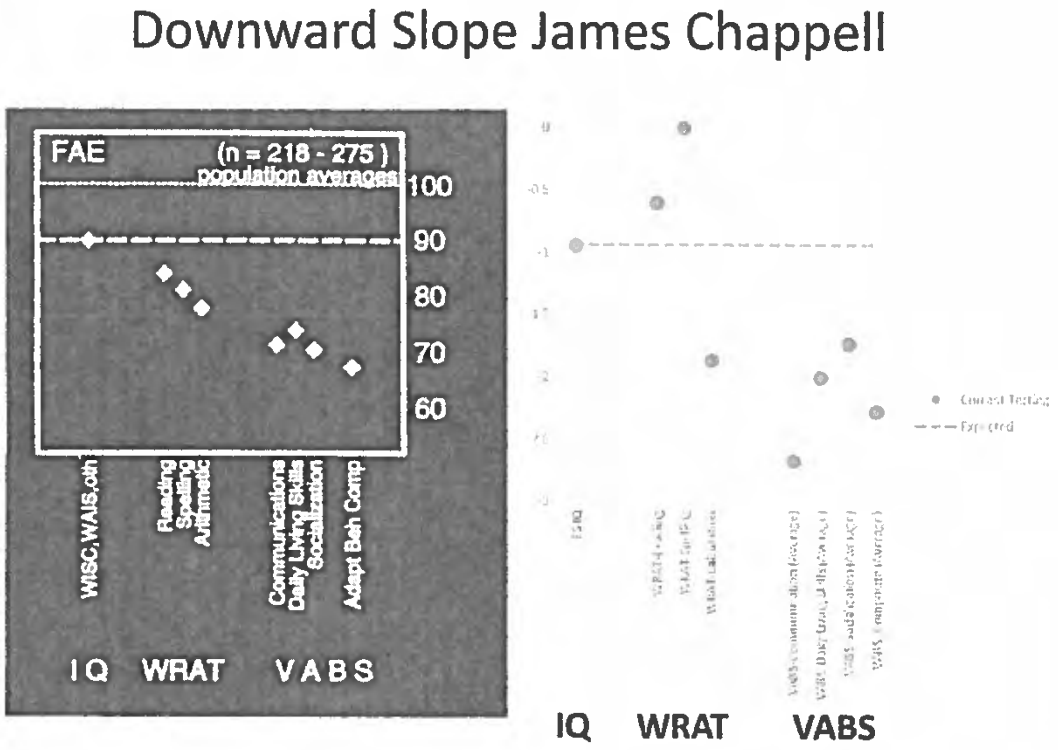
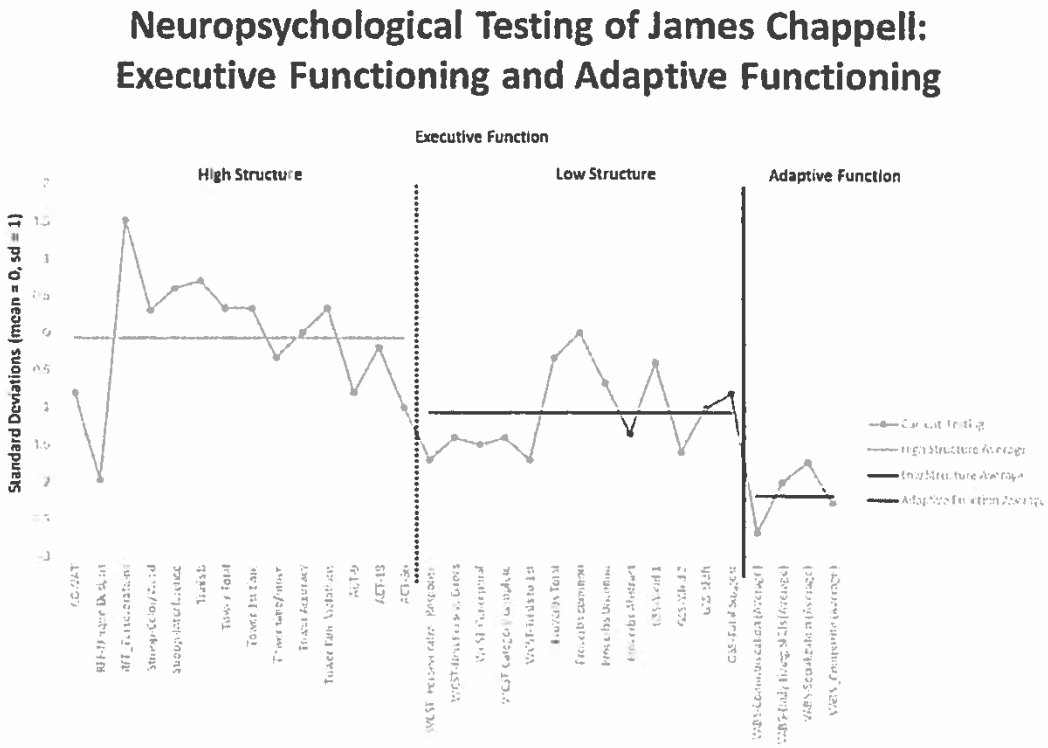

Downward Slope James Chappell
FAE
(n = 218 - 275)
population averages
100
90
80
70
60
WISC, WAIS,oth
Reading
Spelling
Arithmetic
Communications
Daily Living Skills
Socialization
Adapt Beh Comp
IQ
WRAT
VABS
IQ
WRAT
VABS

Figure 4:


Neuropsychological Testing of James Chappell:
Executive Functioning and Adaptive Functioning
Executive Function
High Structure
Low Structure
Adaptive Function
Standard Deviations (mean = 0, sd = 1)

MATERIALS RELIED UPON (Amended)

DOCUMENTS SENT TO DR. PAUL CONNOR

- Dr. Lewis Etcoff, Report (6-11-1996)
- Dr. Lewis Etcoff, Supplemental Report (9-28-1996)
- Evaluation Material (incl. Life History Questionnaire), Dr. Lewis Etcoff
- Dr. Natalie Novick Brown, Final Report (8-3-2016)
- Dr. Julian Davies, Final Report (8-5-2016)
- Quantitative EEG Analysis, Dr. Robert Thatcher (8-1-2016)
- Dr. Jonathan Lipman, Report (8-12-2016)
- Dr. Matthew Mendel, Final Report (6-27-2016)
- Social History Chronology
- Photo, James Chappell at age five
- Photo, James Chappell at age one
- Excerpts of Medical Records from Ely State Prison for James M. Chappell
- Nevada Supreme Court Opinion (12-30-1998)

School records, James M. Chappell

- 1976-1977 Moores Park School, Semester Report
- 1977 Moores Park School, Certificate
- 1978 Lansing School District Environmental Education Center, Certificate
- 1978, Moores Park School, Certificate for Field's Day
- 1979-1980 Moores Park School, Student Progress Report
- 1980 Class assignment
- 1980 Daily Progress Report
- 1981, Forest View School, Student Progress Report
- 1982, Maple Grove School, Certificate of Completion-6th grade
- Junior Citizen's Award, Officer Friendly Program
- Lansing School District, Cumulative School Record

Declarations of:

- Angela Mitchell (8-9-16)
- Benjamin Dean (4-17-16)
- Bret Robello (9-29-16)
- Charles Dean (4-19-16)
- Carla Chappell (4-23-16)
- Clare McGuire (8-6-2016)
- Dina Richardson (8-9-16)
- Ernestine 'Sue' Harvey (6-15-16)
- Ernestine 'Sue' Harvey (7-2-16)
- Fred Dean (6-11-16)
- Georgette Sneed (5-14-16)

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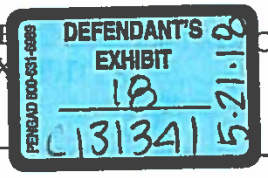

- Harold Kuder (4-17-16)
- James Ford, (5-19-16)
- James Wells (1-22-16)
- Joetta Ford (5-18-16)
- Lila Godard (8-5-16)
- Lewis Etcoff (7-11-16)
- Louise Underwood (9-22-16)
- Madge Cage (9-24-16)
- Michael Chappell (5-14-16)
- Michael Pollard (9-14-16)
- Myra Chappell-King (5-20-16)
- Phillip Underwood (4-17-16)
- Rodney Axam (4-16-16)
- Rose Wells-Canon (4-16-16)
- Rosemary Pacheco (8-9-16)
- Sharon Axam (4-18-16)
- Sheron Barkley (4-16-16)
- Shirley Sorrell (9-23-16)
- Terrance Wallace (5-17-16)
- Verlean Townsend (9-23-16)
- William Earl Bonds (5-13-16)
- William Roger Moore (4-17-16)
- Willie Richard Chappell (4-16-16)
- Willie Richard Chappell, Jr. (5-16-16)
- Willie Wiltz, Jr. (7-28-16)

Trial and 2nd Penalty Trial Testimony of:

- Trial Testimony, James Chappell (10-14-1996)
- Trial Testimony, Dr. Lewis Etcoff (10-15-1996)
- Trial Testimony, William Roger Moore (10-22-1996)
- 2nd Penalty Trial Testimony, Dr. Lewis Etcoff (3-16-2007)
- 2nd Trial Testimony, Dr. William Danton (March 14, 2007)

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August 5, 2016

JAMES CHAPPELL - MEDICAL EXPERT REPORT

James M. Chappell (DOB 12/27/[redacted] is a 46 year old man referred to me by the Office of the Federal Public Defender, District of Nevada, current federal habeas counsel for Mr. Chappell. Counsel asked me to evaluate whether Mr. Chappell has a Fetal Alcohol Spectrum Disorder.

MEDICAL EXPERT OPINION

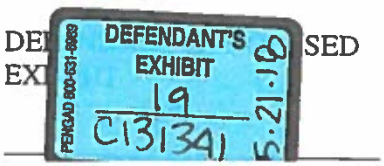
It is my opinion to a reasonable degree of medical certainty that Mr. Chappell has Alcohol-Related Neurodevelopmental Disorder (ARND). This diagnosis is a Fetal Alcohol Spectrum Disorder (FASD).

In plainer language, Mr. Chappell's mother drank alcohol in a high-risk pattern during pregnancy. Since childhood Mr. Chappell has demonstrated a pattern of brain dysfunction consistent with fetal alcohol damage. ARND applies to patients with the brain injuries but without the classic Fetal Alcohol Syndrome (FAS) physical features seen in a minority of affected individuals. His ARND was likely compounded by a potent combination of genetic influences, other prenatal exposures, traumatic loss, childhood neglect and abuse, lack of appropriate role models, environmental toxins, and adolescent substance abuse.

FASD BACKGROUND

FASD is an umbrella term used to describe the spectrum of birth defects and neurologic impacts caused by maternal alcohol consumption during pregnancy. FAS is at one end of that spectrum. FAS is a permanent birth defect syndrome caused by prenatal alcohol exposure, characterized by prenatal and/or postnatal growth deficiency, a unique cluster of minor facial anomalies, and central nervous system (CNS) abnormalities. This cluster of subtle facial anomalies includes short eye widths, thin upper lip, and a smooth philtrum (the vertical groove between nose and lip).

The brain injuries caused by prenatal alcohol exposure are variable, but can include such outcomes as lower IQ, ADHD (attention deficit/hyperactivity disorder), difficulties with judgment and impulse control, language and social difficulties, learning disabilities, visuospatial deficits, motor and coordination challenges, memory problems, and impairments in executive functions - "higher-level" cognitive skills like flexibility, planning, organization, inhibition, judgment, and novel problem-solving. Individuals



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with FASDs have daily functioning skills and life outcomes that are often more impaired than their IQ alone would predict.[1]

A diagnosis of FAS requires all of the above features (growth, face, brain) to be confirmed. For alcohol-exposed individuals who lack a history of growth deficiency, the facial features of FAS, and/or evidence of severe brain impairments, diagnoses on the broader fetal alcohol spectrum such as Alcohol-Related Neurodevelopmental Disorder (ARND) may be appropriate.

The field of FASD is over 40 years old, and uses well-established diagnostic criteria, most notably the Institute of Medicine (IOM) guidelines,[2] the University of Washington 4-Digit Code,[3] the Centers for Disease Control (CDC) definition of FAS,[4] and the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5).[5]

I am a board-certified pediatrician licensed in the State of Washington, and a Fellow of the American Academy of Pediatrics. I was trained at Yale, UCSF, and the University of Washington. I am a Clinical Professor of Pediatrics at the University of Washington School of Medicine, where for the past thirteen years I have evaluated children and adults at the longest-running FAS diagnostic clinic in the country. Since FAS is a birth defect syndrome, many experts in the field have pediatric backgrounds; the diagnostic criteria for FAS are the same for children and adults.

I have published articles in the peer-reviewed literature on prenatal alcohol/drug exposures, and present on these topics at regional and national conferences. I have been been retained in cases relating to FASDs by defense counsel in Arizona, California, Georgia, Illinois, Ohio, Oregon, Pennsylvania, Texas, Utah, and Washington State, as well as the US Attorneys in Seattle. I have qualified as an expert witness in Oregon and Pennsylvania. A copy of my resume is attached.

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[1] Streissguth, A. P., Bookstein, F. L., Barr, H. M., Sampson, P. D., O'Malley, K., & Young, J. K. (2004). Risk factors for adverse life outcomes in fetal alcohol syndrome and fetal alcohol effects. Journal of Developmental & Behavioral Pediatrics, 25(4), 228–238.

[2] Stratton, K. R., Howe, C. J., Battaglia, F. C., Institute of Medicine (U.S.). Committee to Study Fetal Alcohol Syndrome, National Institute on Alcohol Abuse and Alcoholism (1996). Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment. National Academies Press.

[3] Astley, S. J., & Clarren, S. K. (2000). Diagnosing the full spectrum of fetal alcohol-exposed individuals: introducing the 4-digit diagnostic code. Alcohol and Alcoholism (Oxford, Oxfordshire), 35(4), 400–410.

[4] Bertrand, J., Floyd, R., Weber, M., O'Connor, M., Riley, E., Johnson, K., & Cohen, D. (2004). Fetal Alcohol Syndrome: Guidelines for Referral and Diagnosis. Centers for Disease Control and Prevention, Atlanta, GA.

[5] American Psychiatric Association DSM-5 Task Force (2013). Diagnostic and Statistical Manual of Mental Disorders : DSM-5. American Psychiatric Association, Washington, DC.

MATERIALS RELIED UPON

Available for my review at the time of this report were the following materials:

1. School Grades Chart, James M. Chappell
2. School Testing Chart, James M. Chappell
3. Social History
4. Current Neuropsychological Testing Preliminary Chart of James Chappell
5. Preliminary Neuropsychological Summary Scores, James Chappell
6. Ely State Prison medical records excerpts for James Chappell
7. Ely State Prison excerpts of the Inmate File for James Chappell
8. School records, James M. Chappell
    a. 1976-1977 Moores Park School, Semester Report
    b. 1979-1980 Moores Park School, Student Progress Report
    c. 05-09-1980 Class assignment
    d. 05-09-1980 Daily Progress Report
    e. 1981, Forest View School, Student Progress Report
    f. 1982, Maple Grove School, Certificate of Completion-6th grade
    g. 06-14-1978 Lansing School District Environmental Education Center, Certificate
    h. 1978, Moores Park School, Certificate for Field's Day
    i. Junior Citizen's Award, Officer Friendly Program
    j. Lansing School District, Cumulative School Record
    k. 1977 Moores Park School, Certificate
9. Declarations
    a. Benjamin Dean (4-17-16)
    b. Carla Chappell (4-23-16)
    c. Charles Dean (4-19-16)
    d. Ernestine 'Sue' Harvey (7-2-16)
    e. Fred Dean (6-11-16)
    f. Georgette Sneed (5-14-16)
    g. Harold Kuder (4-17-16)
    h. James Ford (5-19-16)
    i. James Wells (1-22-16)
    j. Joetta Ford (5-18-16)
    k. Michael Chappell (5-14-16)

l. Myra Chappell-King (5-20-16)
m. Phillip Underwood (4-17-16)
n. Rodney Axam (4-16-16)
o. Rose Wells-Canon (4-16-16)
p. Sharon Axam (4-18-16)
q. Sheron Barkley (4-16-16)
r. Terrance Wallace (5-16-16)
s. William Earl Bonds (5-13-16)
t. William Roger Moore (4-17-16)
u. Willie Richard Chappell, Jr. (5-16-16)
v. Willie Richard Chappell, Sr. (4-16-16)

10. Trial Testimony, Dr. Lewis Etcoff (10-15-96)
11. 2nd Penalty Trial Testimony, Dr. Lewis Etcoff (3-16-07) -
12. 2nd Penalty Trial Testimony, Dr. William Danton (3-14-07)
13. Juvenile Records, James M. Chappell
14. Report of Dr. Natalie Novick Brown
15. Report of Dr. Paul Connor
16. qEEG Analysis by Robert Thatcher, Ph.D.
17. Photographs taken of James Chappell

As is standard in an FASD evaluation, at the beginning of my engagement I requested any available family history, pregnancy and prenatal exposure history, childhood and adult medical records, social history, school and developmental records, occupational history, criminal justice history, and client mental health records, as well as the results of any neurologic or neuropsychological testing.

I have rendered my opinion based on materials available to me at this time, and retain the right to revise my opinion should new information become available.

Childhood-era information will refer to the client as "James," with adult references as "Mr. Chappell."

Pertinent positives and negatives from records review include the following:

PRENATAL EXPOSURES AND PREGNANCY HISTORY

1. James's aunt reported that "James Jr.'s mother, Shirley Chappell, was the best friend of my sister Barbara ... Barbara was an alcoholic and frequently drank with a group of alcoholic friends. Shirley was a part of this group, so I assume she was

drinking as well ... I often saw Shirley and Barbara intoxicated and behaving in the same manner when I encountered them in passing ... It was my impression that Shirley was abusing substances throughout her pregnancies with James and Myra, because she did not change her behaviors and I observed her drunk or intoxicated on various occasions."(Rose Wells-Canon)

2. A close friend of James's mother stated that "Shirley's lifestyle did not change at all during her pregnancies. She continued to abuse heroin and cocaine on a daily basis while she was pregnant with James. She also continued to engage in prostitution whenever she was short on cash. Shirley also continued to drink alcohol during her pregnancy with James, but not as frequently as she abused other drugs. Shirley drank alcohol a couple times a week, as far as I recall, but not on a daily basis because it was not her drug of choice. Shirley liked hard liquor and usually had several drinks in one setting when she drank, even while pregnant." (William Bonds)
3. James's alleged father reported that "Shirley abused drugs on a daily basis throughout her entire pregnancies with both Jimmy [James] and Myra." He and she "used heroin as much as we could, but usually no less than two or three nickel bags a day." He could not recall her "receiving much, if any, prenatal care during both pregnancies." (James Wells)
4. James's other possible father stated that "Shirley was a heavy drinker from the time that we met in 1966 until her death in 1973 ... Shirley regularly drank with her best friend, Barbara Wells, and others. Barbara Wells and Shirley's mutual friends were alcoholics who drank most days, but especially on weekends. I frequently saw Shirley drunk and smelled alcohol on her breath. Shirley drank alcohol throughout her entire pregnancy with James." He also noted that Shirley smoked one to one and a half packs of cigarettes a day during her pregnancy with James. (William Chappell, Sr.)
5. James's older sister was told that their mother abused drugs and alcohol during her pregnancies with her and her siblings. (Carla Chappell)
6. "All that I know about my mother was told to me by the adults in my family including that she struggled with an addiction to heroin and alcohol, and that she heavily used both of these substances throughout her pregnancies with all of us, except for Lapriest." (Myra Chappell-King)
7. Jame's maternal uncles reported that "Alcohol and drug addiction were major problems for me and my siblings, Shirley, Anthony, Sharon, and I were all addicted to substances, starting at early ages. All of my siblings had arrest records and tragic lives. Shirley died while walking down a highway in the middle of the night while intoxicated ..." (Rodney Axam)
8. At 5-7 months of her pregnancy with James, "In a state of intoxication, Shirley slipped and fell down an entire staircase ... Shirley began spotting blood after she got up and was rushed to the hospital ... the doctors told her that she almost lost James." (William Chappell, Sr.)

9. "James had a very rough start in life. He was born to an alcohol and heroin addicted mother. Drugs and alcohol were a problem for James's aunts, uncles, and other family members as well. A year before her death, it was determined that his mother's substance abuse problems had caused her to neglect her children, so James and his siblings were removed from her custody and placed in the home of their maternal grandmother, Clara Axam. James's mother was killed when he and his siblings were just toddlers and babies, so James's grandmother had to assume permanent custody and raise them by herself. James and his siblings had different fathers who were all absent from the children's lives. James and his siblings had no male role models in or outside the home.... James's deficits and behaviors were typical of the other children I have supervised who were prenatally exposed to alcohol and drugs." (William Moore)
10. "Shirley was a drug addict by the time she became pregnant with James, and it is my understanding that she abused heroin throughout her pregnancy with him." (Sharon Axam)
11. Around the time of her pregnancy with her son James, Shirley "was a junkie. Besides abusing heroin, Shirley also drank alcohol." (Georgette Sneed)
12. Adults told her that her mother Shirley abused heroin and alcohol during all of her pregnancies except for LaPriest. (Myra Chappell-King)

BIRTH HISTORY

1. A school social work evaluation reported that James was full term and 6.5 pounds at birth (16th percentile).
2. James was the fourth of five children from Shirley Chappell; his birth father is inconsistent in the declarations (James Wells is listed but his grandmother suspected Willie Chappell, who also felt that he was the father). Carla was born 3/15/67, Ricky 3/2/68, and Myra 1/16/72. He had an older half-sibling Lapriest, with a different father.

GROWTH HISTORY

1. A school physical on 7/18/75 (5.5 years old) reported a weight of 47.5 pounds (74th percentile) and height 41 inches (4th percentile). (School records)
2. Other childhood growth records are not available to me at this time.

MEDICAL HISTORY

1. James was hospitalized in 1973 for "tonsils" and also had chickenpox in 1973 but was otherwise found to be healthy at school entry. (School records)
2. James had prolonged enuresis (bedwetting) until 14-15 years old. (Carla Chappell) He also had daytime enuresis, and was nicknamed "Pissy." (James Ford) James

soiled himself as well, and would not react to presence of stool in his pants. (Willie Chappell, Jr.)

3. James frequently complained about headaches, possibly related to poor vision. (James Ford)
4. School records documented normal hearing exams, and noted that he was prescribed glasses.
5. James and other kids in the neighborhood played at the abandoned Diamond Reo factory site, inside empty storage tanks and in the surrounding dirt. This was felt by many that were interviewed to be a significant exposure to environmental contaminants. Nellers Court residents were eventually paid to relocate in James's teens, and the homes were demolished. (James Ford; Joetta Ford)
6. A memo from the current habeas team regarding suspected environmental contaminants in the Diamond Reo plant and nearby Nellers Court neighborhood. This memo reports that "Arsenic, Benzene, Lead, Perchloroethylene (sometimes called Tetrachloroethylene), Toluene, Trichloroethylene, Vinyl Chloride, and cis-1,2 Dichloroethylene" are currently present at the site, but that "a personal communication with the Michigan Department of Environmental Quality suggests that Arsenic and Lead were not introduced by the Diamond Reo plant but contaminated the soil later, when the state of Michigan used historic fill from other sites to cover the Diamond Reo site." This would leave solvents and solvent by-products as the likely contaminants of the site when James lived there. Of these, perchloroethylene (PCE) "was the only one of the contaminants mentioned whose chronic effects included neurological effects. Chronic exposure to PCE causes sensory symptoms such as headaches, impairments in cognitive and motor neurobehavioral functioning, and color vision decrements." The other contaminants can have short-term effects (such as headaches) but are not reported to permanently impair cognitive functioning. Toluene can impair cognition in chronic abusers but this has not been described at lower level environmental exposures. Lead does impair cognition but his exposure level is unclear - it was a common contaminant in the 1970s.
7. Mr. Chappell was treated for hypertension, chest pain, headaches, and cold/flu symptoms in prison. (Nevada DOC records)

SOCIAL HISTORY

1. I have reviewed Mr. Chappell's social history in extensive declarations listed above, and in Dr. Brown's report. I have not included pertinent positives and negatives here in the interest of space, as this history is being directly addressed by other experts.

DEVELOPMENTAL HISTORY

1. A close friend of James's mother who saw James almost daily from birth to age 3 noted that "James was slower than his siblings and did not seem to pick up on things as quickly as they did. James was also less interactive than his siblings. James did not talk much. He did not run up to me and Shirley's other friends to jump on our lap, play, or ask for things like his other siblings did. James rarely smiled or laughed. James just quietly sat looking at everything going on around him with a puzzled look on his face." (William Bond)
2. James's grandmother reported to school that his early development appeared to be normal but that James would not talk to anyone after his mother died. She enrolled him in Head Start "where he would not play with anyone or talk to anyone. He finally built a relationship with a new teacher, and when she left suddenly, he regressed to his old behavior, not talking to anyone." (Clara Axam)
3. Young James was called a "cry baby" who was very sensitive and afraid of others. (Carla Chappell)
4. After entering Kindergarten, James started to relate to his teacher and some children, "but did not get involved in playing with them, usually playing by himself or standing on the sidelines." (School records)
5. James was perceived to be "mentally slow" in childhood, with slow and simple language, and poor attention span. (Benjamin Dean)
6. "James also had a short attention span and was easily distracted in the classroom. Whenever James had problems understanding or focusing on the work, he often became disruptive in class by talking to other students or becoming the class clown." (Harold Kuder)
7. James's sister described very hyperactive behavior and a short attention span. (Myra Chappell-King)
8. James's older brother observed that "James was a very immature person and acted like someone who was younger than his actual age. James acted like he was six years old when he was ten and eight years old when he was thirteen." (Willie Chappell, Jr.)
9. "James could not read well and had problems with word pronunciations throughout his childhood and early adulthood. He often asked me and others to read things for him, even when he was in his early twenties." (James Ford)
10. His close friends would cover for his reading difficulties by mentioning his poor vision and reading for him. James was similarly dependent on friends to get him jobs, drive him to work, and let him stay with them. (Terrance Wallace)
11. James's neighbor and mother of his friend worked as a nurse. She claimed that one of James's elementary teachers mentioned that James's IQ was in the low 70s. Her own impression was of impulsivity, lack of awareness of consequences, and "getting into trouble repeatedly for the same issues." She noted James to struggle with reading, even as a young adult. She also described that Clara "worried most about James because he was the most disabled and needy of his siblings." (Joetta Ford)

12. James was described as gullible, not street-wise, a follower, very impressionable, and the frequent butt of tricks/jokes. He had difficulty following social cues and was "very childish." He wore bizarre clothing that he seemed to believe looked cool, and he was noted to have poor personal hygiene. (Benjamin Dean; Charles Dean)
13. James was "very uncoordinated and couldn't run fast." (Harold Kuder)
14. James was not violent or aggressive (until he got involved with crack). He would back down easily, and would cower at neighborhood girls, which got him teased. (Charles Dean)
15. James had a poor sense of direction, and could not locate an address unless he'd been there before. (Charles Dean)
16. James tried selling drugs but was bad at math and would get cheated by junkies on sales; he would also use his own supply. Drug dealers reportedly gave him a pass because of his developmental/mental health issues. (Charles Dean)
17. It took James longer than his peers to develop personal hygiene skills and the ability to look presentable. (Myra Chappell-King)
18. James was very dependent on friends and family, as his disabilities made him immature and vulnerable. They worried about him leaving the state with Debbie. (Charles Dean)
19. James had no money management skills, and worked low end jobs where he was frequently let go after short periods of time. (Myra Chappell-King)
20. His former probation officer summarized James's history well, stating that "James was a child with severe deficits. He was a special education student with a learning disability and had difficulties with various school subjects ... It was almost impossible to teach him intangible concepts ... James had an inability to grasp and internalize the ideas that the tutors and I tried to teach him. I repeatedly had to tell James the same things, but it seemed like "no one was home" ... James experienced minor improvements at times, but they were not sustained ... James had trouble overcoming his disabilities. James took failures very hard, and it was sometimes challenging to get him motivated again. James lacked introspection and had no insight into the problems and how to overcome them. James's deficits and behaviors were typical of the other children I have supervised who were prenatally exposed to alcohol and drugs." (William Moore)

ACADEMIC HISTORY

1. Dr. Etcoff testified that school records revealed that by 2nd Grade, James had already come to the attention of of the school district, which was more unusual than it is now. He interpreted his SLD diagnostic category as "severely learning disabled," and noted placement in a SLD special education classroom setting with one-on-one attention. Despite that extra attention and special programming, James's high school reading and math achievement scores were at the 1st stanine (lowest of 9 stanines). (Dr. Etcoff)

2. In 1976-77 (1st grade) James's academic grades were poor, especially math. He missed 6 days and was tardy 33 times. (School records)
3. In June 1977, James was first referred for supportive services with the following concerns: "James has a wetting problem and he sucks his fingers. HIs actions and reactions are very slow. He asks unrelated questions and will not respond when spoken to." He was in the second grade but functioning at a first grade level. It is unclear what evaluation resulted from these concerns, but "nothing was done at that time." A number of informal interventions were tried but none of them were effective, and his behavior deteriorated. (School records)
4. In 1977-78 (2nd Grade) James's academic grades ranged typically from Satisfactory to Needs to Improve. He had excellent attendance. (School records)
5. In 1978-79 (3rd Grade) James's academic grades were in the "Satisfactory" to "Is Improving" range, with comments about being easily distracted, late turning in work, and inconsistent in work habits and effort. He had good attendance. (School records)
6. In 1979-80 (4th grade), James's grades were generally poor, mostly "Needs Improvement" or "Is Improving" in academic subjects, with comments about disruptive behaviors and "real difficulties in math" (multiplication and division grades were blank except for "can't even begin"). Attendance appeared good. (School records)
7. Special education services were formally initiated in 4th grade. He was referred for an evaluation due to disruptive behavior, aggressive responses, easily distracted, and low academic achievement. He qualified under "Emotionally Impaired." The school psychologist reports that IQ tests showed borderline to low average performance. It appears that his academic achievement in Reading was at the 34th percentile, and only 4th percentile in Arithmetic. However, the Key Math results reported seemed closer to grade level. The testing psychologist noted him to have basic abilities in the typical range but "severe difficulty maintaining his attention on the external world." His psychological evaluator noted that he was uncooperative on testing (thus the results were unreliable), sat with his back turned towards the examiner, appeared to have poor self-concept, and was felt to be using withdrawal as a defense. He was assigned to "Basic Special Ed Class" with minimal participation in Regular Education (small group, non-academics). (School records)
8. In 1980-81 (5th grade), James's grades were "Satisfactory" to "Is Improving" in many subjects, but it was noted that he was in Upper Elementary "SLD" which could mean Severely Learning Disabled (per Dr. Etcoff) or Specific Learning Disability. Grade level in reading was at the 4th grade. Talking and self-control were noted as problems. Attendance was good. (School records)
9. In 1981-82 (6th grade), James had good attendance, and reading level was still at the 4th grade level. (School records)
10. In 1982-83 (7th Grade), James only attained 14/28 objectives in Math, but achieved 21/23 objectives in Reading. (School records)

11. In June 1983 a school social worker reported that James was a "'depressed' young man who sleeps a lot. He has some significant learning disabilities which will continue to cause him a great deal of frustration in the school setting." (School records)
12. During the 1983-4 school year James had a number of disruptive behavior episodes at school, and saw improvements in Social Studies grades in tutoring. (School records)
13. From 1977 to 1982 (Elementary School) a number of achievement tests were reported, with Total Reading and Math scores declining over time. (School records)
14. In December 1984 (9th grade) a Peabody Individual Achievement Test placed him overall at a 6.8 grade level. (School records)
15. In May 1985 (9th Grade) a poorly legible SAT Task 2 achievement test appears to show Reading at 3rd-13th percentile, Spelling at 7th percentile, English 9th percentile, Math at 3rd percentile. Attendance was reportedly poor. (School records)
16. In November 1986, James's special education eligibility category was "Emotionally Impaired." His Special Education plan as available to me was sparse, with one short-term goal of turning homework in, and "Basic Classroom (EMI/EI/LD)" 1-3 hours daily and General Education 2-4 hours daily. Teacher consultant services only was rejected as an option, as he needed more support. (School records)
17. The October-November 1986 Special Education evaluation noted the following areas of concern:
    "Ability: Borderline to low average with probable higher potential.
    Achievement: WRAT Reading 5th percentile, Arithmetic 2nd percentile.
    Emotional: Obs. and interview - Low self-concept, depressed, distrusting, few coping skills.
    Social-Emotional: Low self-image, poor problem solving skills, difficulty completing assignments, past history of problems with attendance, low motivation.
    Math: Low computational + problem solving skills." (School records)
18. The school psychologist's testing in October 1986 included only subtests of the WAIS-R which found "no significant change" in his verbal fluency and abstract ability (previously borderline to low average). His academic achievement scores dropped to 5th percentile in Reading and 2nd percentile in Math. It is unclear why Specific Learning Disability - Math was not given more consideration given current and prior significant discrepancies between IQ and math achievement. It appears that his behavioral, environmental, and juvenile justice issues may have overshadowed his learning problems in these special education evaluations.
19. In January 1987 (10th Grade, but was only promoted to 10th grade in January 1987 after an extra semester of 9th Grade) James had a GPA of 0.65 (with many special education classes listed) and class rank of 584/607. (School records)

20. James appears to have dropped out of school around 10th grade. (Myra Chappell-King)

PSYCHIATRIC AND SUBSTANCE ABUSE HISTORY

1. See Academic History for emotional concerns in school.
2. Court records at 13 years of age refer to "counseling, off and on, with Dr. Gene Pernell." (Juvenile records) This lasted for a year, stopping around the time Anthony was killed. (School records)
3. Dr. Etcoff testified in 1996 that Mr. Chappell's Millon Clinical Multiaxial Inventory II (a personality test) was valid and indicated social awkwardness, introversion, desire to be accepted but fear of rejection, mistrust of others, "enormously low self-worth and very little self-respect," and Borderline Personality Characteristic. He also reported cocaine dependence since about 1992. (Etcoff testimony)
4. Dr. Danton testified in 2007 about domestic violence dynamics and Mr. Chappell's abandonment anxiety, borderline personality, and dependent personality type (Danton testimony).
5. James used a lot of alcohol and marijuana starting in early adolescence, and started to use crack in his later teens. His crack addiction worsened after the birth of his first child. (Carla Chappell)
6. In his teens, James was drinking 20 bottles of 40-ounce male liquor per week, drinking from morning until evening. He binge drank liquor on weekends. (James Ford)
7. James's crack addiction in Nevada was severe, and he would smoke crack "morning, noon, and night on a daily basis when he was no incarcerated." His normally kind and gentle personality would change for the worse on crack, with extreme paranoia. (Sue Harvey) James would also isolate himself and complain of hearing things when high on crack. (James Ford)
8. James stole and sold items such as frozen meats to support his habit, so much so that neighbors would place orders with him. (Ernestine Harvey)

FAMILY HISTORY

1. James's mother Shirley was reported to be a drug and alcohol addict, who was killed by a police cruiser while walking on a highway. Shirley and her siblings were said to have been in special education classes for learning disabilities, and only Uncle Rodney completed high school (but was apparently unable to read). (Carla Chappell)
2. James' maternal grandmother Clara was described as "a weekend alcoholic." (William Chappell, Sr.)
3. James's uncle, aunts, and some cousins "seemed a bit mentally challenged." (Benjamin Dean) James's maternal uncle stated that "My siblings and I all did

poorly in school, were diagnosed with learning disabilities, and were classified as special needs students." (Rodney Axam)

4. James's siblings "had severe behavioral problems." (Benjamin Dean) His sister Myra stated that "Ricky Jr., James and I have struggled with lifelong behavioral problems, attention deficits, impulse control issues, educational difficulties, trouble with the law and substance abuse problems. I believe that these issues stem from our mother's habits and activities. While we all had our individual struggles, it was clear that James had the most problems. James is mentally slower than the rest of us, he was diagnosed with having a learning disability at an early age, and was placed in special education classes." (Myra Chappell)
5. James's older sister Carla (possibly half-sibling, paternity uncertain) had a history of special education, learning disabilities, and social difficulties. (Carla Chappell)
6. Multigenerational and pervasive substance abuse was reported. (Carla Chappell)

STRUCTURAL EVIDENCE OF BRAIN DAMAGE

1. Robert Thatcher, Ph.D., analyzed a Quantitative EEG (qEEG) recorded on 8/1/16 at Ely State Prison and summarized the findings as follows: "The power spectral analyses were deviant from normal with excessive power in bilateral frontal regions and especially right frontal at 9 Hz, bilateral central frontal regions and especially left central frontal from 2 - 6 Hz in the Laplacian montage, and in the midline central frontal region from 1 - 6 Hz in the Laplacian montage. LORETA 3-dimensional source analyses were consistent with the surface EEG and showed excessive current sources in the midline paracentral lobule, cingulate and medial frontal gyri with a maximum at 4 Hz (Brodmann areas 6, 24 & 31). Elevated LORETA current sources were also present in the right superior frontal gyrus with a maximum at 9 Hz (Brodmann areas 8, 9 & 10). EEG amplitude asymmetry, EEG coherence and EEG phase were abnormal, especially in bilateral frontal and temporal relations. Reduced coherence was present in the bilateral temporal and parietal regions which indicate reduced functional connectivity. Elevated coherence was present in bilateral frontal and occipital regions which indicate reduced functional differentiation. Both conditions are often related to reduced speed and efficiency of information processing. In summary, the qEEG analyses were deviant from normal and showed dysregulation of the bilateral frontal lobes of the paracentral lobule, medial and superior frontal gyri and the cingulate gyrus. The frontal lobes are involved in mood control, executive functioning, abstract thinking and social skills. The limbic lobes are involved in motivation, emotion, learning, and memory. The paracentral lobule is involved in bimanual coordination and processing sensorimotor signals related to the lower extremities. The cingulate gyrus is involved in volitional motor control and attention control by regulation of limbic emotional and memory input to the cortex. To the extent there is deviation from normal electrical patterns in these structures, then sub-optimal functioning is expected." (Thatcher report)

BRAIN DOMAINS WITH EVIDENCE OF DYSFUNCTION

1. Intellectual Functioning - In 1996 Mr. Chappell received a Full Scale IQ of 80 on a WAIS-R, at the 9th percentile; Performance IQ at 91 (27th percentile), Verbal IQ of 77 (borderline range, at the 6th percentile). In 2016 his Full Scale IQ was 86 on WAIS-IV (18th percentile), with a Working Memory score of 71 (3rd percentile), which was significantly lower (split) than his other IQ domains.
2. Academic Functioning - Mr. Chappell had academic achievement testing with arithmetic performance (3rd percentile on WRAT-4) well below his overall level of intellectual functioning and level of completed schooling. This significant impairment is in line with previous WRAT testing below the 3rd percentile in 1986 and 1996, and his history of special education services with prominent trouble in math. Dr. Etcoff testified that Mr. Chappell has a Learning Disability in arithmetic. On the Texas Functional Living Scale - Money and Calculation, he scored at the 3rd-9th percentile. (Connor, Etcoff)
3. Learning and Memory - Mr. Chappell demonstrated significant impairments in memory for verbal and visual information: <1st percentile on CVLT initial list learning task; story recall on GSS-2 at 5th percentile for immediate recall and 2nd percentile delayed; <1st percentile RCFT Immediate Recall, and 1st percentile Delayed. (Connor)
4. Visuospatial Construction and Organization - Mr. Chappell had a severely impaired performance on the RCFT Copy task, scoring below the 1st percentile (more than 3 standard deviations below the mean). This is a pattern we frequently see in our FAS clinic, with very poor organization and failure to recognize overall shapes within the figure that would allow for a more accurate and efficient copy. (Connor)
5. Attention - Multiple informants described prominent childhood symptoms of ADHD (especially inattention and impulsivity). Dr. Etcoff testified that James probably met criteria for ADHD in childhood. While his sustained visual attention on one test was in the average range, he showed slowing of reaction time (9th percentile on CPT). (Etcoff, Connor)
6. Processing Speed - On a task of color naming (Stroop) Mr. Chappell performed at the 3rd percentile. He also had a relatively low score on Digit Symbol-Coding (9th percentile), and was qualitatively noted to have an approach to tasks that was very slow, with latencies in responding. (Connor)
7. Executive Functioning - While Mr. Chappell was able to score in the average to even above average range on tests with high external structure, he had notably lower scores with low external structure such as the WCST, where most scores were from 2nd to 10th percentile. He also scored below the 3rd percentile on Unique Designs on the RFF. (Connor)
8. Language/Communication: Dr. Etcoff testified that Mr. Chappell would have been eligible for a Language Disorder diagnosis (borderline Verbal IQ, Vocabulary

subtest at the 5th percentile). Mr. Chappell scored in the average range on a test of auditory comprehension with Dr. Connor, but only at the 3rd-9th percentile on Texas Functional Living Scale - Communication. Multiple informants had significant concerns about James's language abilities as a child, and on interview Mr. Wallace rated his overall Communication at less than the 1st percentile (severely impaired) and Ms. Chappell-King rated his receptive and expressive communication in the moderately to severely impaired range. Mr. Ford, despite having reported significant speech concerns from childhood, rated Mr. Chappell's Communication at age 25 at the 25th percentile. (Etcoff, Connor)

9. Daily Living Skills: On direct testing with the Texas Functional Living Scale, Mr. Chappell's total score was at the 5th percentile, with lowest scores in Communication and Money & Calculation. On structured informant scales (VABS - Daily Living Skills), Mr. Ford rated him at the 5th percentile and Mr. Wallace rated him at 1st percentile. His life history fits well with these low scores in living skills. (Connor)
10. Socialization Skills: On structured informant scales (VABS - Socialization), Mr. Ford rated him at the 6th percentile, and Mr. Wallace rated him at the 3rd percentile. These scores fit with the converging reports of impaired social abilities from friends and family. (Connor)

IN-PERSON INTERVIEW

I had the opportunity to interview and examine Mr. Chappell during a 90 minute visit on 7/11/16, in a semi-private interview room at the Ely State Prison in Ely, NV.

I explained the purpose of the visit, that his participation was optional, my licensing status and record-keeping requirements, and that I could not maintain my typical level of confidentiality. He appeared to understand and agreed to proceed.

PAST MEDICAL HISTORY

Mr. Chappell did not know his gestational age, birthweight, or about any specific neonatal complications.

He recalled getting periodic pediatric and dental care. He denied a childhood history of allergies, ear infections, sinusitis, or hearing problems. He started wearing glasses at age 10. He denied a childhood history of birth defects, seizures, loss of milestones, and chronic heart, kidney, bone/joint, or gastrointestinal problems. He denied operations or hospitalizations

Mr. Chappell abashedly described wetting the bed until junior high, and getting teased for it.

Mr. Chappell denied significant head trauma. He was rear-ended at age 23, but sustained no head injuries, loss of consciousness, or symptoms of concussion. He did have a CT of his back at that time, which found some degenerative changes.

CURRENT MEDICAL ISSUES

Mr. Chappell currently takes metoprolol and lisinopril for hypertension, and ibuprofen or aspirin for occasional headaches. Review of systems was otherwise negative.

DEVELOPMENTAL/ACADEMIC HISTORY

Mr. Chappell was unaware of his early developmental milestones, but was told that after his mother was killed when he was two and half he became introverted, quiet, and withdrawn for a period of time.

Mr. Chappell recalled being in three elementary schools, and taking "the little yellow bus" (special education) starting in 1980-81 at his second school. He was teased for this. He recalled that his special education services continued through high school. He was not sure what his qualifying issues were, but recalls being told by his Junior High Special Education teacher that he was there due to his "inability to pay attention to just about anything." He agrees that he was easily distracted, but cannot recall a specific workup for ADD/ADHD and knows that he was not medicated for such.

At school, Mr. Chappell recalled having the hardest time with math. He was otherwise vague about possible learning differences or struggles, and described himself as a "jovial

and upbeat" student who got along well with others. He denied behavioral problems in school until he started getting in trouble and suspended in high school for skipping class. He reported completing 10th grade, but after getting suspended twice for truancy his grandmother took him out of high school and into adult education classes. He didn't last long there, as he was "goofing" and smoking marijuana with friends instead of attending classes. He did not complete a GED.

PSYCHIATRIC HISTORY

Mr. Chappell thinks he was taken to a counselor or psychologist by his grandmother at 10 and 12 years of age, but cannot remember what they worked on. He did not recall other mental health diagnoses or treatment "when I was in society," but thinks a psychologist might have diagnosed him with something at the time of his trial in 1995. He has not been on any psychotropic medications.

He recalled stress and anxiety during his trial, and that it "took some time to condition myself and adapt to this place" but that he did so as reasonably as one possibly can. He denied current symptoms of depression, anxiety, compulsive behaviors, mania, paranoia, and auditory or visual hallucinations - "I'm a realist."

SUBSTANCE HISTORY

James's aunt and her brother would babysit often, bring friends over, use drugs and alcohol openly in the dining room, "then turn the music up and party. I was looking at them and wondering about the objects on the table, and how their moods would change and they would get happy and loud." They would often leave alcohol, pills, and "roaches" on the table when the party ended. He also recalled a lot of public intoxication, substance use, and "drug houses" on his block.

Mr. Chappell reported that he was introduced to marijuana and alcohol at age 12. He would use on weekends at first (often scrounging leftovers from his aunt's parties). In high school he recalled smoking weed with friends before school, and drinking too, several days per week.

He had long been aware of crack cocaine from the neighborhood, but was scared to try it. At age 16, Mr. Chappell was introduced to cocaine, in the form of crushed crack cocaine mixed with marijuana and rolled up. "It was a level further, sensation-wise." In Michigan, he and his friends still typically stuck to marijuana and alcohol, only smoking crack occasionally when mixed with weed. After moving to Arizona at age 20, he stuck to alcohol at first as he didn't have friends to use with, but then he was given some cocaine powder by a co-worker and he "rocked it up." Late 1990 was when he recalled starting to use crack more habitually.

IN-PERSON EXAMINATION

MENTAL STATUS EVALUATION

Mr. Chappell was jovial and cooperative with the visit. He was dressed in a prison jumpsuit, with a few days stubble and a short mustache, with black bifocal glasses. His responses were on-topic, with slow, considered speech. At times he would use more sophisticated words incorrectly. He appeared open and unguarded in his responses, without depressed or anxious affect. There was no evidence of pressured speech, flight of ideas, or responding to internal stimuli.

Mr. Chappell failed the Montreal Cognitive Assessment (MoCA, version 7.1),[6] which is a medical clinician screening tool for cognitive dysfunction, used in this case for a brief qualitative evaluation. It not intended to supersede the type of neuropsychometric testing performed by psychologists, as many of the tasks are easier than those found on formal diagnostic tests.

His total score on the MoCA was 24 out of 30 (in the abnormal range, even with one point added for abbreviated education), with a normal score being 26 or above. He appeared to give good effort, without clear evidence of malingering. Subtest results are listed below.

Visuospatial/Executive: Mr. Chappell's alternate trail-making was incorrect, as he connected D to E without immediate correction. 3-D cube copy was correct as was his "draw-a-clock". He achieved 4 out of 5 points in this section.

Naming: He was able to correctly identify a drawing of a lion, rhinoceros, and camel. (3/3 points)

Attention: A 5-digit list was recalled correctly with forward order, but incorrect with 3-digit list in backward order; he showed slow response but passed a vigilance task; serial 7 subtractions from 100 was correct in terms of results but qualitatively interesting as he originally did the answers in his head but not out loud to me, and was remarkably slow albeit correct in his subtraction. (5/6 points)

Language: He failed to accurately repeat both sentences - "I only know that John is the one to help today" became "I only know that John is the one that help today," and "The cat always hid under the couch when dogs were in the room" became "Cats always hid under the couch when the dogs were in the room." Language fluency (maximum number of words he could produce that start with F) was adequate, with 12 words in one minute. (1/3 points)

[6] Nasreddine, Z. S., Phillips, N. A., Bédirian, V., Charbonneau, S., Whitehead, V., Collin, I., et al. (2005). The Montreal Cognitive Assessment, MoCA: a brief screening tool for mild cognitive impairment. Journal of the American Geriatrics Society, 53(4), 695-699.

Abstraction: He was able to briefly describe a similarity between train & bicycle ("transportation") but failed watch & ruler ("they both have numbers," which is too concrete). (1/2 points)

Delayed Recall: He recalled the 3 of 5 words at 5 minutes, got one remaining word with category prompt and the other with multiple choice prompt. (3/5 points)

Orientation: Intact to day of week, month, year, date, place, and city. (6/6 points)

His performance on this screening evaluation indicated potential problems in visuospatial/executive skills, attention, language, abstract thinking, and memory. Such results would have prompted a recommendation for a full neuropsychometric evaluation had one not already been performed, especially with a known prenatal alcohol exposure and history of special education.

LIMITED PHYSICAL EXAMINATION

The prison declined my request to take measurements or conduct a contact physical examination with my customary equipment. The prison staff did take measurements earlier in the morning, and a correctional officer took a few confirmatory facial photographs at my direction.

Weight: 256 pounds on facility scale per prison staff, which is at the 99th percentile.

Height: 72 inches per prison staff, which is at the 81st percentile.

Body Mass Index (BMI): 34.7

Occipitofrontal head circumference (OFC): 22 inches per prison staff (50th percentile).

General: Pleasant middle-aged African-American male clothed in orange jumpsuit with white t-shirt, unshackled. He entered with a mild limp which he attributed to a recent basketball injury.

Head, Eyes, Ears, Nose, Throat (HEENT): Upper lip was a 3 (just below the FAS range), using the in-person guide appropriate for his ethnicity. Philtrum (vertical groove between nose and lip) depth was a 3-4 on the lip-philtrum guide (on the borderline of the FAS range, obscured somewhat by facial hair). Palpebral fissure lengths (width of visible eye openings) were measured manually at 29 mm bilaterally.

Head shape was not markedly abnormal, although he did have a sloping forehead. No midface flattening. Typical ear position and rotation, with mild "railroad track" ear configuration on the right. Conjunctivae clear. Palate intact.

Neck: No visible thyromegaly.

Chest: Typical respiratory rate with comfortable breathing.

Abdomen: Soft, non-tender, without palpable organomegaly.

Skin: No birthmarks of note on face or distal arms.

Extremities: No clinodactyly, unusual palmar creases, elbow valgus or evidence of radio-ulnar synostosis.

Neurologic: Right-handed. Cranial nerves II-XII grossly intact. Visual fields intact. Palmar digit recognition intact. Slow rapid alternating movements, with deliberate but accurate fingertip touching. Finger-nose-finger accurate but slow. Unsteady tandem gait, possibly due to sore knee. Romberg negative. No evident tics, tremors, or unusual movements.

PHOTOGRAPHIC ANALYSIS OF FACIAL FEATURES[7]

The University of Washington FAS Facial Photographic Analysis Software is used by clinics around the world to analyze the sentinel facial features of FAS, and has been shown to be more accurate and reliable than manual evaluations, particularly in eye measurements.[8] The photographs analyzed here were taken at Dr. Paul Connor's visit, when Mr. Chappell was clean-shaven.

Palpebral fissure lengths (eye widths): Mean palpebral fissure lengths (PFL) of 28.5 mm, which is -1.5 standard deviations (SD) below the mean on the Iosub PFL chart, which is a African-American normed chart.

Lip: Lip circularity 46.9, rank of 3 on the the University of Washington African-American Lip-Philtrum Guide (which is just below the FAS range on a scale of 1-5, with 5 being the most severe, and 4-5 being in the FAS range).

Philtrum: Rank of 3 (very close to 4, on the borderline of the FAS range on a scale of 1-5) on the University of Washington African-American Lip-Philtrum Guide.

[7] Astley S. J. Fetal Alcohol Syndrome Facial Photographic Analysis Software, version 2.0.
[8] Astley, S. J. (2015). Palpebral fissure length measurement: accuracy of the FAS facial photographic analysis software and inaccuracy of the ruler. Journal of Population Therapeutics and Clinical Pharmacology, 22(1), e9-e26.

DIAGNOSIS AND OPINION

Based on my examination of James Chappell and review of relevant ancillary materials, it is my opinion to a reasonable degree of medical certainty that Mr. Chappell has Alcohol-Related Neurodevelopmental Disorder (ARND) using the Institute of Medicine (IOM) Criteria.[9] This is a diagnosis under the umbrella of Fetal Alcohol Spectrum Disorders (FASD).

When evaluating for a Fetal Alcohol Spectrum Disorder, there are 4 main areas to explore: history of prenatal alcohol exposure, evidence of growth deficiency, degree of FAS facial features, and level of brain dysfunction. A process of differential diagnosis is also important, to consider other genetic, prenatal, postnatal, medical, and psychiatric explanations for a patient's outcomes.

FASD diagnosis is multi-disciplinary, and it is typical for medical professionals to rely on the reports of colleagues such as psychologists when evaluating level of brain dysfunction, adaptive functioning, and life history.

IOM DIAGNOSTIC CRITERIA FOR ARND

The Institute of Medicine criteria for ARND are summarized as follows:

Alcohol-Related Effects

Clinical conditions in which there is a history of maternal alcohol exposure,[a,b] and where clinical or animal research has linked maternal alcohol ingestion to an observed outcome.

Alcohol-related neurodevelopmental disorder (ARND)

Presence of:

A. Evidence of CNS neurodevelopmental abnormalities, as in any one of the following:
— decreased cranial size at birth
— structural brain abnormalities (e.g., microcephaly, partial or complete agenesis of the corpus callosum, cerebellar hypoplasia)
— neurological hard or soft signs (as age appropriate), such as impaired fine motor skills, neurosensory hearing loss, poor tandem gait, poor eye-hand coordination

and/or:

B. Evidence of a complex pattern of behavior or cognitive abnormalities that are inconsistent with developmental level and cannot be explained by familial background or environment alone, such as learning difficulties; deficits in school performance; poor impulse control; problems in social perception; deficits in higher level receptive and

[9] Stratton, K. R., Howe, C. J., Battaglia, F. C., Institute of Medicine (U.S.). Division of Biobehavioral Sciences and Mental Disorders. Committee to Study Fetal Alcohol Syndrome, National Institute on Alcohol Abuse and Alcoholism (U.S.). (1996). Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment. National Academies Press.

expressive language; poor capacity for abstraction or metacognition; specific deficits in mathematical skills; or problems in memory, attention, or judgment

[a] A pattern of excessive intake characterized by substantial, regular intake or heavy episodic drinking. Evidence of this pattern may include frequent episodes of intoxication, development of tolerance or withdrawal, social problems related to drinking, legal problems related to drinking, engaging in physically hazardous behavior while drinking, or alcohol-related medical problems such as hepatic disease.

[b] As further research is completed and as, or if, lower quantities or variable patterns of alcohol use are associated with ARBD or ARND, these patterns of alcohol use should be incorporated into the diagnostic criteria.[10]

ALCOHOL

Mr. Chappell was exposed to substantial, regular maternal alcohol intake: several hard liquor drinks per occasion several times a week, regularly witnessed to be intoxicated during this pregnancy. His mother is long deceased, but this exposure is reported by multiple friends, partners, and family members who observed her drinking and/or intoxicated during the pregnancy. This meets original IOM criteria for "a pattern of excessive intake."

Even if the alcohol exposure were at a lesser level, harms from maternal drinking at low to moderate levels have been shown in multiple research reports subsequent to publication of the IOM criteria;[11] [12] [13] this is reflected in the U.S. Surgeon General advisory that "No amount of alcohol consumption can be considered safe during pregnancy."[14]

GROWTH

James's birth weight was at the 16th percentile, and his height at 5.5 years was short, at the 4th percentile. Other early childhood birth data is lacking. Mr. Chappell does not show current deficits in weight or height. The growth impairments in FAS are typically most evident in the newborn and early childhood period, and often "catch up" in

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[10] Stratton, K. R., Howe, C. J., Battaglia, F. C., Institute of Medicine (U.S.). Division of Biobehavioral Sciences and Mental Disorders. Committee to Study Fetal Alcohol Syndrome, National Institute on Alcohol Abuse and Alcoholism (U.S.). (1996). Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment. National Academies Press.
[11] Sood B, Delaney-Black V, Covington C, Nordstrom-Klee B, Ager J, Templin T, et al. Prenatal alcohol exposure and childhood behavior at age 6 to 7 years: I. dose-response effect. Pediatrics 2001;108:E34.
[12] Flak AL, Su S, Bertrand J, Denny CH, Kesmodel US, Cogswell ME. The Association of Mild, Moderate, and Binge Prenatal Alcohol Exposure and Child Neuropsychological Outcomes: A Meta-Analysis. Alcohol Clin Exp Res 2013;38:214–26.
[13] Astley SJ. Profile of the first 1,400 patients receiving diagnostic evaluations for fetal alcohol spectrum disorder at the Washington State Fetal Alcohol Syndrome Diagnostic & Prevention Network. Can J Clin Pharmacol 2010;17:e132–64.
[14] United States Public Health Service Office of the Surgeon General. A 2005 Message to Women from the U.S. Surgeon General. Centers for Disease Control, Washington, DC 2005.

adolescence.[15] However, Mr. Chappell's scant available growth history does not meet growth criteria for FAS at this time.

FACIAL FEATURES

Mr. Chappell has an upper lip thickness that is just in the normal range (a rank 3 on a scale of 1 to 5 where 4 and 5 are in the FAS range). He has a philtrum (vertical groove between nose and upper lip) on the borderline between normal and FAS range. He has palpebral fissure lengths (eye widths) that are at the 7th percentile (-1.5 SD). Mr. Chappell is thus close to the FAS facial phenotype in all three sentinel features but does not meet criteria for the face of FAS.

In practice, the classic face of FAS is uncommon: only 9% of our FAS clinic patients have these features.[16] Research suggests that the facial features of FAS require an alcohol exposure during a very narrow window of opportunity, around days 19-20 of pregnancy. The developing brain can be damaged at any point in pregnancy.

BRAIN

In an FASD evaluation, we look for structural and/or functional evidence of brain damage. Mr. Chappell has not had a head CT or MRI, we lack birth/childhood head circumferences, and his adult head circumference is in the typical range.

My exam found no evidence of neurological hard signs (impairments in basic motor, sensory, and reflex behaviors that typically indicate a focal deficit) but did note some soft signs (non-localizing neurological abnormalities) such as slow rapid alternating movements and finger-nose-finger touching, as well as an unsteady tandem gait, (possibly influenced by sore knee). His non-dominant hand finger-tapping was at the 4th percentile and multiple informants described poor coordination as a child.

In addition, Mr. Chappell has an abnormal qEEG. qEEG compares surface measurements of brain electrical activity to a normative database, digitally analyzing various aspects of brain function such as electrical power, asymmetry, coherence and phase lag between regions. Use of LORETA (Low Resolution Tomography) techniques permits findings to be mapped to brain anatomical locations.[17]

Mr. Chappell's qEEG is abnormal in regions (frontal and limbic lobes) and in patterns (EEG coherence suggestive of reduced speed and efficiency of information processing) that correspond to his functional impairments. It would be inappropriate to use qEEG

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[15] Carter, R. C., Jacobson, J. L., Sokol, R. J., Avison, M. J., & Jacobson, S. W. (2013). Fetal alcohol-related growth restriction from birth through young adulthood and moderating effects of maternal prepregnancy weight. Alcoholism Clinical and Experimental Research, 37(3), 452–462.

[16] Astley, S. J. (2010). Profile of the first 1,400 patients receiving diagnostic evaluations for fetal alcohol spectrum disorder at the Washington State Fetal Alcohol Syndrome Diagnostic & Prevention Network. The Canadian Journal of Clinical Pharmacology, 17(1), e132–64.

17 Coburn, K. L., Lauterbach, E. C., Boutros, N. N., Black, K. J., Arciniegas, D. B., & Coffey, C. E. (2006). The value of quantitative electroencephalography in clinical psychiatry: a report by the Committee on Research of the American Neuropsychiatric Association. The Journal of Neuropsychiatry and Clinical Neurosciences, 18(4), 460–500.

results alone in diagnosis without clinical correlation, and in routine FASD practice in-depth neuropsychometric testing is much more commonly used. However, it can be argued that a qEEG with significant abnormalities when compared to a large normative database provides some convergent evidence of brain damage/dysfunction, and might serve as a "digital soft sign."

In 1996 qEEG was in use, and by 2007 techniques such as LORETA had been refined. The IOM authors were ambivalent about the use of neurodiagnostic techniques, citing concerns that CT and MRI brain scans at the time lacked large normative databases. Nonetheless, IOM criteria included examples of structural brain abnormalities (partial or complete agenesis of the corpus callosum, cerebellar hypoplasia) which would require brain scans to diagnose in a living patient. Currently (and in 2007) the use of MRI to diagnosis significant structural abnormalities in FASD is widely accepted, so standards have clearly evolved.

Thus it is unclear whether Mr. Chappell meets IOM criterion A for evidence of CNS neurodevelopmental (structural) abnormalities. He does not need to, since ARND requires evidence of structural abnormalities *and/or* functional cognitive abnormalities. In practice the latter is more common.

Multiple evaluators have found evidence of dysfunction in Mr. Chappell's brain functioning in the following areas: intellectual functioning, academic functioning, learning and memory, visuospatial construction and organization, attention, processing speed, executive functioning, language/communication, daily living skills, and socialization skills.

The domains with most significant impairment appear to be his learning disability in math, significant impairments in memory, severely impaired performance on visuospatial organization, poor executive functioning performance with low external structure, and his overall very poor real-world and testing performance in language/communication/social use of language domains. In addition, his teacher, peer, and family reports suggest that James would have received an ADHD diagnosis in childhood had he received a modern evaluation.

Mr. Chappell's pattern of disability is consistent with patterns of dysfunction seen in FASD, and satisfies IOM criteria for "B. Evidence of a complex pattern of behavior or cognitive abnormalities that are inconsistent with developmental level and cannot be explained by familial background or environment alone ...". Familial background and environmental impacts will be addressed in the following section on differential diagnosis, but by themselves do not convincingly explain his pattern of cognitive impairments.

Thus Mr. Chappell meets IOM criteria for Alcohol-Related Neurodevelopmental Disorder (ARND), which is a diagnosis under the umbrella of Fetal Alcohol Spectrum

Disorders (FASD).[18] It is also worth noting that Mr. Chappell would receive a DSM-5 diagnosis of Neurodevelopmental Disorder Associated with Prenatal Alcohol Exposure (ND-PAE, code F88).[19]

The DSM-5 criteria published in May 2013 address FASD in two sections. In the criteria for Other Specified Neurodevelopmental Disorder (F88), the only specific example given is for "Neurodevelopmental disorder associated with prenatal alcohol exposure: Neurodevelopmental disorder associated with prenatal alcohol exposure is characterized by a range of developmental disabilities following exposure to alcohol in utero." Mr. Chappell qualifies for this diagnosis based on the evidence presented above. More specific criteria for Neurobehavioral Disorder associated with Prenatal Alcohol Exposure (ND-PAE) are proposed in Conditions for Future Study, and Mr. Chappell meets all seven proposed criteria for ND-PAE.[20]

ADAPTIVE FUNCTIONING

It is important to note that the gap between some of Mr. Chappell's more intact testing scores (such as Performance IQ), his academic achievement that is lower than predicted by IQ, and his very dysfunctional adaptive functioning fits a "step-down" pattern frequently seen in people with ARND. They can perform at a relatively higher level in a one-on-one, focused testing environment, but have trouble translating that performance into the more complex environment of school, and have even more difficulty using their limited mental capacities in the less-structured life of an adolescent/young adult. They can perform more basic, rote skills but when complexity is introduced, or the need for abstract thought, interpretation, or judgment, their adaptive "real world" performance can be surprisingly impaired.

The accounts of James's day-to-day impairments from family, friends, and a former probation officer are striking in how well they fit typical FASD features: slower and more disabled than siblings from a young age, slow/simple language, ADHD symptoms, declining school performance as demands increased, having to learn things over and over, attempts to cover for deficits like reading difficulties, particular disability in math, difficulty with abstract concepts, poor coordination, lack of sense of direction, prolonged toileting and hygiene issues, very immature with widening gaps between James and peers over time, gullibility, dependence on more functional peers and family members, juvenile history of repeated impressionable/impulsive rule violations (stealing keychain, following peers into empty houses, etc.), and inability to function independently or hold a job as adult.

Adaptive functioning deficits are not required for a diagnosis of FASD, but it is notable that the adverse life outcomes (disrupted school experience, trouble with the law,

[18] He also meets 4-Digit Code criteria for Static Encephalopathy, Alcohol Exposed, which is equivalent to ARND.
[19] American Psychiatric Association DSM-5 Task Force (2013). Diagnostic and Statistical Manual of Mental Disorders : DSM-5. American Psychiatric Association, Washington, DC.
[20] *Ibid.*, pages 798-9.

confinement, drug/alcohol problems) experienced by Mr. Chappell fit a classic pattern of fetal alcohol "secondary disabilities."[21] These result from having the primary disabilities (brain damage that you're born with) of FASD but none of the identified protective factors such as early diagnosis of FASD and a stable, sober, and supportive childhood home.

A landmark investigation called "the Seattle 500 study" explored risk factors that influence these adverse FASD outcomes. What is remarkable about Mr. Chappell's history is that in addition to a high-risk pattern of prenatal alcohol exposure and current ARND diagnosis, his formative years were marked by *all* of the risk factors shown in this study to increase the risk of adverse outcomes: no early diagnosis of FASD, lack of stable/nurturing caregiving, multiple home placements, IQ over 70, domestic violence and abuse, poor quality home environment in middle childhood, caregivers who abused alcohol, many life basic needs not met, male gender, and having ARND rather than FAS. These risk factors increase the odds of adverse outcomes 2- to 4-fold.[22]

Indeed, individuals like Mr. Chappell with ARND rather than FAS, and those with broadly normal IQ rather than intellectual disability, are actually at higher risk for adverse life outcomes. This may be because they are less likely to receive an early diagnosis and appropriate supports.

DIFFERENTIAL DIAGNOSIS

Etiologies such as genetic inheritance and other adverse pre- and post-natal factors also likely contributed to the brain dysfunction displayed by Mr. Chappell.

His available family history contains abundant drug and alcohol abuse, some vague mental health risk, mother/siblings/aunts/uncles with varying degrees of special education needs for learning and behavioral problems, and possible ADHD in siblings, but is not notable for a formally diagnosed pattern of intellectual disability or genetic syndromes. Thus his maternal-side family history carries significant risk for attentional and learning disabilities, and both sides confer marked risk for substance abuse.

What is challenging with such a family history is assessing the relative contribution of genetic risk versus environmental/modeling influences versus multigenerational FASD (his grandmother was noted to drink as well, although we lack detailed exposure history for her children). It is likely that these influences interact with each other to increase risk. For example, research shows that prenatal alcohol exposure increases lifetime odds

[21] Streissguth AP, Kanter J. The Challenge of Fetal Alcohol Syndrome: Overcoming Secondary Disabilities. University of Washington Press; 1997.
[22] Streissguth, A. P., Bookstein, F. L., Barr, H. M., Sampson, P. D., O'Malley, K., & Young, J. K. (2004). Risk factors for adverse life outcomes in fetal alcohol syndrome and fetal alcohol effects. Journal of Developmental & Behavioral Pediatrics, 25(4), 228-238.

of alcoholism above any expected genetic risk; the fetus develops "a taste for alcohol" in the womb.[23]

Mr. Chappell was also reportedly prenatally exposed to heroin, cocaine, and tobacco. The presence of prenatal illegal drug exposure often overshadows alcohol in lay people's recollection and assignment of blame for outcomes. However, the research is clear that the legal product - alcohol - is the most worrisome exposure. Alcohol is a known teratogen; the other reported substances are not.

Prenatal opiate (heroin) exposure can cause neonatal withdrawal symptoms, may lead to mild memory and perceptual difficulties in older children, and can increase susceptibility to adverse childhood experiences. Cocaine use during pregnancy appears to be associated with irritability in young children and language difficulties in children/adolescents but is not associated with global deficits. Tobacco use during pregnancy increases risk for low birthweight, ADHD, and antisocial behaviors.[24]

In general, we worry more about exposures to toxins in the prenatal and early postnatal period than later in childhood, as the brain is more vulnerable during critical periods of organ development and rapid growth. Mr. Chappell was exposed to various environmental contaminants around his grandmother's home in Nellers Court. Of the toxins listed, most were solvents that are not clearly associated with long-term cognitive impacts. PCE (perchloroethylene/tetrachloroethylene) was one that can lead to headaches and later impairments in cognitive and motor functioning in adults that worked in or lived near dry cleaners that used this solvent. However, the literature on PCE and childhood exposures is "very limited ... the data supporting a cause-and-effect relationship for these effects are inadequate."[25] The current lead contaminant was reportedly introduced to the site after his family moved. However, childhood lead exposure was common at the time. Typical lead exposures of that era could lower IQ but not typically by more than 5-10 points.[26]

Postnatal adverse risk factors are extensive, and include early childhood neglect by his drug-abusing parents resulting in child services placement with his maternal grandmother at age 2; death of his mother at age 3 which had a significant impact in James, leading to withdrawal and mutism; emotional neglect and physical abuse in his grandmother's home; lack of appropriate supervision in childhood; lack of appropriate male role models; pervasive exposure to violence and substance abuse in his home and neighborhood; traumatic loss of the only adult in the family that showed him affection

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[23] Alati, R., Mamun, Al, A., Williams, G. M., O'Callaghan, M., Najman, J. M., & Bor, W. (2006). In utero alcohol exposure and prediction of alcohol disorders in early adulthood: a birth cohort study. Archives of General Psychiatry, 63(9), 1009-1016.

[24] Davies, J. K., & Bledsoe, J. M. (2005). Prenatal alcohol and drug exposures in adoption. Pediatric Clinics of North America, 52(5), 1369-93, vii.

[25] Agency for Toxic Substances and Disease Registry (ATSDR). (1997). Toxicological Profile for Tetrachloroethylene (Update). U.S. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA.

[26] Lanphear, B. P., Hornung, R., Khoury, J., & Yolton, K. (2005). Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. Environmental Health Perspectives, 113(7), 894-899.

at age 11; signs of untreated childhood depression; being easily influenced by peers involved in drugs and crime; and adolescent substance abuse (alcohol, marijuana, and cocaine). This life history multiplies the risk of adverse outcomes such as disrupted school experience, trouble with the law, confinement, mental health diagnoses, drug/alcohol problems; as described above, these risk factors increase the odds of such secondary disabilities in FASD 2- to 4-fold.[27]

Medically, Mr. Chappell's available history does not include significant episodes of traumatic brain injury. His history and physical examination did not suggest an alternative genetic or neurological diagnosis.

Mr. Chappell had a prominent substance use disorder in adolescence and early adulthood. He reportedly had a high tolerance to alcohol in adolescence, used marijuana regularly, and developed a worsening cocaine addiction in young adulthood. Substance abuse can have cognitive impacts, but these effects tend to improve with sobriety.

Adolescence does appear to be a vulnerable period where "Research has shown that heavy drinking during adolescence can lead to decreased performance on cognitive tasks of memory, attention, spatial skills, and executive functioning. ... Studies have also shown that marijuana use during adolescence can result in decreases in cognitive functioning, particularly learning and sequencing scores. ... Longitudinal studies are essential to fully understand how alcohol and marijuana use affect adolescent neurodevelopment."[28]

A review of long-term cognitive effects of cocaine abuse found that "Long-term cocaine use is associated with cognitive impairment in most domains. The strongest and most convincing evidence applies to the domains of sustained attention, response inhibition, memory, reward-based decision making, and psychomotor performance."[29] However, this and similar reviews do not specifically address cognitive recovery from adolescent/young adult abuse followed by a long period of abstinence.

It appears that Mr. Chappell's drug abuse may have worsened his preexisting deficits but is not a convincing alternate diagnosis. His drug abuse does not account for his childhood-onset disabilities and appears unlikely to adequately account for deficits years after his period of substance abuse.

Finally, Mr. Chappell has a history of childhood onset very poor self-image, depression, inattention, and disruptive behaviors at school, where he qualified as "Emotionally Impaired." Adult evaluators noted "enormously low self-worth," fear of rejection,

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[27] Streissguth, A. P., Bookstein, F. L., Barr, H. M., Sampson, P. D., O'Malley, K., & Young, J. K. (2004). Risk factors for adverse life outcomes in fetal alcohol syndrome and fetal alcohol effects. Journal of Developmental & Behavioral Pediatrics, 25(4), 228–238.

[28] Squeglia, L. M., Jacobus, J., & Tapert, S. F. (2009). The influence of substance use on adolescent brain development. Clinical EEG and Neuroscience : Official Journal of the EEG and Clinical Neuroscience Society (ENCS), 40(1), 31–38.

[29] Spronk, D. B., van Wel, J. H. P., Ramaekers, J. G., & Verkes, R. J. (2013). Characterizing the cognitive effects of cocaine: a comprehensive review. Neuroscience and Biobehavioral Reviews, 37(8), 1838–1859.

mistrust of others, abandonment anxiety, dependent personality type, and borderline personality characteristics. Mental health problems are frequently comorbid with FASDs. In one study of adults with FASD, 92% met criteria for an Axis-I disorder such as alcohol or drug dependence (60%), depression (44%), psychotic symptoms (40%), and anxiety or bipolar disorder (20% each). In addition, 48% met criteria for at least one personality disorder.[30]

It is vanishingly rare to see an adult in a FAS clinic that does not have some combination of at-risk family history, prenatal alcohol exposure, other prenatal influences, adverse childhood experiences, and adolescent/adult issues such as substance abuse and mental illness. It is not scientifically possible to precisely tease apart the negative influences of all of these factors. However, Mr. Chappell's childhood-onset disabilities, functional evidence of brain deficits consistent with prenatal alcohol impacts, and life-long adaptive functioning that is very typical of individuals with FASD implicate prenatal alcohol damage as a primary cause.

SUMMARY

James Chappell has Alcohol-Related Neurodevelopmental Disorder (ARND), also known as Neurodevelopmental Disorder associated with Prenatal Alcohol Exposure (ND-PAE), which is a Fetal Alcohol Spectrum Disorder. This syndrome was present at birth, but compounded by genetic risks, other prenatal exposures, adverse childhood experiences, possible damage from environmental contaminants, mental illness, and substance abuse.

Based on my review of the available records and my in-person examination, I hold the above opinions to a reasonable degree of medical certainty. The analysis I have conducted could have been conducted by any qualified FASD professional at the time of Mr. Chappell's trial (1996) and penalty re-hearing (2007).

The diagnosis of ARND made here establishes that Mr. Chappell does have a mental disease and defect. By virtue of this disorder being a result of exposing a fetus to a toxic substance, this condition was present before the age of 18 and preceded the subject offense.

Thank you for the opportunity to examine Mr. Chappell,

MD

Julian Davies, MD

[30] Famy, C., Streissguth, A. P., & Unis, A. S. (1998). Mental illness in adults with fetal alcohol syndrome or fetal alcohol effects. The American Journal of Psychiatry, 155(4), 552–554.

MATERIALS RELIED UPON (Amended)

DOCUMENTS PROVIDED TO DR. JULIAN DAVIES

- School Grades Chart, James M. Chappell
- School Testing Chart, James M. Chappell
- Social History Chronology
- Preliminary Chart, Current Neuropsychological Testing of James Chappell
- Preliminary Neuropsychological Assessment Services Summary Scores, James Chappell
- Excerpts from I-File from Ely State Prison for James Chappell
- Excerpts of Medical Records from Ely State Prison for James Chappell
- Juvenile Record, James M. Chappell
- Photos of James Chappell (taken at Ely State Prison (7-11-2016)
- Nevada Supreme Court Opinion (12-30-1998)
- Dr. Jonathan Lipman, Final Report (8-12-2006)
- Dr. Matthew Mendel, Final Report (6-27-2016)
- Dr. Lewis Etcoff, Report (6-13-1996)
- Dr. Lewis Etcoff, Supplemental Report (9-28-1996)
- Quantitative EEG Analysis, Dr. Robert M. Thatcher (8-1-2016)
- Dr. Natalie Novick Brown, Final Report (8-3-2016)
- Dr. Paul Connor, Final Report (7-15-20006)

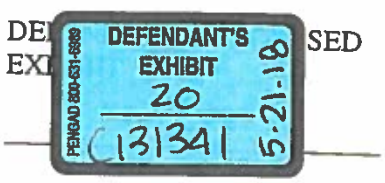
School records, James M. Chappell

- 1976-1977 Moores Park School, Semester Report
- 1979-1980 Moores Park School, Student Progress Report
- 09-05-1980 Class assignment
- 09-0-1980 Daily Progress Report
- 1981, Forest View School, Student Progress Report
- 1982, Maple Grove School, Certificate of Completion-6th grade
- 06-14-1978 Lansing School District Environmental Education Center, Certificate
- 1978, Moores Park School, Certificate for Field's Day
- Junior Citizen's Award, Officer Friendly Program
- Lansing School District, Cumulative School Record
- 1977 Moores Park School, Certificate

Declarations of:

- Angela Mitchell (8-9-16)
- Benjamin Dean (4-17-16)
- Bret Robello (9-29-16)
- Carla Chappell (4-23-16)
- Charles Dean (4-19-16)

DE SED
EX



- Clare McGuire (8-19-16)
- Dina Richardson (8-9-16)
- Ernestine 'Sue' Harvey (7-2-16)
- Fred Dean (6-11-16)
- Georgette Sneed (5-14-16)
- Harold Kuder (4-17-16)
- James Ford (5-19-16)
- James Wells (1-22-16)
- Joetta Ford (5-18-16)
- Lila Godard (8-5-16)
- Louise Underwood (9-22-16)
- Madge Cage (9-24-16)
- Michael Chappell (5-14-16)
- Michael Pollard (9-14-16)
- Myra Chappell-King (5-20-16)
- Phillip Underwood (4-17-16)
- Rodney Axam (4-16-16)
- Rose Wells-Canon (4-16-16)
- Rosemary Pacheco (8-9-16)
- Sharon Axam (4-18-16)
- Sheron Barkley (4-16-16)
- Shirley Sorrell (9-23-16)
- Terrance Wallace (5-16-16)
- Verlean Townsend (9-23-16)
- William Earl Bonds (5-13-16)
- William Roger Moore (4-17-16)
- Willie Richard Chappell, Jr. (5-16-16)
- Willie Richard Chappell, Sr. (4-16-16)
- Willie Wiltz, Jr. (7-28-16)

Trial and 2nd Penalty Trial Testimony of:

- Trial Testimony, Dr. Lewis Etcoff (10-15-1996)
- 2nd Penalty Trial Testimony, Dr. Lewis Etcoff (3-16-07)
- 2nd Penalty Trial Testimony, Dr. William Danton (3-14-07)

Neuropsychological Functioning: James Chappell

Paul D. Connor, Ph.D.

Neuropsychologist

Fetal Alcohol Spectrum Disorder (FASD)

FASD: Umbrella term for group of conditions caused by maternal alcohol consumption, which result in CNS Dysfunction.

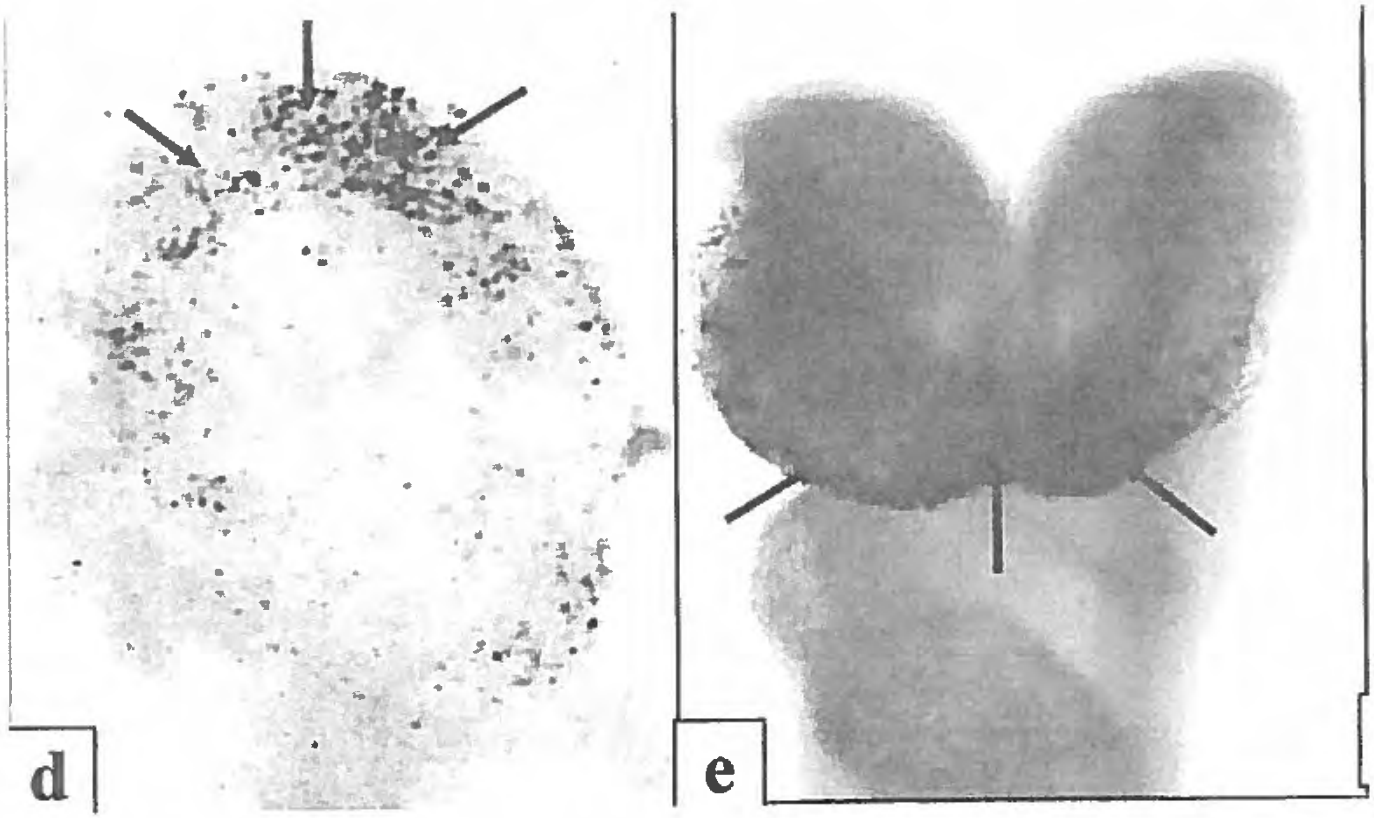
- FAS (fetal alcohol syndrome)
- PFAS (partial fetal alcohol syndrome)
- ARND (alcohol-related neurodevelopmental disorder)

FAE: Previous term for PFAS, ARND

- Other substances can affect gestating infants, but none do so in the same manner as alcohol

Alcohol is a Teratogenic Drug

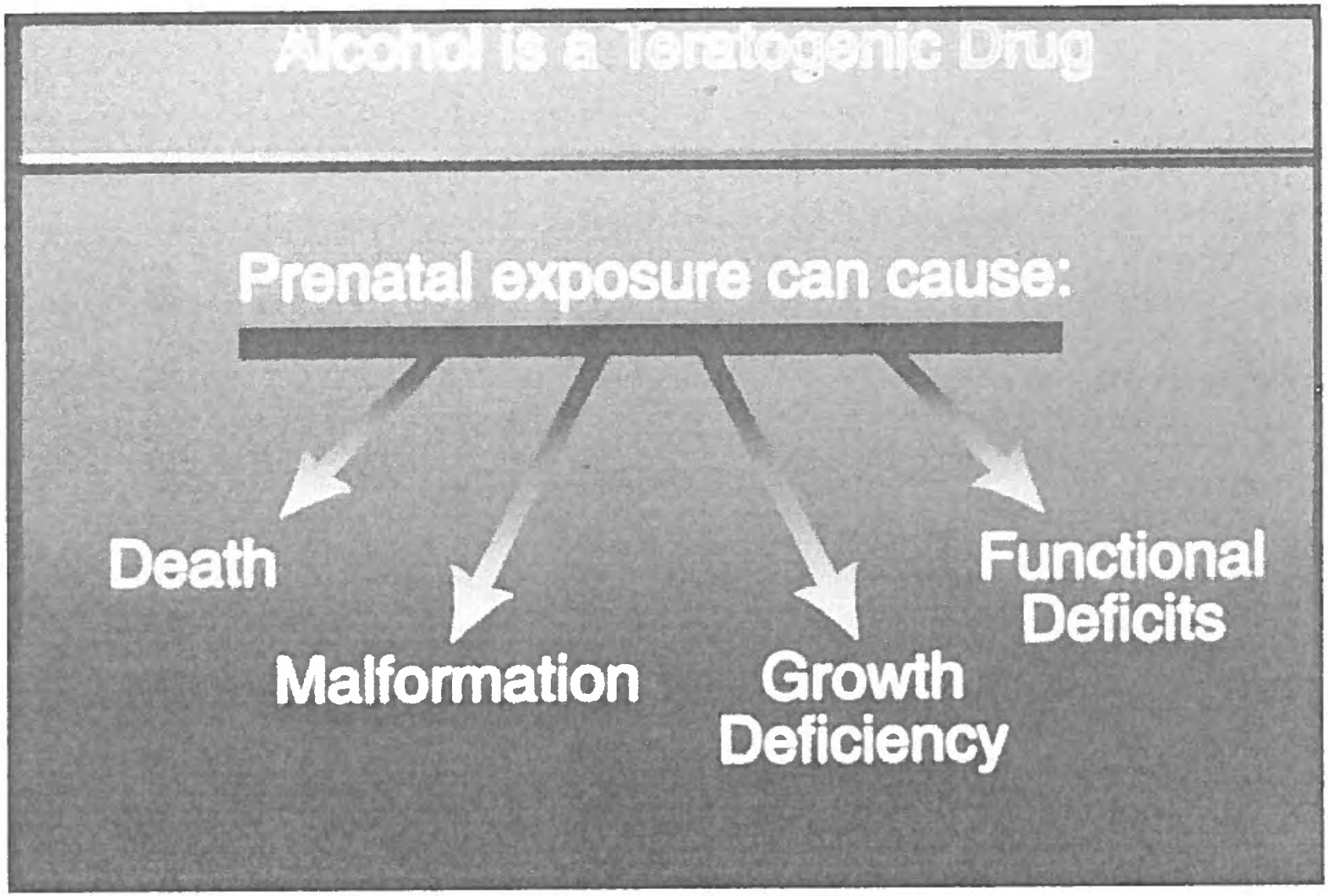
- Alcohol freely passes from the mother's blood into the fetus.
- A fetus has no functioning liver early in gestation.
- Fetal brain cell death commences within 12 hours of maternal alcohol exposure.

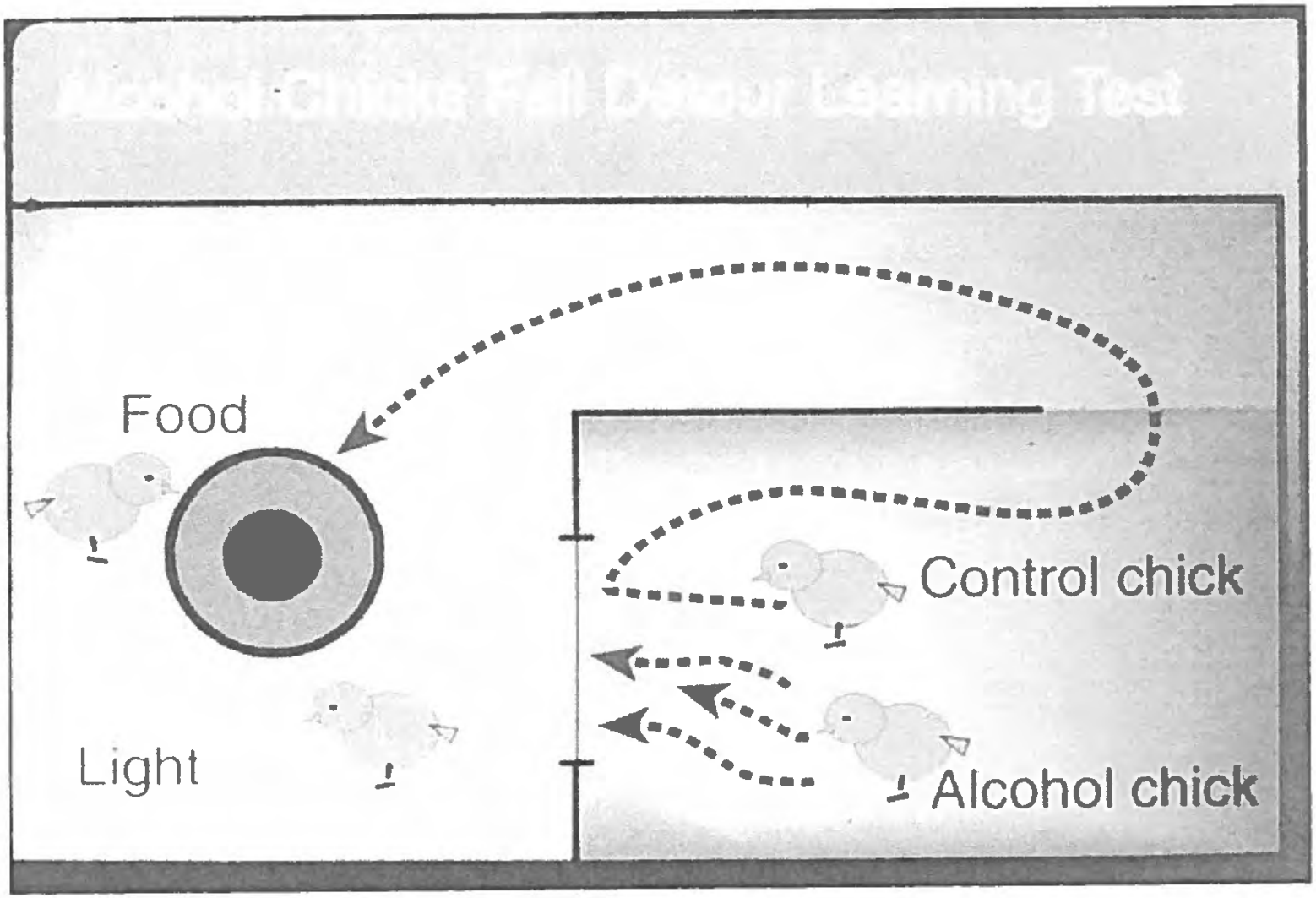


Sulik KK. Genesis of Alcohol-Induced Craniofacial Dysmorphism.
Exp Biol Med 230(6): 366- 375, 2005, Figure 4 at page 370.

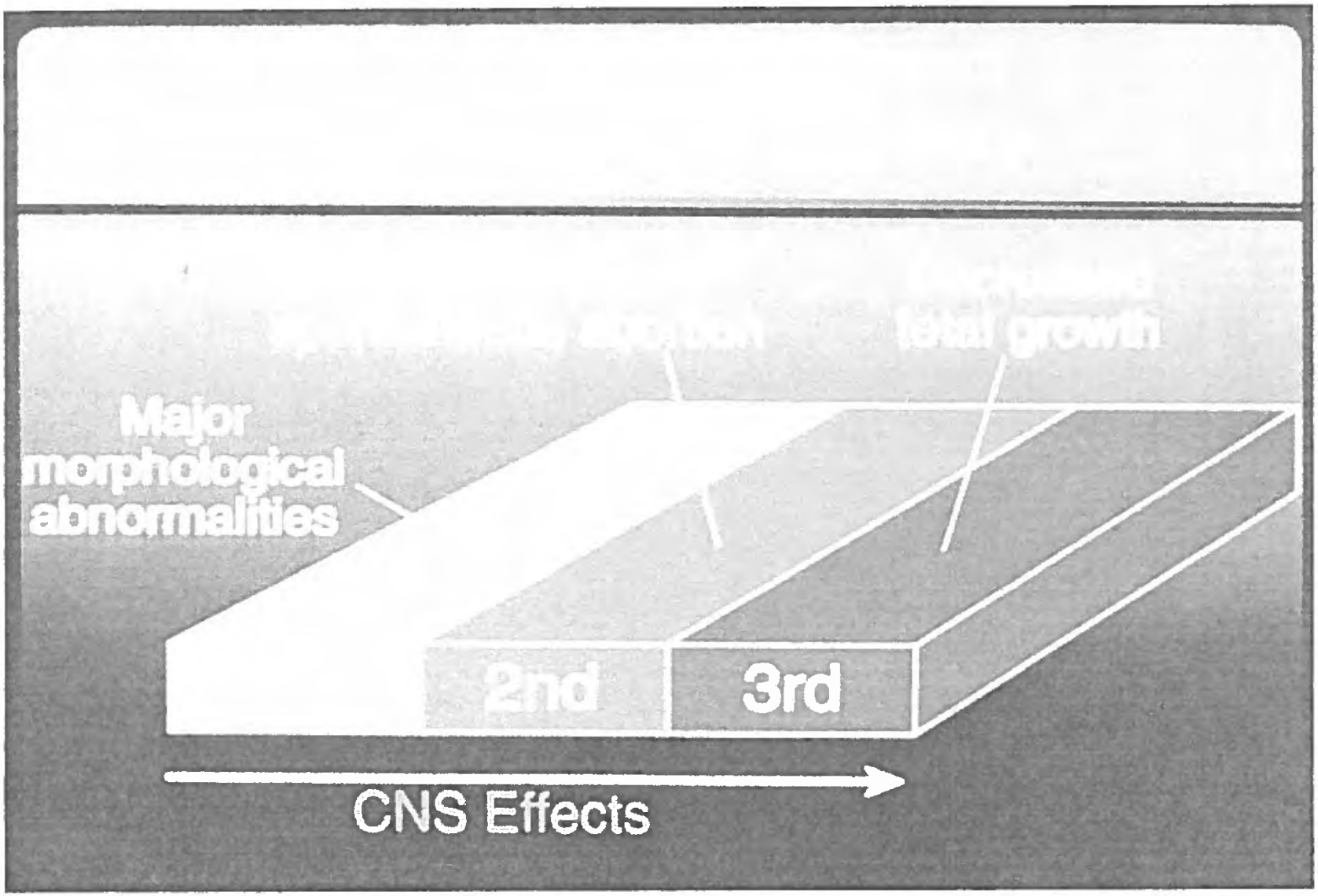
Teratogenic Effects of Prenatal Alcohol Exposure

- Direct toxic effect of alcohol on cells
- Direct toxic effect of acetaldehyde on cells
- Hypoxia from impaired placental/fetal blood flow
- Effect on migration of cells
- Effect on apoptosis


Alcohol is a Teratogenic Drug
Prenatal exposure can cause:
Death
Malformation
Growth Deficiency
Functional Deficits



Means, McDaniel, Pennington (1989) *Alcohol*


Major
morphological
abnormalities
fetal growth
2nd
3rd
CNS Effects

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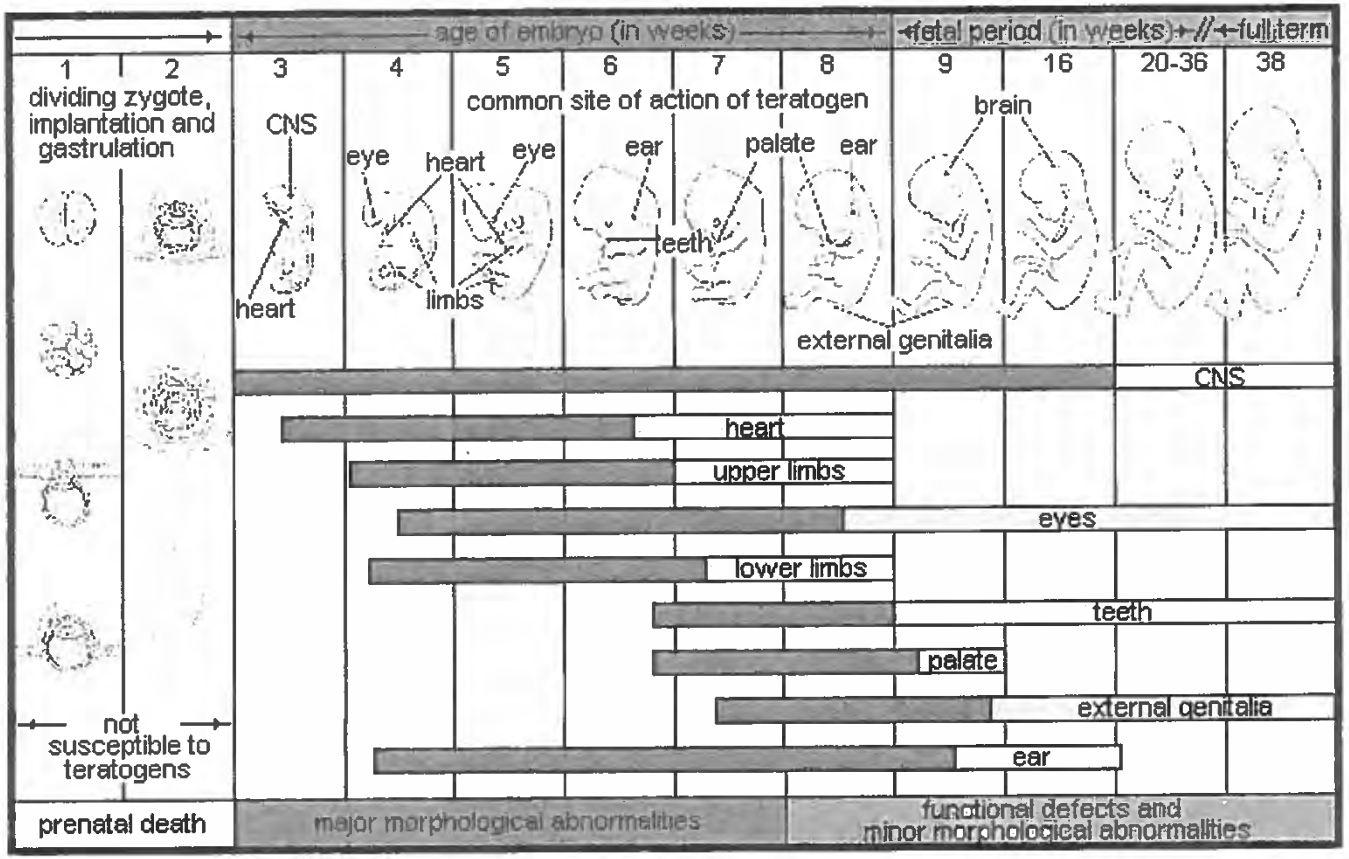
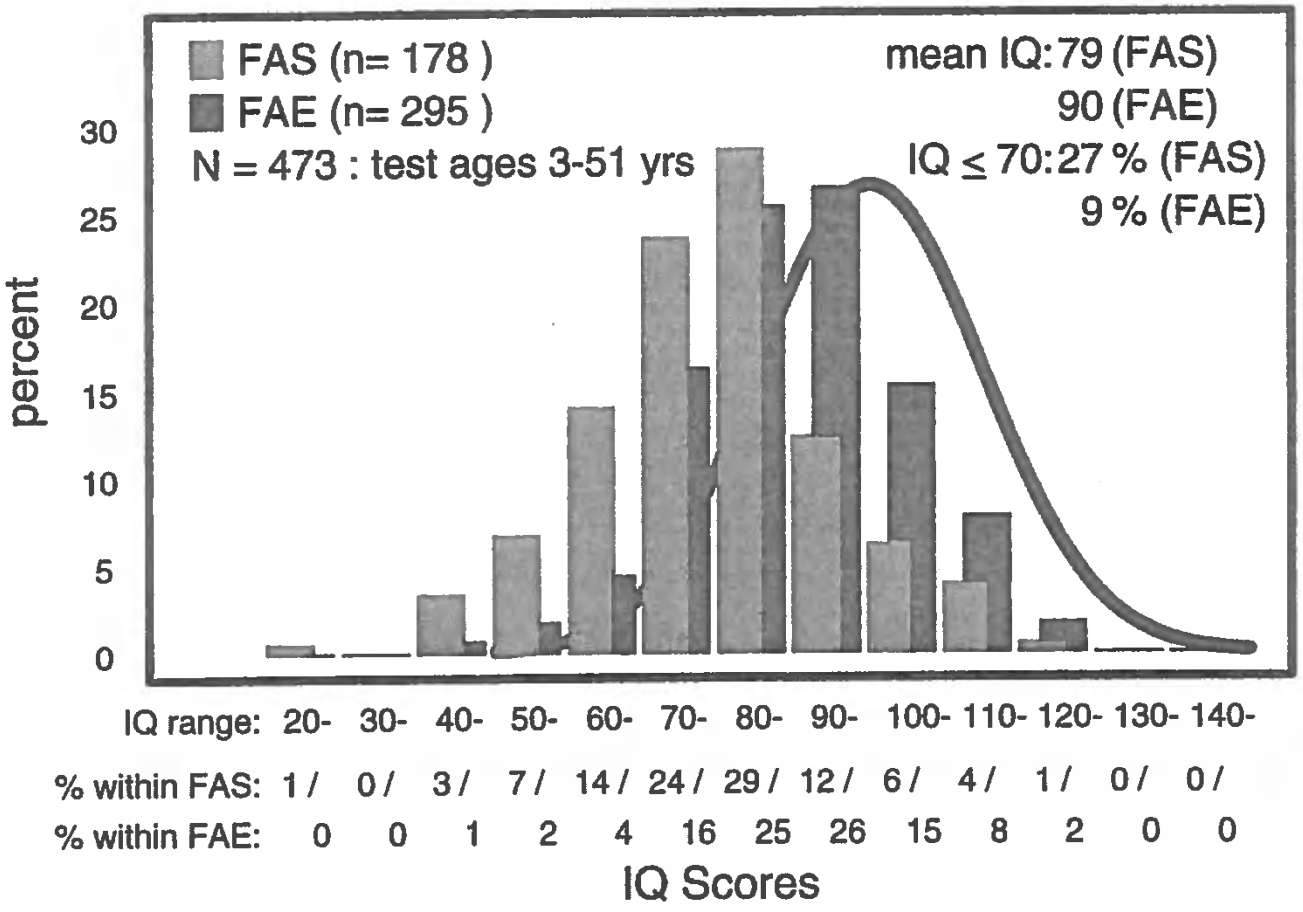
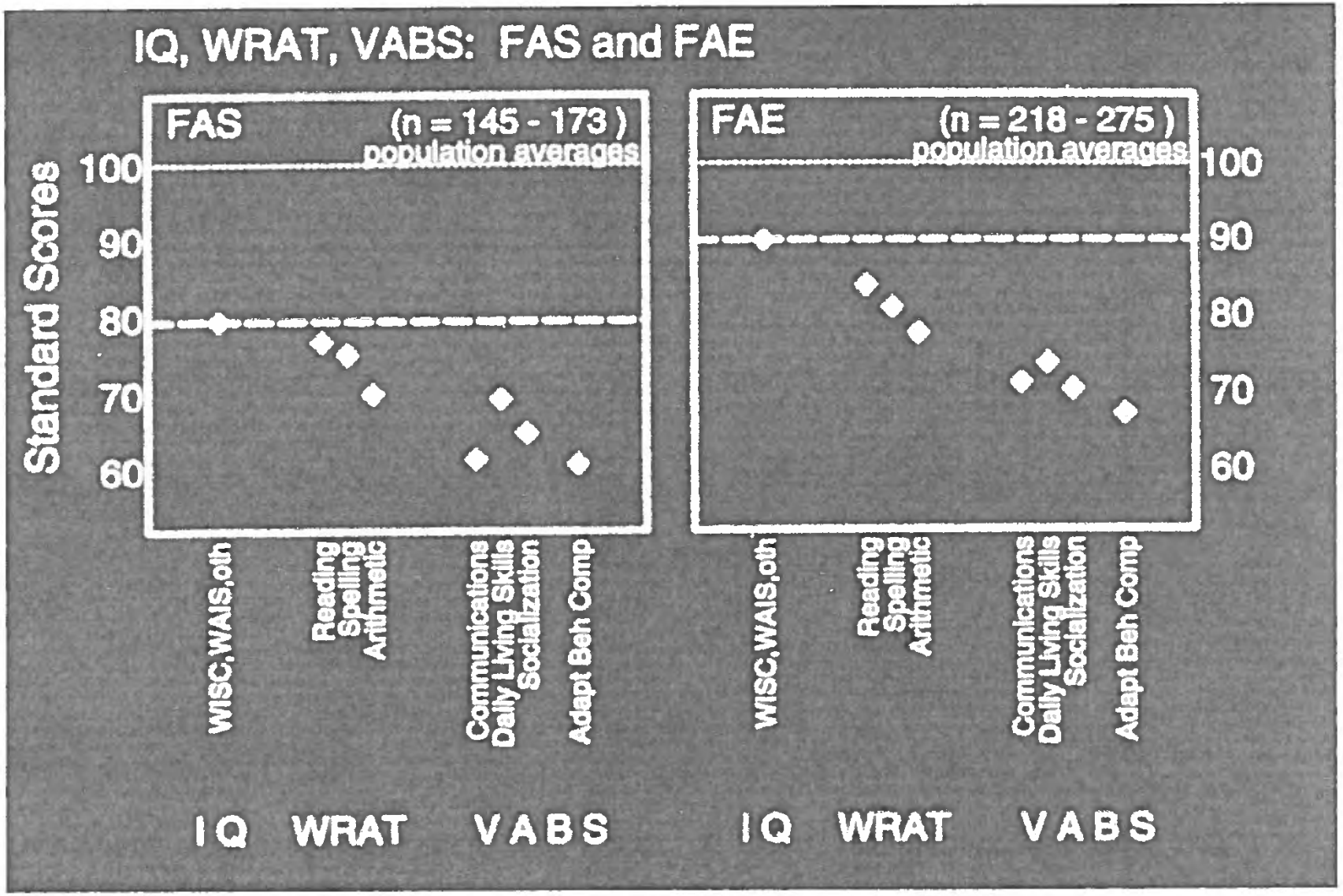

age of embryo (in weeks)
fetal period (in weeks)
full term
1
2
3
4
5
6
7
8
9
16
20-36
38
dividing zygote, implantation and gastrulation
common site of action of teratogen
CNS
heart
eye
heart
eye
limbs
ear
teeth
palate
ear
external genitalia
brain
CNS
heart
upper limbs
eyes
lower limbs
teeth
palate
external genitalia
ear
not susceptible to teratogens
prenatal death
major morphological abnormalities
functional defects and minor morphological abnormalities

IQ distributions in the Primary Disabilities Sample: FAS and FAE




IQ, WRAT, VABS: FAS and FAE
FAS
(n = 145 - 173)
population averages
FAE
(n = 218 - 275)
population averages
Standard Scores
100
90
80
70
60
WISC,WAIS,oth
Reading
Spelling
Arithmetic
Communications
Daily Living Skills
Socialization
Adapt Beh Comp
IQ WRAT VABS
IQ WRAT VABS

IOM Guidelines

- D. Evidence of CNS neurodevelopmental abnormalities, as in:
  - Decreased cranial size
  - Structural brain abnormalities
  - Neurological hard or soft signs such as **impaired fine motor skills, poor eye hand coordination**
- **E. Evidence of a complex pattern of behavior or cognitive abnormalities that are inconsistent with developmental level and cannot be explained by familial background or environment alone, such as learning difficulties; deficits in school performance; poor impulse control; problems in social perception; deficits in higher level receptive and expressive language; poor capacity for abstraction or metacognition; specific deficits in mathematical skills; or problems in memory, attention, or judgment**

CDC Guidelines

- Functional Deficits
  - IQ 2 SD below average
  - Deficits 1 SD below average in at least 3 domains
    - Cognitive or developmental or **Discrepancies** (Including academics)
    - Executive functioning
    - Motor functioning
    - Attention or hyperactivity
    - Social skills
    - Other domains that can include sensory problems, pragmatic language problems (receptive and expressive communication), and learning and memory deficits among others (not meant to be an all inclusive list)

Using CDC Criteria to Apply to IOM

- CDC criteria is:
  - More structured
  - More able to be applied consistently and reliably across cases
- Therefore, they could be used as a method of quantifying IOM requirements for a "…complex pattern of behavior or cognitive abnormalities…"

What is a Neuropsychological Assessment

- A series of tests designed to measure brain functioning
- Does not diagnose "brain damage" per se but "brain dysfunction"
- Tests based on functions found to be impaired in people with damage to brain in multiple areas
  - Usually learned from cases in which specific regions of brain have been damaged resulting in specific deficits (i.e. Phineas Gage, H.M.)
  - Memory deficits related to damage to parts of temporal lobe (hippocampus)
  - Executive function deficits related to damage to frontal lobes
- Looking for Significant Deficits (more than 84% of the population performed better
  - Further broken into levels of severity (e.g. mild, moderate, severe)
  - However, at whatever level, it refers to **impairment** in functioning (e.g. intellectual disability)
- However, A diagnosis of an FASD **does mean** that the individual has brain damage due to the prenatal alcohol exposure.

Role of Neuropsychology in the Diagnosis of FASD

- Identify pattern of current strengths and weaknesses of the client
- Determine consistency with research on FASD
- Address the timeline of cognitive deficits (prior testing)
  - Addressed more extensively by the psychologist focusing on historical consistency
- Identify competing etiologies
- Render an opinion of meeting criteria for FASD based on CDC Guidelines and provide DSM-5 diagnosis
- Refer information on to M.D. for final medical diagnosis

Expected Findings in FASD

- Rarely see IQ below 70
  - Often "split" between Verbal and Nonverbal
- "Patchy" (irregular) presentation rather than global or focal deficits with considerable variability between strengths and weaknesses
- Academic deficits especially in arithmetic
- Social/Adaptive functioning deficits
  - worse than expected based on IQ
- Executive function deficits
  - especially on low structure tasks
- Increased variability in performance over time

Neuropsychological Assessment for FASD

- Created a battery that incorporated many of the most salient clinical tests and domains of functioning based on 30+ years of research experience
  - IQ (WAIS-IV)
  - Achievement (WRAT-4)
  - Visual Spatial Construction (RCFT)
  - Learning and Memory (CVLT, RCFT)
  - Attention (CPT)
  - Motor Coordination (Grooved Pegs, Finger Tap)
  - Executive Functions (WCST, DKEFS, COWAT, RFF, Stroop, ACT, Trails)
  - Suggestibility (GSS2)
  - Adaptive Functioning (Communication, Daily Living, Socialization)
    - Ability Test (NAB: AC, ACS: SC, TFLS)
    - Other Report (VABS, BRIEF)

Categories of Documents Reviewed

- James Chappell's School Records
- Psychological Evaluation Reports
- Medical Records and Reports
- Declarations from persons who know James Chappell
- Prior Testimony & Nevada Supreme Court Decision

Effort Testing

Task	Score	Good Effort?
Advanced Clinical Solutions (ACS)	**Word Choice = 49/50** **Reliable Digits = 7**	YES
Verbal Memory (CVLT)	**16/16**	YES
Conner's CPT	**Valid**	YES
Dot Counting Test	**E-Score = 8**	YES

Effort testing on second day of testing as well as behavioral observation during the assessment indicates that James Chappell was putting out good effort.

Intellectual Testing

Verbal Comprehension	Scaled Score	Perceptual Reasoning	Scaled Score
Similarities	9	Block Design	12
Vocabulary	6	Matrix Reasoning	7
Information	11	Visual Puzzles	9

Working Memory	Scaled Score	Processing Speed	Scaled Score
Digit Span	6	Symbol Search	9
Arithmetic	4	Digit Symbol-Coding	6

	IQ
Verbal Comprehension	96
Perceptual Reasoning	96
Working Memory	71
Processing Speed	86
Full Scale IQ	86

Research: Average score for FAE (PFAS, ARND)=90

Current and Prior Intelligence Testing

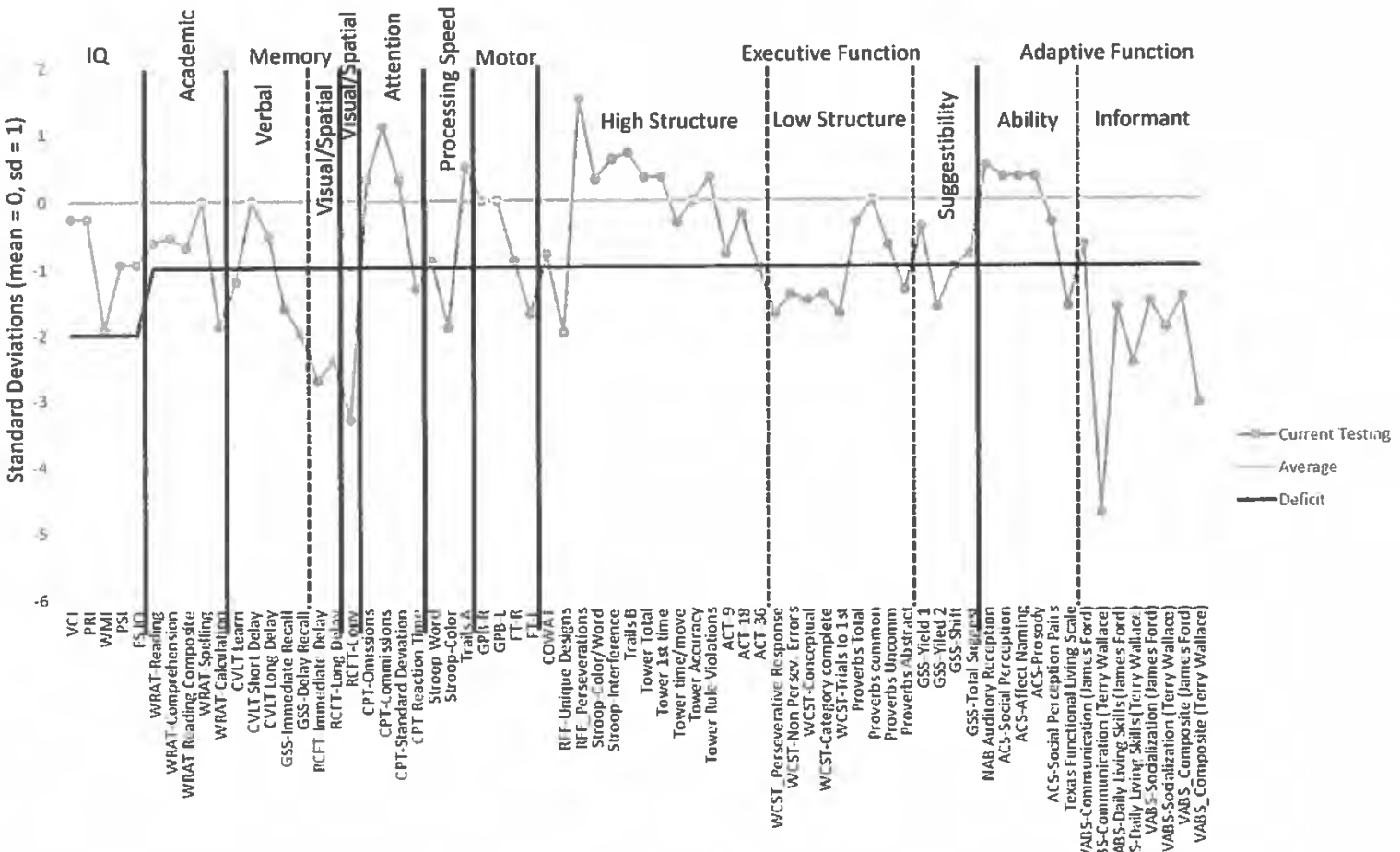
Year	Test	VCI/VIQ	PRI/PIQ	WMI	PSI	FSIQ
10/1986						Borderline to low average
6/1996	WAIS-R	/77	/91			80
5/2016	WAIS-IV	96	96	71	86	86

Current and Prior Academic Testing

Year	Test	Word Reading/ Total Reading	Reading Comprehension	Spelling/ Writing	Math
5/1977	SAT	/18%/			/18%/
5/1978	SAT	/40%/			/12%/
5/1979	SAT	/40%/			/23%/
5/1980	SAT	/4/			/26/
5/1982	SAT	/18%/			/11%/
12/1984	Peabody IAT	/ /6.0	/ /7.5	//8	/ /??
10/1986	WRAT	/5th%/			/2%/
6/1996	WRAT-3	88/ /hs		89/ /8	67/ /4
5/2016	WRAT-4	91/27%/11.6	92/30%/12.0	100/50%/>12.9	72/3/4.0

(Standard Score / %ile / Grade Equivalent)

Current Neuropsychological Testing of James Chappell



Vineland Adaptive Skills at Age 25

Domain	James Ford	Terry Wallace	Myra Chappell-King
	SD (%ile)	SD (%ile)	SD (%ile)
Receptive	0.0 (50)	-2.7 (<1)	-2.7 (<1)
Expressive	0.3 (61)	-2.3 (1)	-2.0 (2)
Written	-1.3 (9)	-2.3 (1)	
Communication	**SS=90/25%ile**	SS=29/<1%ile	
Personal	-2.0 (2)	-2.0 (2)	
Domestic	0.3 (61)	-1.3 (9)	-1.0(16)
Community	-1.7 (5)	-2.7 (<1)	
Daily Living Skills	SS=76/5%ile	SS=63/1%ile	
Interpersonal Rel.	-1.0 (16)	-1.7 (5)	
Play/Leisure Time			
Coping Skills	-1.0(16)	-1.0(16)	
Socialization	SS=77/6%ile	SS=71/3%ile	
Composite	SS=79/7%ile	SS=54/<1%ile	

Cross-validation of Adaptive Functioning Results

Is the informant's report considered valid?	**YES**

Are the informants reports consistent with each other?

Are the results of Adaptive Functioning consistent with research on FASD?

Behavior Rating Inventory of Executive Function (BRIEF)

	James Ford	Terry Wallace	Myra Chappel-King
Negativity Scale	0	1	0
Infrequency Scale	1	1	1
Inconsistency Scale	6	4	4

Cross-validation of Adaptive Functioning Results

Is the informant's report considered valid?

Are the informants reports consistent with each other? **Fairly**

Are the results of Adaptive Functioning consistent with research on FASD?

Vineland Adaptive Skills at Age 25

Domain	James Ford	Terry Wallace	Myra Chappell-King
	SD (%ile)	SD (%ile)	SD (%ile)
Receptive	0.0 (50)	-2.7 (<1)	-2.7 (<1)
Expressive	0.3 (61)	-2.3 (1)	-2.0 (2)
Written	-1.3 (9)	-2.3 (1)	
Communication	**SS=90/25%ile**	SS=29/<1%ile	
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Coping Skills	-1.0(16)	-1.0(16)	
Socialization	SS=77/6%ile	SS=71/3%ile	
Composite	SS=78/7%ile	SS=54/<1%ile	

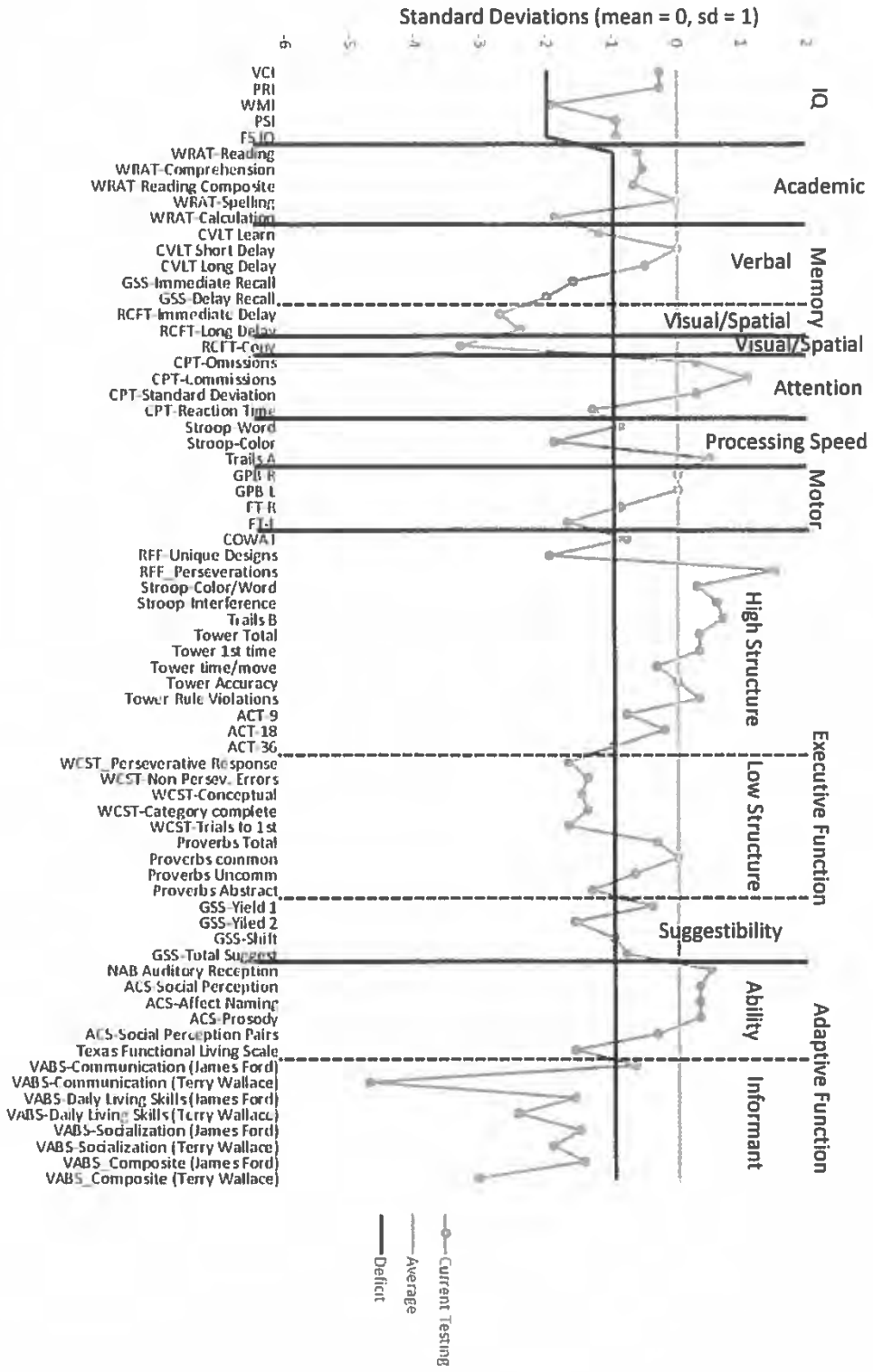
Cross-validation of Adaptive Functioning Results

Is the informant's report considered valid?

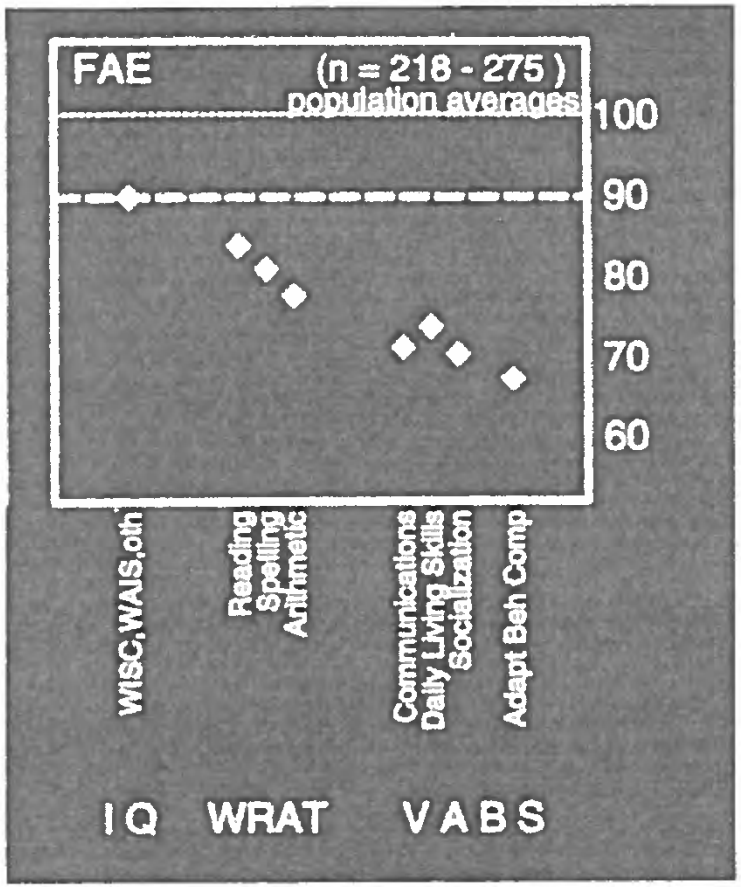
Are the informants reports consistent with each other?

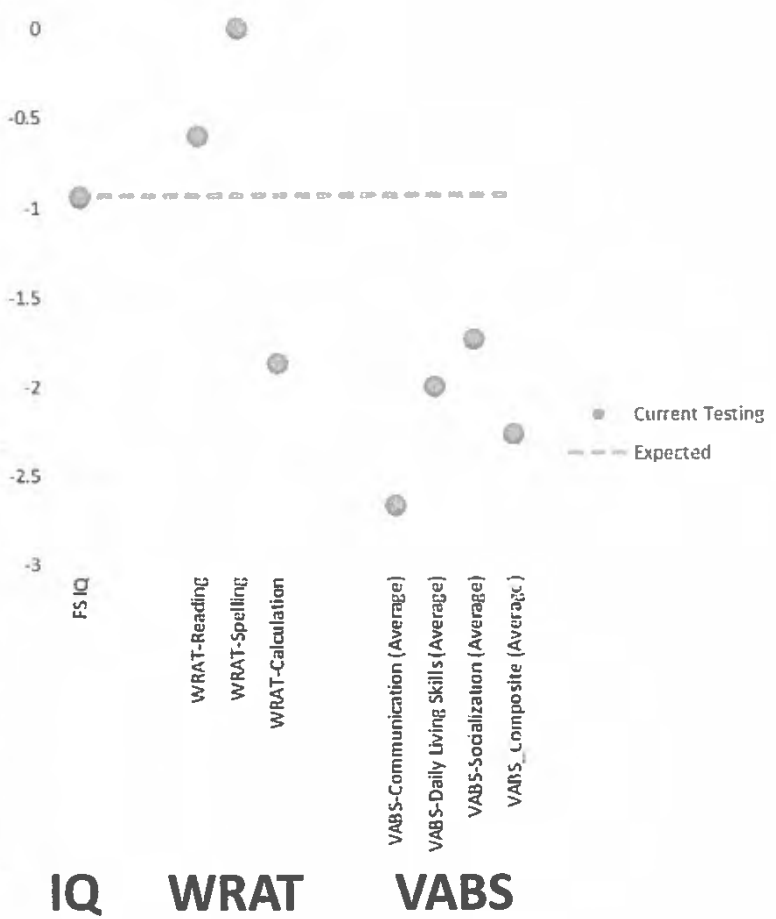
Are the results of Neuropsychological Adaptive Functioning consistent with research on FASD? **YES**

Current Neuropsychological Testing of James Chappell

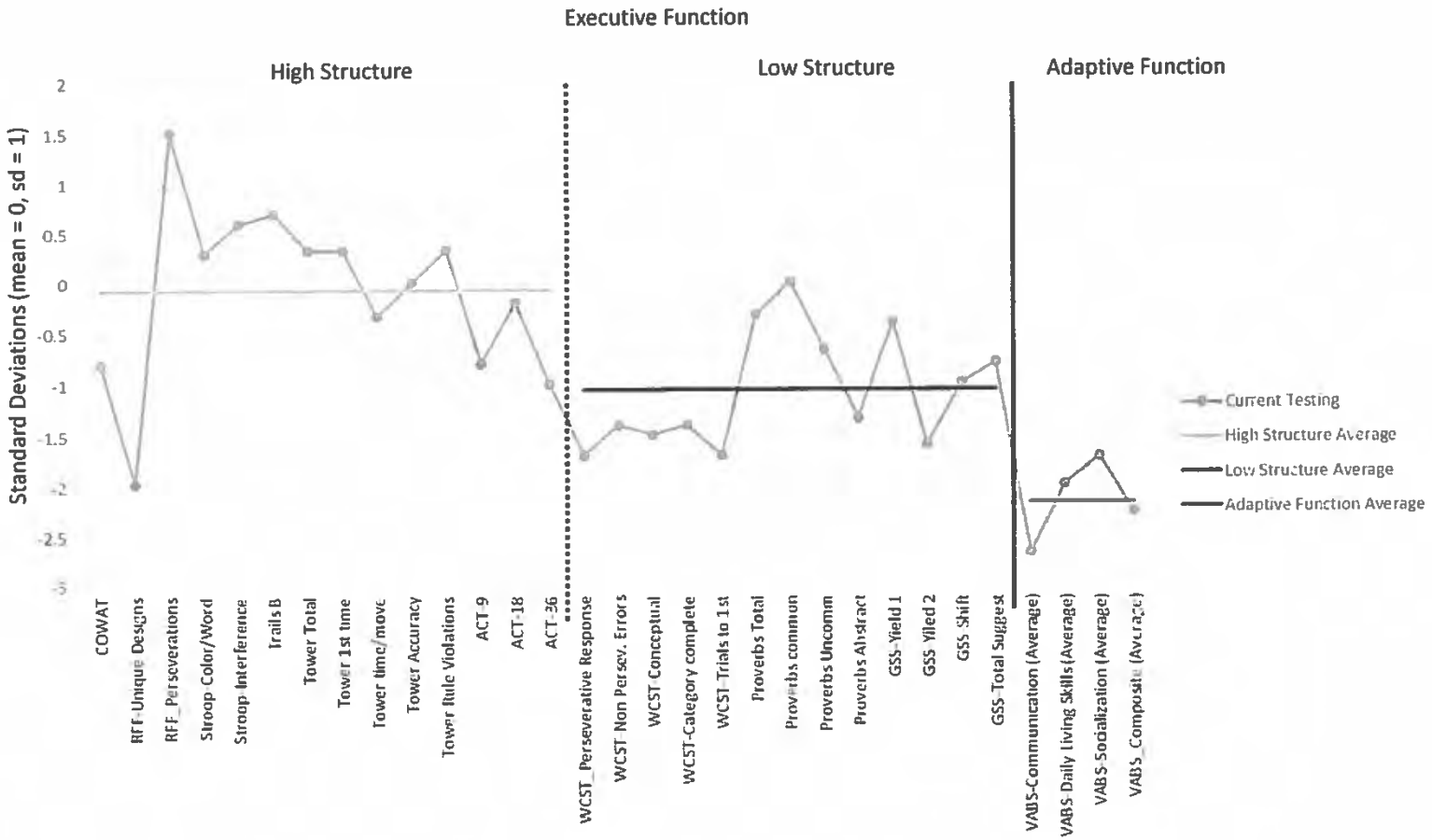


Downward Slope James Chappell





Neuropsychological Testing of James Chappell: Executive Functioning and Adaptive Functioning



IN SUMMARY

Multiple deficits across NINE neuropsychological domains

- Academics especially in math calculation
- Learning and memory for verbal and visual information
- Visuospatial construction and organization
- Attention functioning
- Processing speed
- Executive functions especially on tasks where there was less external structure
- Communication skills (based on direct testing of expressive communication and two of the three informants)
- Daily living skills (found on both ability testing and informant reports)
- Socialization skills (based on informant reports)

Reflect significant functional disabilities.

- 40% of scores at least mildly impaired
- 28% of scores at least moderately impaired

IN SUMMARY

- Chappell's pattern of functioning is most consistent with Neurodevelopmental Disorder associated with Prenatal Alcohol Exposure (ND-PAE) as identified in DSM-5.
- This would have been classified as Cognitive Disorder (Not Otherwise Specified) under the DSM-4.
- **Pattern & breadth of deficits is consistent with Alcohol-Related Neurodevelopmental Disorder (ARND) as diagnosed by Dr. Davies.**

Psychological Expert Testimony

Natalie Novick Brown, PhD

Testimony: April 6, 2018

DEMONSTRATIVE ONLY

Re James Montell Chappell

Case No. C131341

Prevalence

General Population:

- United States: **2-10%** (FASD) [May, et al., 2018]

Adoptees/Foster System:

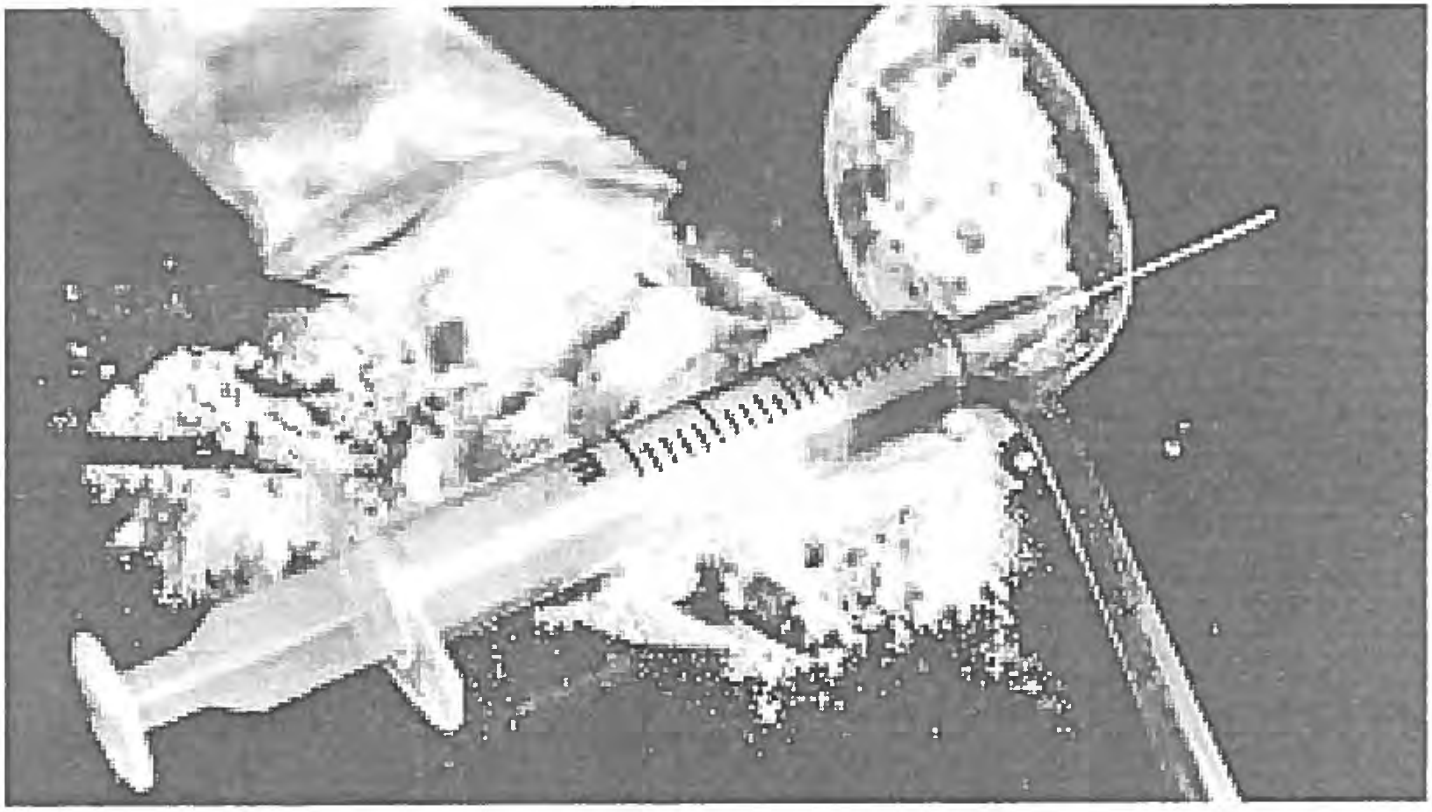
- **6%** (FAS)
- **17%** (FASD) [Lange et al., 2013]

Juvenile Justice System (age 12-18):

- **23%** (FASD) [Fast, Conry, & Loock, 1999]

Adult Criminal Justice System (age 18-30):

- **> 10%** (*15% more adults met criteria except prenatal exposure could not be confirmed*) [MacPherson et al., 2011]

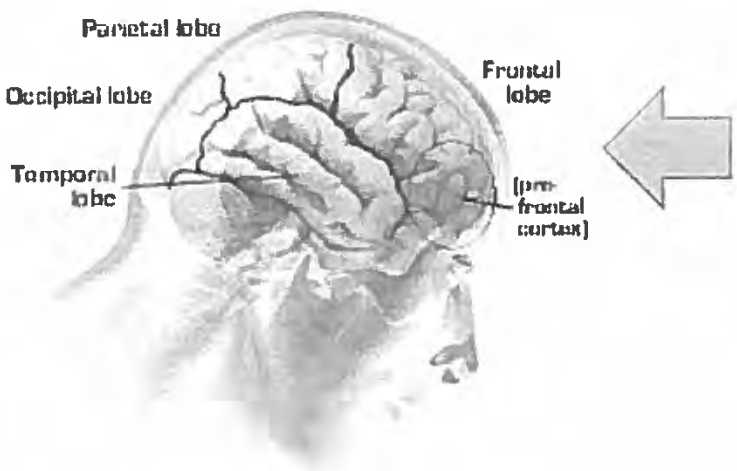


Neuroimaging research is finding that prenatal exposure to methamphetamine, cannabis, heroin, cocaine, and nicotine is almost as *damaging to the fetal brain as prenatal exposure to alcohol*.

Key Deficit: Executive Functioning

[= Reasoning, Reflection & Impulse Control in Forensic Context]

Lobes of the Brain:



- **Attention control**
- **Response inhibition**
- **Working memory (reflection)**
- **Anticipation**
- **Prioritizing**
- **Strategizing**
- **Sequencing**
- **Organization**
- **Second thought**
- **Modulating mood**
- **Response flexibility**
- **Judgment**
- **Goal-directed behavior**

AA07122

FASD Impairs Capacity to Control Violence

American Bar Association (ABA) website:

- **FASD has a significant impact on mental abilities relevant in the criminal justice system, including impaired judgment, inability to understand cause and effect, and difficulty controlling impulses.**
- **FASD alone does not *cause* violence, but it is directly related to *impaired cognitive capacity to control violence.***

- https://www.americanbar.org/groups/child_law/tools_to_use/attorneys/fasd-resolution.html

ABA Website: List of FASD Cases

In 1990, the United States Supreme Court in *Sullivan v. Zebley*, 493 U.S. 521, 533-34 n. 13 described "fetal alcohol syndrome" as a "well-known childhood impairment."

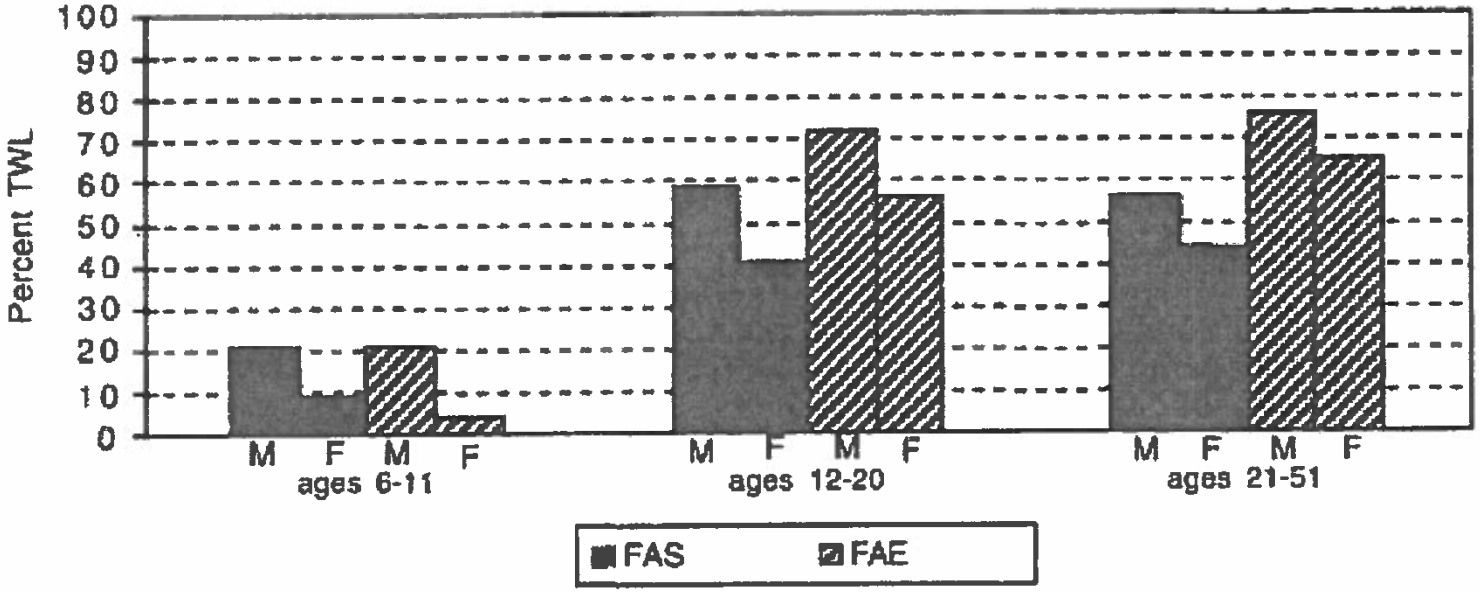
By 1996, a number of cases at the trial and appellate levels involved FASD.

By 2007, hundreds of cases around the country involved FASD.

https://www.americanbar.org/groups/child_law/what_we_do/projects/child-and-adolescent-health/fetal-alchohol-spectrum-disorders/child_and_adolescent_health/fasd_criminallawsubject.html

Brain Damage in FASD Leads to *Trouble With the Law*

10.1 History of Trouble With the Law (TWL) by sex, diagnosis and age at interview (n=412)



Streissguth et al., *Understanding the Occurrence of Secondary Disabilities in Clients with Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE)*, CDC, 1996

Evaluation Procedures

(a) Record review (Appendix A of report):

- Records available in 1996
- Records available in 2007
- Additional records obtained by current habeas counsel, including new declarations from witnesses who were available in 1996 and 2007

(b) Consultation with Dr. Paul Connor re neuropsychological test results

(c) Consultation with Dr. Julian Davies re diagnosis

(d) Interview with Mr. Chappell

Referral Question #1: At the time of trial in 1996 and resentencing in 2007, what was known in the legal field about FASD and ARND?

Highlights in FASD History

1973	"Fetal Alcohol Syndrome" reported *in The Lancet*
1977	**FIRST NATION-WIDE WARNING:** National Institute of Alcohol Abuse and Alcoholism (NIAAA) issues official warning against heavy drinking during pregnancy
1981	1st **SURGEON GENERAL WARNING:** warns pregnant women and women planning a pregnancy not to drink alcoholic beverages
1982	Merck Manual, 14th Ed., included information about FAS
1988	Alcohol Beverage Labeling Act mandated warning labels on alcoholic beverages
1989	Michael Dorris's *The Broken Cord is* published
1991	Dr. Ann Streissguth speaks at NAACP Legal Defense Fund conference in Airlie, VA
1996	**FIRST GOVERNMENT-SPONSORED DIAGNOSTIC CRITERIA:** Institute of Medicine (IOM) develops diagnostic criteria for Fetal Alcohol Spectrum Disorders (FASD): FAS, pFAS, ARND, and ARBD
1996	**SECONDARY DISABILITIES STUDY:** CDC publishes *Final Report on Secondary Disabilities in Clients with FAS and FAE*

Highlights in FASD History

2004	**FAS DIAGNOSTIC CRITERIA ARE REFINED:** Centers for Disease Control (CDC) publishes more specific diagnostic criteria for FAS
2005	**2nd SURGEON GENERAL WARNING:** warns against drinking for pregnant women, women planning a pregnancy, and those at risk for pregnancy
2006	SAMHSA publishes information on its website for criminal justice professionals regarding the relevance of FASD across the legal spectrum
2007	On its website, the Fetal Alcohol and Drug Unit at the University of Washington lists US cases involving FASD (ABA eventually takes over this responsibility, which continues today)

Known in 1996 (2007)

- FASD involves prenatal-onset, permanent brain damage caused by prenatal alcohol exposure.
- FASD can manifest as FAS or FAE/ARND, but the brain damage is the same, regardless of diagnosis.
- FASD is associated with pervasive cognitive deficits, including significantly impaired executive functioning.
- Executive dysfunction manifests in numerous secondary disabilities, including high risk to commit crimes in unstructured, novel contexts.

Known in 1996

[per IOM]

Condition	Alcohol	Opioids	Marijuana	Nicotine
MR / ID	Yes			
Reduced IQ	Yes		?	Yes
Hyperactivity	Yes			Yes
ADD	Yes	?	Yes	Yes
Developmental delays	Yes	?	Yes	Yes
Coordination problems	Yes	?		
Sensory deficits	Yes			Yes
Neonatal withdrawal	Yes	Yes	?	Yes

Known in 2007

	Alcohol	Nicotine	Marijuana	Opiates	Cocaine	Meth
Birth/Short-Term						
Fetal growth	Strong effect	Effect	No Effect	Effect	Effect	Effect
Anomalies	Strong Effect	*	No Effect	No Effect	No Effect	No Effect
Withdrawal	No effect	No Effect	No Effect	Strong Effect	No Effect	?
Behavior	Effect	Effect	Effect	Effect	Effect	Effect
Long-Term						
Growth	Strong Effect	*	No Effect	No Effect	*	?
Behavior	Strong Effect	Effect	Effect	Effect	Effect	?
Cognition	Strong Effect	Effect	Effect	*	Effect	?
Language	Effect	Effect	No Effect	?	Effect	?
Academic	Strong Effect	Effect	Effect	?	*	?

? = Limited or no data available. * = No consensus on effect

Referral Question #1: At the time of trial in 1996 and resentencing in 2007, what was known in the legal field about FASD and ARND?

Opinion

- By the time of Mr. Chappell's trial in 1996 and resentencing in 2007, a great deal of information was known in the legal field about the nature and cause of FASD.

Referral Question #2: At the time of trial in 1996 and resentencing in 2007, what evidence was available to counsel to suggest Mr. Chappell suffered from an FASD condition?

Red Flag:
Defendant's Report to Dr. Etcoff in 1996

[Report dated 9/28/96]

Mr. Chappell informed Dr. Etcoff in a Social History questionnaire that his mother possibly drank and used drugs during the pregnancy.

Records Provided to Dr. Etcoff in 1996

[Report dated 9/28/96]

- A notation in the records indicated **Maternal Aunt Sharon Axam confirmed maternal alcohol/drug use during the pregnancy.**
- **At the time of his mother's death, Mr. Chappell and his siblings had been living with their maternal grandmother for a year due to maternal neglect/heroin use. (William Roger Moore)**
- When Mr. Chappell was ~2 ½ years old, his **mother was struck and killed by a police cruiser while walking on the highway at 4:25 am. (Newspaper)**

Thus, at the time of trial in 1996 and resentencing in 2007, counsel had information that the birth mother drank alcohol and used drugs during the pregnancy.

Witness Accounts of Prenatal Alcohol Exposure
[Available but Not Obtained in 1996/2007]

Declarations from 9 individuals indicated that birth mother Shirley Chappell:

(a) **drank alcohol throughout the index pregnancy,** including heavy consumption on the weekends;

(b) **used heroin and cocaine daily during the pregnancy**; and

(c) **smoked at least a pack of cigarettes daily during the pregnancy.**

Evidence of Central Nervous System (CNS) Dysfunction [i.e., brain dysfunction]

Defendant's Self-Report to Dr. Etcoff in 1996

[Report dated 9/28/96]

- **He recalled being placed in a "special school" in second grade.**
- **He recalled placement in special education classes in seventh through tenth grade, when he left school.**
- **He recalled being "pulled out of regular classes for help in math, reading, and writing" In junior high and high school.**

Other Evidence of CNS Dysfunction

The 41 pages of school records provided to Dr. Etcoff by counsel in 1996 and 2007 documented evidence of:

(a) Chronic developmental delays

(b) Severe learning disability

(c) Pervasive adaptive dysfunction (e.g., did not play with other children until 4th grade, in "constant conflict" with classmates, toileting accidents and finger sucking at age 9)

-- all early in life and prior to the onset of Defendant's own substance abuse in his teen years.

Evidence of CNS Dysfunction: School Records

- Referred for special education services in June 1977 (end of 1st Grade) due to numerous developmental and adaptive delays as well as learning disability.
- Special education reassessment in 1980 indicated major areas of concern:
  a) Adaptive delay in socialization (immaturity involving disruptive and aggressive behavior);
  b) Attention control problem ("easily distracted"); and
  c) Academic achievement deficits:
     - 1-year delay in Reading and Listening Comprehension
     - 2-year delay in Math

Evidence of CNS Dysfunction: 1980 Evaluation

- School evaluations in 1980 (age 12) noted:
  a) **Learning disability** (functioning at 1st grade level in 2nd grade and functioning at 2nd grade level in 4th grade, despite being 3 years older than classmates)
  b) **Developmental delay in communication** ("asks unrelated questions and will not respond when spoken to".... "great difficulty expressing himself")
  c) **Slow processing speed** ("actions and reactions are very slow")
  d) **Self-regulation deficits** i.e., ***executive dysfunction***) ("constant conflict" with other students"); and
  e) **Adaptive dysfunction** ("...great deal of difficulty adjusting in school, both socially and academically....great deal of difficulty forming meaningful relationships").

Evidence of CNS Dysfunction: School Records

[GE = Grade Equivalence / % = percentile]

Year	Gr	Age	Word Read	Read Comp	Spell	Eng	Math Comp	Math Concpt	Math Appl
5/77	1	7	1.9 GE 42%	0.9 GE 6%			1.4 GE 22%	1.2 GE 18%	
5/78	2	8	2.4 GE 32%	2.7 GE 44%			2.1 GE 18%	2.1 GE 18%	1.5 GE 8%
5/79	3	9	3.3 GE 38%	3.7 GE 44%			3.3 GE 28%	2.7 GE 17%	3.2 GE 32%
5/80	4	10	1.0 GE 8%	1.9 GE 4%			3.9 GE 22%	3.5 GE 20%	4.1 GE 36%
5/82	6	12	5.0 GE 30%	4.1 GE 11%			4.3 GE 10%	5.0 GE 16%	4.1 GE 14%
12/84	9	14	6.0 GE	7.5 GE	8.7 GE		8.1 GE		
5/85	9	14	13%	3%	7%	9%		3%	

Red type = 1 or more SD below the mean (≤ 16th percentile)

Orange type = 1 or more years below grade level

Evidence of CNS Dysfunction: Dr. Etcoff's Report

- Significant discrepancy in test results between Verbal IQ (77) and Performance IQ (91)
- Significant discrepancy between achievement test results that fell in the average range for Reading and Spelling but in the moderately impaired range (1st percentile) for Arithmetic
- "SLD" (Severely learning disabled) special education placement
- Documented evidence in the records of numerous cognitive and adaptive problems:
  - Severe learning disability
  - "Probable" ADHD
  - Multiple developmental delays
  - Multiple adaptive problems (social, daily living skills, communication)
  - Executive function problems
  - receptive language disorder and arithmetic disorder

Evidence of CNS Dysfunction: Trial Testimony

1996

- Maternal Grandmother Clara Axam described the Defendant as a "slow" child who did not understand and learn things as quickly as normal children. **COGNITIVE IMPAIRMENT**
- Clara Axam testified that the Defendant had a speech delay in childhood and did not begin speaking until age 3 ½. **DEVELOPMENTAL DELAY**
- Clara Axam testified that the Defendant received special education services from 5th grade into high school. **LEARNING DISABILITY** [School records indicated special education from 2nd grade on.]

2007

- Willie Chappell, Jr. (brother) testified that the Defendant had incontinence problems in childhood. **ADAPTIVE DELAY**
- Myra Chappell King (younger sister) testified that other children teased the Defendant for being "slow." **COGNITIVE IMPAIRMENT**

Lay Witness Evidence of Impairments

Sensory Integration: 2 witnesses

Processing Speed: 9 witnesses

Attention Control: 6 witnesses

Communication: 8 witnesses

Daily Living Skills: 6 witnesses

Socialization: 8 witnesses

Referral Question #2: At the time of trial in 1996 and resentencing in 2007, what evidence was available to counsel to suggest Mr. Chappell suffered from an FASD condition?

Opinion

Documented evidence of mother's pre-natal use of alcohol and drugs during her pregnancy with James Chappell

- **Evidence via friends and family**

Documented evidence of CNS dysfunction

- **Education records**
- **Testimony and Declarations from friends and family**

Uncontested evidence from trial expert Dr. Etcoff that at least two of Mr. Chappell's neurodevelopmental conditions (communication disorder and arithmetic disorder) stemmed from "neurological origin," which constituted clear notice of brain damage

Opinion

- Had counsel asked an expert in neuropsychology to assess Mr. Chappell, results would have indicated pervasive CNS dysfunction similar to what Dr. Connor found, qualifying the Defendant for a diagnosis of Cognitive Disorder NOS (a DSM-IV mental defect that establishes CNS dysfunction in FASD).
- Had counsel retained a medical expert in FASD to examine Mr. Chappell, results would have been similar to Dr. Davies' conclusion that the Defendant met criteria for ARND (a medical defect).
- Results of the current record review are consistent with both diagnoses.

Referral Question #3: How would FASD (i.e., ARND) affect Mr. Chappell's ability to control his actions on the day of the crime?

Neuropsychological Assessment

Neuropsychological assessment by Dr. Paul Connor (report dated 7/15/16) with 24 tests plus adaptive assessment found ***deficits in 6 broad cognitive domains***:

- **Academic Achievement (especially, Arithmetic)**
- **Learning/Memory (verbal and visual)**
- **Visuospatial Construction and Organization** (i.e., sensory integration)
- **Attention**
- **Processing Speed**
- **Executive Functioning (especially in low-structure tasks)**

Plus ***deficits in 3 adaptive domains***:

- **Communication**
- **Daily Living Skills**
- **Socialization**

Cognitive dysfunction predicts adaptive dysfunction, per the FASD research.

Mr. Chappell's adaptive dysfunction involves *child-like* interpersonal skills and coping capacity.

James Chappell: Adaptive Dysfunction

Per Terry Wallace (former friend):

- **Interpersonal: 11 ½ years old**
- **Coping: 12 ½ years old**

Per James Ford (former friend):

- **Interpersonal: 16 years old**
- **Coping: 12 ½ years old**

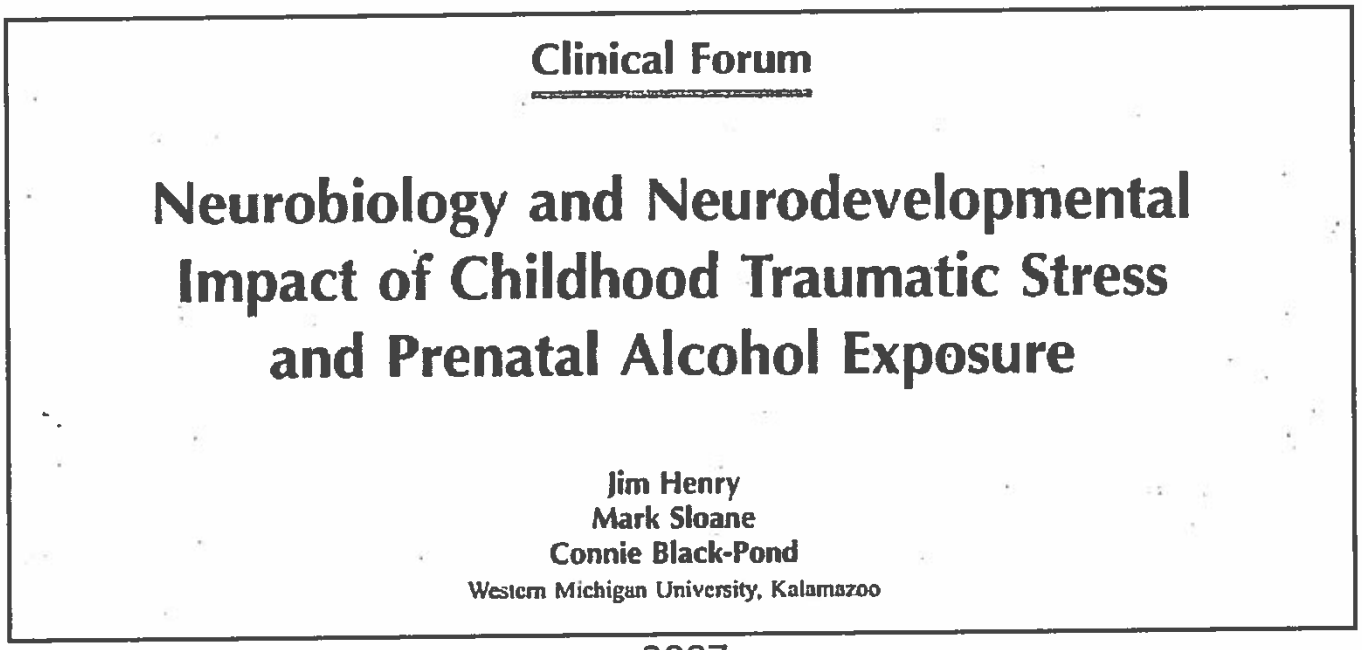
These ratings are consistent with the FASD research.

James Chappell: "Extraordinary" Number of Childhood Traumas

Per Dr. Matthew Mendel (report: 6/27/16):

- Mother's heavy use of heroin and alcohol during her pregnancy with him
- Mother's death when he was a toddler
- Absence of a father/father figure
- Raised in a neighborhood where violence, drugs, and prostitution were commonplace
- Marked poverty
- Extreme physical abuse
- Physical neglect of basic needs
- Emotional neglect
- Loss of an uncle who was his sole nurturer

Double Whammy:
Prenatal Exposure + Postnatal Adversity



Clinical Forum

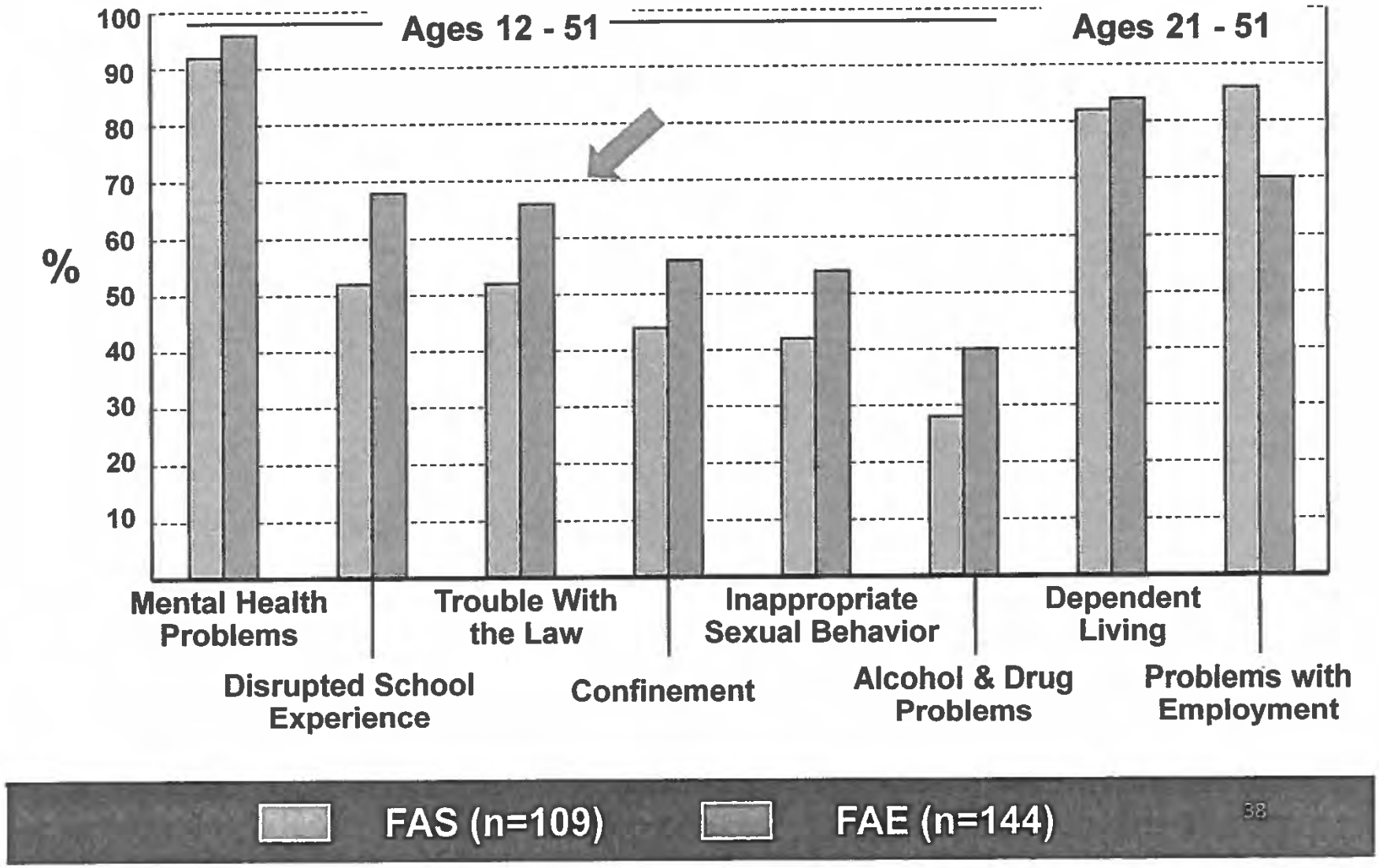
Neurobiology and Neurodevelopmental Impact of Childhood Traumatic Stress and Prenatal Alcohol Exposure

Jim Henry
Mark Sloane
Connie Black-Pond
Western Michigan University, Kalamazoo

2007

- **The combination of FASD and postnatal trauma are significantly more devastating to neurodevelopment than trauma alone.**

Adaptive Dysfunction = 'Secondary Disabilities'



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Referral Question #3: How would FASD (i.e., ARND) affect Mr. Chappell's ability to control his actions on the day of the crime?

Opinion

Because Mr. Chappell's executive control over his behavior is significantly impaired due to FASD and because he was under stress at the time of the offense, which diminishes everyone's executive control, it is likely his ARND influenced his capacity to control his actions at the time of the offense.

Referral Question #4: How would FASD influence Mr. Chappell's behavior with respect to his prior domestic abuse of his girlfriend Deborah Panos?

Opinion

Intense emotions of any kind diminish impulse control for everyone.

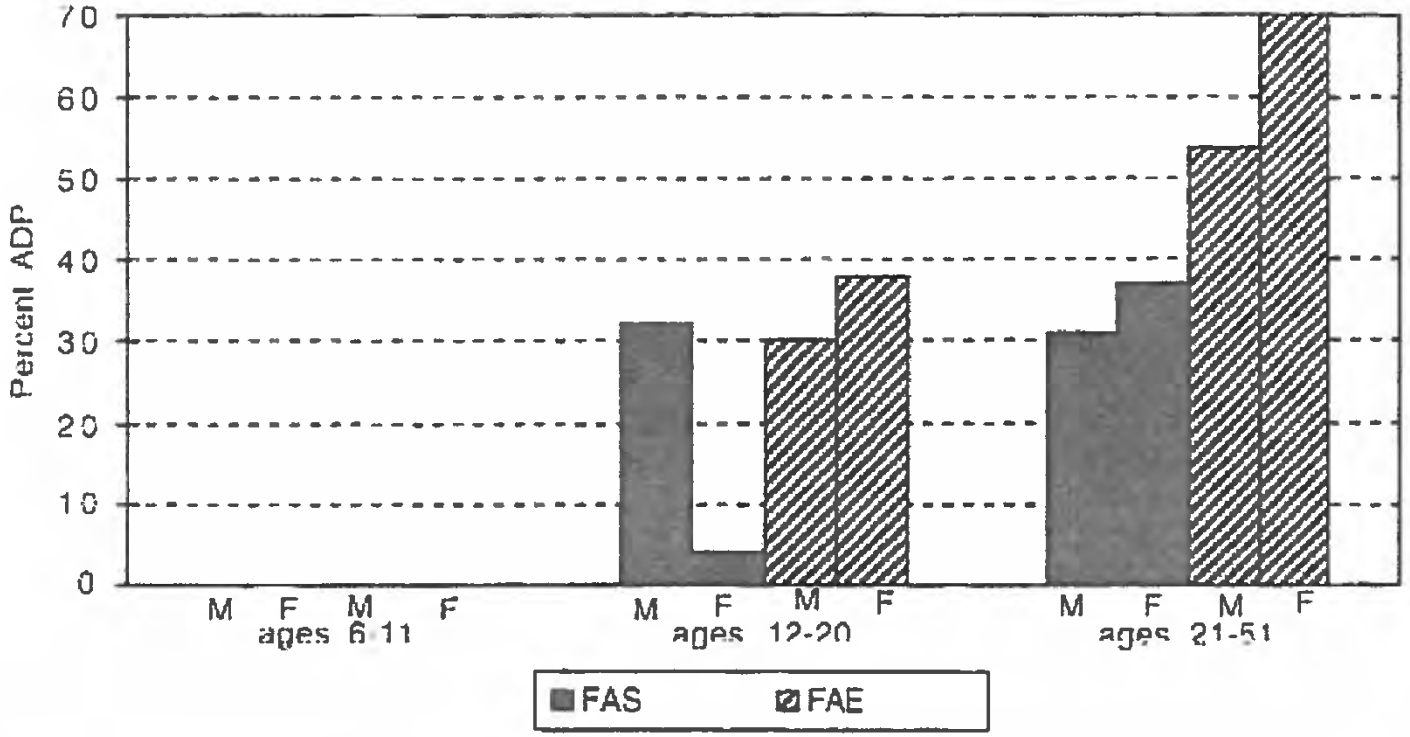
If an individual already has deficient impulse control due to pervasive cognitive dysfunction and childlike coping capacity, stress and/or anger will further decrease control.

Thus, at the time of the prior domestic abuse of his girlfriend Deborah Panos, it is likely Mr. Chappell's ARND influenced his ability to control his actions.

Referral Question #5: How would Mr. Chappell's FASD influence his drug addiction?

Known by 1996/2007: FASD Meant a High Risk of Substance Abuse

13.1 History of Alcohol/Drug Problems (ADP) by sex, diagnosis and age at interview



Secondary Disabilities study (Streissguth et al., 1996)

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Opinion

Compared to those who are not exposed to alcohol in utero, Mr. Chappell's FASD condition increased his likelihood of developing a substance abuse problem.

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Steven D. Grierson
CLERK OF THE COURT

TRAN

DISTRICT COURT
CLARK COUNTY, NEVADA
* * * * *

THE STATE OF NEVADA,	)	
	)	
Plaintiff,	)	CASE NO. C131341
	)	DEPT NO. V
vs.	)	
	)	
JAMES MONTELL CHAPPELL,	)	**TRANSCRIPT OF PROCEEDINGS**
	)	
Defendant.	)	

BEFORE THE HONORABLE CAROLYN ELLSWORTH, DISTRICT COURT JUDGE

EVIDENTIARY HEARING: PETITION FOR WRIT OF HABEAS CORPUS

FRIDAY, APRIL 6, 2018

APPEARANCES:

FOR THE STATE: STEVEN S. OWENS, ESQ.
Chief Deputy District Attorney

FOR THE DEFENSE: BRAD LEVENSON, ESQ.
SCOTT WISNIEWSKI, ESQ.
ELLESSE HENDERSON, ESQ.
Assistant Federal Public Defenders

RECORDED BY: LARA CORCORAN, COURT RECORDER
TRANSCRIBED BY: JD REPORTING, INC.

WITNESSES FOR THE DEFENSE:

LAS VEGAS, CLARK COUNTY, NEVADA, APRIL 6, 2018, 9:07 A.M.

*** * * * ***

THE COURT: Good morning. And this is Case No. C131341, State of Nevada versus James Chappell. This is the time that was set for the evidentiary hearing on the petition for writ of habeas corpus.

Are we ready to proceed?

MR. LEVENSON: Yes, Your Honor. Can we make appearances, please?

THE COURT: Yes, please.

MR. LEVENSON: Brad Levenson, Scott Wisniewski and Ellesse Henderson on behalf of Mr. Chappell, who has waived his appearance today.

MR. OWENS: And Steve Owens on behalf of the State.

THE COURT: Thank you.

MR. LEVENSON: We have our experts here. We just thought if you wanted to give them the admonishment or whether they were allowed to watch the proceedings.

THE COURT: What's the State's position?

MR. OWENS: I would move to exclude witnesses.

THE COURT: All right. So any witness that is not going to take the stand right now needs to wait in the hall.

MR. LEVENSON: Thank you, Your Honor.

THE COURT: I apologize in advance that it's cold out there.

MR. LEVENSON: So we are calling for our first witness Chris Oram, Your Honor.

THE COURT: Thank you.

THE CLERK: Raise your right hand.

CHRISTOPHER ORAM

[having been called as a witness and being first duly sworn, testified as follows:]

THE CLERK: Thank you. Please be seated. State and spell your name for the record.

THE WITNESS: My name is Christopher. Last name is Oram, O-r-a-m, M as in Mary.

THE COURT: You may proceed.

MR. LEVENSON: Thank you, Your Honor.

DIRECT EXAMINATION

BY MR. LEVENSON:

Q Good morning, Mr. Oram.

A Good morning.

Q There is a binder in front of you.

A Okay.

Q I might ask you to take a look at it --

A Yes, sir.

Q -- at certain times to refresh your recollection.

A Okay.

Q Mr. Oram, what is your profession?

A I'm an attorney.

Q And how long have you been an attorney?
A Since 1991, so 27 years.
Q And how are you currently employed?
A As an attorney.
Q What type of law do you practice?
A I practice criminal law, criminal defense.
Q Solo practice?
A No, I have --
Q Solo?
A I have an associate.
Q I'm sorry?
A I have an associate.
Q Okay. What type of criminal law do you practice? What different areas?
A I practice primarily in every aspect of it. I've done -- I do traffic tickets, postconvictions, appeals, just everything, federal cases, so just the gamut of criminal law.
Q Are you Rule 250 qualified?
A I have been since I was in my 20s, yes.
Q Okay. So does 1998 sound like the year you were 250 qualified?
A It could be around there, yes.
Q How many capital cases have you been appointed to?
A I would not be able to give you an accurate estimate of how many capital cases, and I presume you mean

postconviction appeal, pretrial, all of them?

Q Yes, sir.

A Many, many, many. Hundreds of homicide cases I've done. I couldn't give you an accurate number. I can tell you that I've tried approximately 20 to 25 capital murder trials.

Q And any idea about your postconviction cases?

A Lots, but I -- I don't keep count of those numbers, but I do of the trials.

Q Mr. Oram, do you know James Chappell?

A I do.

Q And how do you know Mr. Chappell?

A I represented him on postconviction from his second penalty phase and appeal from postconviction on his second penalty phase.

Q Do you remember when you were first appointed to Mr. Chappell's case?

A I don't.

Q Would it help to -- would anything help to refresh your recollection?

A If you told me, I'd accept it.

Q Well, could you look at Exhibit 1 in the binder in front of you.

A Yes, sir.

Q And take a look at that document. Tell me when you're done.

A Okay. I read it.

Q And do you remember when you were first appointed to Mr. Chappell's case?

A It appears they are appointing me on 10/5 of 2010.

Q When you were appointed to Mr. Chappell's case, did you receive his prior trial file from anyone in particular?

A I don't recall who it came from, but, yes, I did.

Q Would anything help refresh your recollection?

A Actually, I think you sent me something before, if I may look.

Q Or you can look at Exhibit 2 in the binder in front of you.

A I think I have that separately already. Yes, I have that, and it appears to be coming from several different sources, okay, but I have it in front of me from David Schieck, from the special public defender.

Q Okay. And do you remember if Mr. Schieck had served as prior counsel for Mr. Chappell?

A Yes, I remember that.

Q How many -- how much material did you receive from Mr. Schieck?

A Well, according to this, we had it looks like nine bankers boxes.

Q And do you remember if the materials you received from Mr. Schieck included both the 1996 trial and the 2007

penalty retrial?

A I would presume so, but that is exactly what I'm doing. I can't independently remember the boxes, but I would presume Mr. Schieck -- I receive boxes from Mr. Schieck or cases from Mr. Schieck and the special public defender often, and they'd always been pretty thorough about giving me everything I need. I don't remember having to reach out to them and saying I don't have information.

Q And do you remember reaching out to any other -- to any other counsel for any other materials?

A I could have, but I don't have any independent recollection.

Q Okay. Are you familiar with Dr. Lewis Etcoff?

A I am.

Q Who is Dr. Etcoff?

A He is a psychiatrist or a psychologist.

Q And did he work on Mr. Chappell's case?

A I know he worked before my time and testified in Mr. Chappell's case.

Q Okay. And do you remember if that was both in 1996 and 2007?

A I believe so.

Q At some point during your representation of Mr. Chappell, did you ask this Court for any funding during your postconviction litigation?

A Yes. When I filed the supplement, supplemental brief or approximately around that time, I requested funding for an investigator, and I believe three different experts.

Q Do you remember which experts you requested funding for?

A Yeah. Yes. I requested one for a PET scan. One is a little bit more difficult to explain, regarding the prefluid ejaculation semen, that type of -- that was an issue in this case, and I wanted somebody as an expert in that field. I don't think that's what you're dealing with here today, but I wanted that as an expert. I wanted PET scan and someone to help me with fetal alcohol.

Q Okay. Did the State file an opposition to your motion?

A They did.

Q In the opposition, did the State accuse you of going on a, quote, fishing expedition in your request for services?

A I don't independently remember that, but it wouldn't surprise me.

Q Can you turn to -- would anything refresh your recollection?

A Yes. The State's response.

Q If you look at Exhibit 4.

A Okay. I'm looking at it.

Q And is that the State's opposition to your motion?

A It appears to be.
Q Can you look at page 5 of that.
A Yes, sir.
Q On line 10.
A Okay. On line 10. Yes. Fishing expedition.
Q And in that same opposition, did the State argue that even if Chappell had fetal alcohol spectrum disorder, otherwise known as FASD, he could not demonstrate that the result of his trial would've led to a more favorable outcome?
A Correct.
Q Okay. In that opposition, did the State argue that because the jurors found the mitigating factor that Chappell was born to a drug-alcohol-addicted mother there was no need for an expert on FAS?
A Yes.
Q And that an expenditure of public monies would amount to a fishing expedition?
A That's what they're arguing.
Q Was there a counter argument that you could have made to that last point?
A I tried to do that in the reply that I filed to the State's opposition to my supplement.
Q Okay. And what was that? What was that argument?
A Just that we needed it because they hadn't looked into it, and his mother was on drugs and alcohol.

Q So in relation to the State's opposition, did you file a reply to the State's opposition for funding?

A That's -- I don't file something called a reply to the State's opposition to that. I file a reply to everything. So in other words, the way that I do it is I do a supplement. I did the motions. The State responded to my request, and then I did a reply which I reviewed, and I addressed those issues there explaining why I believe I need an evidentiary hearing on all of those things, but I don't file a specific reply on that issue. I file a general reply to all of the issues. Yeah. Hopefully that makes sense.

Q Did the Court hold a hearing on your motion, on the petition and the motion for funding?

A Yes.

Q And in that hearing, did you address in any way your request for expert funding?

A Yes.

Q Can you turn to Exhibit -- I'm sorry, Exhibit 5. Is that the transcript of the hearing?

A Yes.

Q And can you show me where in this transcript you addressed, other than saying you had requested it, any arguments that you made in support of your request for funding?

A Any arguments other than that?

Q Other than stating that you had made the request for

funding.

A Okay. I think on -- I talk on I think pages 5 through 7 about the -- I'm really at that point the Court has already told me the Court is inclined to deny the petition, and I think that it's important to look at what was being said. So to get to your question, I think I say at some point, even after the Court has said, I'm going to deny this petition; I don't see a reason for an evidentiary hearing. The Court tells me, in the past, I have held evidentiary hearings, even in your cases, or words to that effect. I then sort of out of an act of desperation say, Well, could I have an expert, or could I talk about this ejaculation and the fact that that aggravator -- I tried to attack that aggravator.

Q But with regard to the FASD, did you make any arguments in your --

A No.

Q -- in that hearing?

A No.

Q Okay. Was a findings of fact and conclusions of law filed in this case?

A Yes.

Q And in that findings of fact, was it -- was it stated that your request for experts was, quote, bare and conclusory?

A I'd have to look.

Q Would anything help refresh your recollection?

A Yes. The order.

Q If you would look at Exhibit 6, is that the findings --

THE COURT: Do I have these exhibits you keep referring to? Because I have a binder of exhibits from you, but they're not -- the numbers don't correspond to the things you're referring to at this point. So --

THE WITNESS: Your Honor, I have a lot of these myself. I brought them. So if you want mine that they've given me --

MR. LEVENSON: I believe the clerk has a binder.

THE COURT: Okay. I'd like to at least look --

MR. LEVENSON: I'm sorry --

THE COURT: -- if you're going to be moving to admit these.

MR. LEVENSON: I'm sorry. When we originally called the Court, we were told four copies, and so we brought four copies, one for the clerk, one for the witness, one for the State, and one for the DA. We didn't realize the Court's copy -- clerk's copy was not the Court's copy.

THE COURT: Oh, okay.

MR. LEVENSON: So we will be glad to make an additional copy, even over the lunch hour if we need to.

THE COURT: Okay. All right. What exhibit are we on here?

MR. LEVENSON: I'm sorry. This is Exhibit 6.

THE COURT: Thank you.

MR. LEVENSON: And, Your Honor, we will go ahead and get another binder made for you.

BY MR. LEVENSON:

Q So my question is, Mr. Oram, in the findings of fact and conclusions of law, was there a statement that your expert request was bare-bones? It was -- I'm sorry, quote, bare and conclusory?

A If you could direct me to a page.

Q Absolutely. Can you look at page 5, lines 8 and 9.

A Yes, that's with the Court -- that's what the Court rules.

Q And do the findings of fact find that you failed to make any specific allegation as to what an expert in FASD would uncover that would possibly change the outcome of this case? Lines 17 through 19 if you need to refresh your recollection.

A Yes.

Q Did you file any objections to the findings of fact and conclusions of law?

A A notice of appeal.

Q Did you -- did you file an objection to this Court?

A No.

Q Why was retaining an expert in FASD important in Mr. Chappell's case?

A Well, because I had seen that his mother had been addicted to alcohol and drugs, and so when I had seen that, I made the request. I thought maybe I could unearth something with it.

Q Are you familiar with the Clark County Office of Appointed Counsel?

A Yes.

Q And as a Rule 225 qualified counsel, are you required to attend continuing education classes put up by them?

A Yes.

Q Do you remember attending a CLE event sponsored by that office at the government center in December 2011 where a course on FASD was given?

A No, I don't independently remember.

Q Okay.

A A course on FASD.

Q Do you remember attending any CLEs on fetal alcohol spectrum disorder before, prior to 2012?

A No, I don't recall.

Q Before your work on Mr. Chappell's case, had you requested an expert on FAS in any other case?

A Well, you have sent me a copy where I made a request in front of Judge Cadish in State of Nevada versus Dante Johnson, who had been sentenced to death, and I also believe in your questioning of me before I told you that I had, I think

the same experts that you have outside in a case that was -- in other words it was pending a capital trial in State of Nevada versus Burns.

Q In the one that I sent you on Dante Johnson, could you look at Exhibit 7 in front of you.

A Yes.

Q Does that look like the supplemental brief you filed in that case?

A It does.

Q And when was that filed?

A It shows October 12th, 2009.

Q And that would have been roughly three years after Mr. Chappell's brief that you filed in his case?

A When did I file his brief in this case?

Q Court can take judicial notice of the docket, but I believe it's February of 2012, the supplemental brief.

A So, yes, but you said that -- you said that I filed --

Q About two and a half years. This was roughly two and a half years before.

A Yes, Dante Johnson.

Q And did you raise in Mr. Johnson's case that counsel failed to raise evidence of fetal alcohol disorders?

A Yes.

Q Did you state in that brief that FASD is a group of

disorders that can occur in a person whose mother drank alcohol during her pregnancy?

A Yes.

Q And did you say that some of the symptoms of FAS are poor judgment and reasoning skills?

A Yes.

Q Do you remember what evidence you actually had in your possession at the time that you were representing Mr. Chappell related to fetal alcohol spectrum disorder?

A Not independently. You have sent me something showing a questionnaire, I believe, by Dr. Etcoff, but that didn't really provide me more. I had that knowledge that his mother had had the problems.

Q When you say the mother had problems, what -- can you --

A Drugs and alcohol.

Q Okay. During her pregnancy with --

A Correct.

Q -- James. Okay. Did you interview any of Chappell's family regarding whether Chappell's mother drank or took drugs during her pregnancy?

A I don't believe so.

Q Did you take any other measure to contact family members? Did you write them a letter? Did you make any phone calls?

A No. And I thought that would be fruitless since nobody was arguing that she wasn't doing that. Do you see what I mean? In other words, I had proof of it, and I had nobody disputing it.

Q So it's your testimony that the only thing you could've interviewed family members about was whether Mr. Chappell's mother drank during her pregnancy? There was nothing else that you could've inquired about them regarding fetal alcohol spectrum disorder?

A Oh, we could've interviewed them and done a whole bunch of things, but again an investigator was denied.

Q Right. So that's what I'm asking. You personally could have written them a letter or called them?

A I could, yes.

Q Okay. Did you interview Mr. Chappell's probation Officer William Moore [phonetic] about whether Chappell's mother drank or took drugs?

A No.

Q Okay. Did you review Dr. Etcoff's report prepared for the 1996 trial during your representation of Mr. Chappell?

A I would presume so.

Q Okay. Can you turn to Exhibit 13 in the binder in front of you.

A Yes.

Q Does that document look familiar to you?

A I see what it is. And when you say does it look familiar to me, what do you mean? Could you be more specific? Does it look familiar?

Q Do you remember seeing this document in the files that you received from Mr. Schieck?

A Again, I would presume so.

Q Okay. Do you remember seeing a notation that Mr. Chappell was placed in special education classes in various grades?

A I would presume so.

Q And okay. Did you review Mr. Chappell's school records during your representation of him?

A I would presume so.

Q In your motion for funding, did you argue that one effect of fetal alcohol spectrum disorder is problems with learning?

A Yes.

Q Based upon your argument, wouldn't reviewing Chappell's school records have assisted you with giving more information to the Court?

A Yeah. Yes.

Q Do you remember any notations in the school records that Chappell was -- I think you said this -- he was in special education classes -- that was in the school records -- and that Chappell was characterized in school records as emotionally

impaired?

A It could well be. He had a very problematic childhood. Yes.

Q And he suffered from low academic achievement and average level of intellectual ability?

A Right.

Q Did you raise this argument regarding the funding for FASD to the Nevada Supreme Court?

A I did. In fact, what I did was -- I read the briefs in the last couple of days, and what I did is I morphed the no investigator, no funding, no experts, no evidentiary hearing, and I made that the number one issue.

Q Uh-huh.

A I changed it from the supplement and said, look, I'm not funded. I couldn't go outside this record. Can we send this back down, a new evidentiary hearing, and --

Q So other than your motion for funding, did you present any additional evidence to the Court in support of your motion for funding, any other outside the record information other than what you said in your motion for funding?

A No, just the supplement and what was in the record.

Q Did you reach out to any experts on FASD to pick their brains about what arguments you could make to the Court to promote your argument for the need for funding?

A No, because I wouldn't know what else anybody else

could help me with. I thought it was pretty straightforward.

Q So you didn't think talking to an expert in FASD would assist you in gathering more information to give to the Court for funding that you don't --

A Oh, absolutely. I do, but that's why we get funding. In other words, once you get the expert funding, then you get the expert, and then you get to do all of this.

Q You didn't think that just calling an FASD expert and just asking them for a few minutes of their time to help you out? A consulting expert.

A For what? I'm not sure, like, just to say, you know, I'm contacting you and --

Q Yeah. You've never done that before?

A If I didn't -- I would think it was kind of a fruitless conversation because if all you're doing is talking about it, I figure they're going to tell me, yeah, that guy could have fetal alcohol; why don't you try to get us appointed. So, I'd be like, okay, that's a good idea. So that's what I did.

Q You didn't think about calling them up and asking what else you could argue to the Court to help your motion for funding?

A No, because I would've thought it would have been granted. I thought I -- I would've thought what I had done was going to get me what I wanted.

Q Uh-huh. And after that happened, you didn't do any additional research? You didn't call any experts for a motion for reconsideration of that denial?

A No, I didn't. And I'll tell you, when I came into the court, the Court started on page 1, and basically said, I've reviewed all of this, Mr. Oram, and I think by page 2 is saying, I'm going to deny this writ, and the Court also says to me that the Court has appointed -- done a lot of evidentiary hearings with me and says, I've read everything; I'm not inclined to grant this, gives me a little bit of time to talk.

Again then I ask the Court, Could you give me some direction if you do want to hear anything, is there -- can I dissuade you from denying this?

Q But, again, in your -- in that argument, you never raised the issue again about the FASD experts. Your concentration was on a preejaculate expert, correct?

A Yes, that's correct.

Q Okay.

A I do say to the Court, you know, I'm ready to argue for an hour. I'm prepared to argue this, but --

Q But you didn't argue the FASD?

A No. And the Court addresses it I think on page -- the Court addresses that matter on page 11 of the ruling, specifically goes over why the Court does not want to appoint, and the Court's looked it over and that the jury had looked at

mitigators on page 11 of the other order.

Q Uh-huh. And at no time at that point did you make any other arguments to the Court why you thought that was incorrect?

A No. I didn't argue with the Court.

Q Did you give the Court any names of experts that could be brought in?

A No.

Q Did you give the Court any cost estimates and how much it would cost to bring an expert in?

A I didn't know at that time how much it would cost, and I didn't feel that the Court was asking about -- I think the Court was telling me I've read everything. This is unpersuasive. In fact, I think the Court says right on page 1, This is unpersuasive, and so --

Q Okay. Oh, I'm sorry.

MR. LEVENSON: Can I have a moment, Your Honor?

THE COURT: Yes.

MR. LEVENSON: We'll pass the witness, Your Honor.

THE COURT: Cross.

CROSS-EXAMINATION

BY MR. OWENS:

Q Mr. Oram, your entrance into this case I believe you testified was in what, 2012 when you filed the supplemental petition. Does that sound about right?

A I think, Mr. Owens, that Mr. Levenson showed me an order where it was 2010 where I was appointed.

Q Okay.

A I don't remember.

Q So the pro per petition was filed in 2010. Your supplemental brief was filed in 2012. Does that sound about right?

A Yes, sir.

Q So that was about five, six years ago, and that was you and me, and, in fact, it was here in this department; is that right?

A Yes.

Q In that supplemental petition that you filed, you had already recognized fetal alcohol syndrome as a potential issue to pursue in this case; is that right?

A Yes. I do it what I would call almost ad nauseam. Now that I've gone through it I just can't stop saying fetal alcohol. In fact -- yes.

Q And that was based on things that you read in the record in this trial where you discovered that there was evidence that the defendant's mother had been abusing drugs and alcohol during the pregnancy?

A Yes. It may even be in the record and also outside of the record because I would've talked to David Schieck. I would've talked to trial counsel about it or penalty phase

counsel about it. So I was aware of it from a number of different sources.

Q In fact, do you recall that that was one of the mitigators specifically written in by the jury that defendant was born to a drug-and-alcohol-addicted mother?

A Not only that, but I remember that the actual Court, when the Court made the oral ruling against me, addressed that the jury found those mitigators, and I remember the Court specifically saying to me, I don't think it would make a difference. They found it, Mr. Oram.

Q So even though there was some evidence presented of it and the jury found it as a mitigator, you still felt that prior counsel David Schieck was ineffective in failing to do -- to do what? To pursue that more aggressively?

A Well, I'm arguing that I want the appointment of the investigator to pursue this avenue is what I'm asking and to see what can be unearthed with it.

Q And it would have been based on the claim of ineffective assistance of counsel, right?

A Yes.

Q That's what you raise in habeas, right?

A Correct.

Q So you don't think that David Schieck had done as good a job with that issue as perhaps he should've?

A I would just clarify this. I make arguments. I

think Mr. Schieck is a fine lawyer, and so I'm a little more cautious to say I don't think he did a good job. I'm not -- that's not the way I approach ineffective assistance of counsel. I believe I could make the argument, and I'm trying to assist Mr. Chappell. I tried to make the argument as ineffective assistance of counsel not to have obtained it, and I'm trying to convince the Court and eventually the Supreme Court to give me the funding to do it, which I could not get.

Q Do you recall that David Schieck had actually called two different psychologists in the redo of the penalty hearing which I think was 2007, as well as a medical expert, three different experts to testify in their penalty hearing? Do you remember that?

A It sounds about right, and I believe Mr. Schieck actually overturned the penalty phase, but I can't swear to it.

Q And it sounded to me on direct that you were being questioned or criticized somewhat for focusing on an issue regarding an ejaculate expert as opposed to a fetal alcohol syndrome expert; is that right?

MR. LEVENSON: Objection, Your Honor.

BY MR. OWENS:

Q He was questioned or criticized, maybe it was just questioned, that your emphasis at least in response to the State's opposition was that you argued here in front of this Judge more strenuously about this ejaculate expert rather than

fetal alcohol?

A I don't think he was criticizing me, but he was questioning me. Yes.

Q All right. And so do you see the ejaculate expert as being a more important issue perhaps than fetal alcohol?

A It was because it was the only aggravator left. So once the Court had made the statement to me, I've read everything, I'm inclined to deny this, I felt that there was just the tiniest bit of wiggle room if there's something else you want to say, and I just thought go right at the aggravator, see if I can convince the Court to give me something to attack that aggravator, and so that's why I went directly at that. I thought if I can get rid of the aggravator, I can get him off death row.

Q So rather than just presenting new evidence of more mitigation which might help in habeas, you felt like going after that sole aggravator, if you could defeat that, the death is off the table; right?

A Correct.

Q In fact, that's the focus of the three experts that David Schieck called in the penalty hearing; right? They were all focused on overcoming that sole aggravator of the sexual assault and whether it was consensual?

A Yes. And not only that, but I remember now conversations with Ms. JoNell Thomas about focus on this,

Chris, during the -- when I got the postconviction. Look at that aggravator. There's something wrong there, and so she gave me some indication to look at that very carefully.

Q So you've had experience both trying capital cases and doing habeas in capital cases; right?

A Tremendous amounts.

Q And so as a trial litigator, one who actually goes into court and has to convince a jury, you saw the more important issue being those which focused on undermining that aggravator rather than something just presenting new mitigation evidence?

A Mr. Owens, I wouldn't say that I -- I know as a capital litigator that if there are no aggravators you cannot sentence my client to death. I see it as a very important issue, but I saw other issues as important here too. I felt that they're important. When we talk about the experts I asked for, I didn't feel -- as I'm sitting here, I know the Court disagreed with me. I know the Supreme Court disagreed with me, but as an advocate, I felt that what I was asking for was important.

Q So you don't put all your eggs in one basket and focus on one issue?

A No, sir.

Q Establishing the defendant suffers from fetal alcohol syndrome does not disqualify him for the death penalty, does

it?

A No.

Q Establishing that the sexual assault was consensual does?

A What they had relied upon to uphold it in that appeal was wrong, and that's what I was trying to show, that I felt it was wrong. I could see an argument that looked flawed to me.

Q And so the experts that David Schieck called, there was one that testified as a psychologist about the cycle of domestic violence and whether or not the victim truly consented or whether she would use sex as a means to renew her relationship with the defendant in and out of this relationship. That was focused on undermining consent so you could dismiss that sexual assault aggravator; correct?

A Well, that's what they were trying to do. Yes.

Q And same too with the ejaculate expert that you're talking about. That would be another way to show that the defendant didn't lie when he said that he withdrew and that there was preejaculate fluid in her. That would explain the DNA in her and be consistent with a consent?

A Yes. They were saying he was lying, and it doesn't have to be that way, and that bothered me that -- I just thought it was a flawed -- your arguments I thought were flawed, your arguments.

Q One of the other experts that David Schieck called

was this Dr. Todd Grey, the medical examiner, who testified there was no physical evidence of sexual assault; is that correct? Do you remember that?

A Yes. Yes.

Q And then the final one was Dr. Lewis Etcoff, who testified that the defendant had a bad childhood, that he was ill-suited to make decisions under stress and that he had abandonment issues, a lot of different things going on in the defendant's mind, again focused on showing that the sexual assault was consensual; is that right?

A Yes.

Q Let me move on. After you filed the supplemental brief, you filed these motions that you were asked about on the direct examination; is that right? Motion for an investigator and for three experts; right?

A I would've thought it was simultaneous with the supplement, but I could be wrong.

Q I think it was. You were denied the investigator; correct?

A Yes. Yes.

Q You were denied funding for a PET scan which is a Positron Emission Topography scan. What was your purpose in asking for that?

A So that we could -- I wanted to have examination of his brain. I wanted to have experts look at this information

to see about brain damage and fetal alcohol.

Q Kind of to confirm some of the opinions of Dr. Etcoff because he had testified that there was a neurological basis for the problems in defendant's brain. So you wanted to confirm that and show that there actually was brain damage; right?

A I think I probably would've wanted -- my hope would be go farther and that something better would come, something different would come.

Q And then you asked for a full neurological exam on Mr. Chappell?

A I did.

Q Because the last one had been 10 years prior?

A Yes.

Q And that's something common that you see in habeas is every time there's a new round of habeas, there's a new round of experts, right, frequently?

A Yes.

Q And then you wanted an --

A Can I just say with regard to capital habeas.

Q Right.

A I do a lot of noncapital habeas, and I don't usually see it there as much.

Q And then you asked for a third expert on the possible effects of fetal alcohol spectrum disorder on Mr. Chappell, and

you set forth that there was evidence his mother had been addicted to drugs and alcohol; is that right?

A Yes.

Q And you said, A proper investigation should have been conducted to determine whether James was born to a mother ingesting narcotics and alcohol during her pregnancy. There is no indication in the voluminous file that counsel investigated the possibility of fetal alcohol syndrome. Does that sound right?

A Yes.

Q And then you also filed a motion for the sexual assault or ejaculate expert, right, on that other issue to undermine the aggravator; correct?

A Yes.

Q And those were all denied?

A They were.

Q I filed an opposition. I think they already had you read from it where I said that it was a fishing expedition.

A You did.

Q And that does sound like something I might say.

A It does.

Q You said that you filed a reply, maybe not a reply directly to the motions, but a reply to my opposition, and in there you pressed again on your fetal alcohol and PET scan issues. Does that sound right?

A It is right.

Q In fact, it figured prominently in your reply brief that you said that these things had not been investigated adequately, and you needed the time and resources to go do that; correct?

A Not only did I do it there, but I realized in the reply brief in the Supreme Court I mentioned it 10 times.

Q Yeah. Okay. And we're going to get there in just a minute. It was denied at the argument by the Judge.

A The Court did deny it, yes.

Q And there was findings of fact and conclusions of law?

A Yes.

Q Where the Judge said, Even if brain imaging could reveal that Chappell suffers from fetal alcohol syndrome, this Court has already accepted such allegations as true and found it would not have changed the outcome. Does that sound like a ruling that was made against you?

A Yes. And it was -- the Court made it orally, made something very similar to that orally.

Q And we went up on appeal. There was briefing, and you said you raised this what, 10 times in your reply brief?

A What I did is I put it all in -- I changed it into argument one, and I thought the best thing I could do was try to see if I could convince the Court that -- the Supreme Court

that there wasn't the funding. There wasn't an evidentiary hearing. I think let's see if I can get this to come back down, and they gave me oral argument.

Q To show the Court that you didn't get a full and fair hearing here --

A Yes.

Q -- there wasn't funding, that the issues weren't taken seriously?

A No, I didn't -- I didn't say that this Court didn't take it seriously. I said that I should have had funding. I never said that nobody took it seriously. Just I take a little bit of exception to the way you said that.

Q Sure.

A I just said that I want funding. I should've been allowed this. This is something, you know, just making as much -- I thought it would be the strongest argument I could make to them. Get this back down to the District Court so I could get the hearing; I could get the experts.

Q And you thought you would win on that issue?

A When they had en banc oral argument and we had to go up there, I thought I -- I thought I had a fighting chance, yes.

Q So you and I went, and we argued this en banc in front of the full court?

A Six of them. I think Justice Douglas recused

himself.

Q And so they ruled against you. They judged -- agreed with Judge Ellsworth?

A Unanimously they agreed with Judge Ellsworth.

Q There was no dissent.

A No dissent and they addressed --

Q And they ruled. You've read the order of affirmance; correct?

A I have. And I read it this morning as well.

Q And they said, As his cognitive deficits have been extensively documented and the jury nevertheless -- nevertheless concluded that they were not sufficiently mitigating, Chappell failed to demonstrate that counsel were deficient?

A Yes. It mirrored -- it mirrored this Court's -- what this Court ruled is almost identical to what you just --

Q And they found that the District Court, Judge Ellsworth, did not err in denying this claim without an evidentiary hearing and without granting funding; correct?

A Yes. That's what they said.

Q And you didn't let it sit at that. You went and filed a petition for rehearing?

A Yes.

Q Hoping perhaps you could get -- illuminate this issue and get at least one Judge to change their mind up there?

A Yes.

Q And that was the subject extensively of the petition for rehearing, and I filed a response, and there's the typical one sentence order denying rehearing; right?

A Yes.

Q I think I elicited already that that was one of the aggravators the jury found, that Chappell was born to a drug-alcohol-addicted mother?

A That's one of the mitigators you mean.

Q I'm sorry. One of the mitigators that they found. They also found that he had suffered from a learning disability because that was something that Dr. Etcoff had talked about?

A Yes.

Q And their special verdict form was written out in their own handwriting. It wasn't just a check the box. They actually --

A No. I noticed that.

Q -- wrote that --

A Yeah.

Q -- and other mitigators down?

A Yes. And I actually think in the oral decision of this Court, of this District Court the Court addressed that. When I went back and looked at that, the Court actually in her ruling sort of goes through. She doesn't say Mitigator Number 1, but she says what the jury found or what was presented to

the jury.

Q So you recognized this as an issue, and you did your best to raise it and brief it to the courts?

MR. LEVENSON: Objection, Your Honor. The State is taking actually the contrary attitude they took in front of you in 2012. They stated numerous times that Mr. Oram was deficient in his performance because he argued with no specificity, and he was going on a fishing expedition. So to now say that he did the best he could in 2012 seems disingenuous to me.

MR. OWENS: I never said that Mr. Oram was deficient. I disagreed. I think he went over the top and went into areas that clearly the Supreme Court did not agree needed to go into. He was being extra zealous on behalf of the client is my point.

THE COURT: It's overruled. I don't think that the State is arguing contrary to their prior position so should be estopped.

BY MR. OWENS:

Q So, Mr. Oram, you recognize this as what you felt was an important issue, this fetal alcohol syndrome issue?

A Yes. Yes. I just don't -- when I go through this and I prepared for this, I can't think of how many more times I could say it without being obnoxious.

MR. OWENS: Thank you. I'll close my examination.

THE COURT: Thank you.

Any redirect?

MR. LEVENSON: Yes, just briefly. One moment, Your Honor.

REDIRECT EXAMINATION

BY MR. LEVENSON:

Q Mr. Oram, the State has been talking about this mitigating factor that Mr. Chappell was born to a drug-and-alcohol-addicted mother. Do you see a difference between an aggravator that talks about being born to a drug-alcohol-addicted mother and being born with FASD?

A You said an aggravator.

Q I'm sorry. Mitigator. The mitigator.

A Well, I see -- okay. So --

Q Do you see a difference between the jury finding that he was born to a drug-alcohol-addicted mother and evidence that he was born with FASD and what that means? Do you see a distinction?

A Oh, yes. I would think that an expert would be able to give -- shed much more light. I've often argued that, that we as lawyers saying, okay, this is what that means. I cannot articulate fetal alcohol, like I'm sure the next witnesses are going to be able to do. I'm not -- so I do see a distinction between we as lawyers arguing, and, again, that's why I would ask for an expert so that they can give that kind of information.

Q So it's your testimony that the jurors didn't know the full extent of the problem just by the fact that they found he was born to a drug-and-alcohol-addicted mother?

A That's what I was arguing.

Q Mr. Oram, would you raise a frivolous issue to the Court?

A I raise issues in capital cases that I often footnote in the Supreme Court and to the district courts where I say I recognize the issue I'm raising has been denied repeatedly. I do it to preserve for federal review. So I suppose somebody -- a Court could say you know those have always been denied, and so is that frivolous? I try not to raise things that are going to cause a loss of credibility, and like with those issues just acknowledge that you --

Q So let me be more specific. Did you raise -- did you think your fetal alcohol spectrum disorder issue was frivolous?

A No.

Q Did you think it was less important than the ejaculate issue that you raised?

A (No audible response.)

Q Did you think that if James Chappell had FASD that that would not have perhaps one juror would have found that he should not have been sentenced to death?

A That's possible, but I guess what you're asking me is if I could -- if I could defeat one of the two, I'd defeat the

sexual assault because then there's no -- there's no death. So I saw that as the -- that would be the most important primary attack. To be -- from the beginning when I had this case, the most primary attack I could get was to get rid of that aggravator.

Q So in your case then, you actually argued for the ejaculate expert to the exclusion of the FASD expert?

A No. No.

Q But you didn't raise any argument about the FASD expert in front of this Court, in front of this Court at the hearing?

A Yes. There were a lot of issues that I raised that were not raised. I mean, that's very quick. If you look back at that evidentiary hearing transcript, as I look at it, by page 1, the Court is telling me essentially what the ruling is, looks like it's going to be. So, yes, at that point where she just gives me a little window to say something, I go after the expert that I think could attack the one aggravator.

MR. LEVENSON: No further questions.

THE COURT: Recross.

MR. OWENS: Nothing further.

THE COURT: May this witness be excused?

MR. LEVENSON: Yes, Your Honor.

THE COURT: Thank you, Mr. Oram.

THE WITNESS: Thank you very much, Your Honor.

Do you want me to leave?

MR. LEVENSON: Yes, please.

THE COURT: You may call your next witness.

MR. LEVENSON: Thank you.

MR. WISNIEWSKI: Thank you, Your Honor. We would call Dr. Paul Connor.

PAUL CONNOR

[having been called as a witness and being first duly sworn, testified as follows:]

THE CLERK: Thank you. Please be seated. State and spell your name for the record.

THE WITNESS: My name is Paul Connor. Last name is spelled C-o-n-n-o-r.

THE COURT: You may proceed.

MR. WISNIEWSKI: Thank you, Your Honor.

DIRECT EXAMINATION

BY MR. WISNIEWSKI:

Q Good morning, Dr. Connor.

A Good morning.

Q Do you need a moment to get some water?

A That's okay.

Q Oh, okay. What do you do for a living?

A I am a clinical neuropsychologist in private practice.

Q And are you licensed to practice in any states?

A I have a full license to practice in the states of Washington and Oregon, and I get temporary licenses when needed in other states.

Q Okay. Did you get one for Nevada for this case?

A I did.

Q And that's a license as a psychologist?

A Yes.

Q What educational degrees did you earn to prepare you for your position?

A I received a bachelor of science degree in psychology from the University of Washington and then a Ph.D. in clinical psychology with a specialization in neuropsychology from Brigham Young University. As part of that training, I do an internship year which was at Henry Ford Health System in Detroit, Michigan.

Q What is clinical psychology?

A Clinical psychology is either the assessment of or treatment of mental health conditions or personality conditions. So it's looking at issues of depression, anxieties, psychotic conditions, personality disorders, things like that.

Q And what is forensic psychology?

A Forensic psychology is usually applying those sorts of skills in a forensic setting in a criminal or civil case.

Q And is that what you did in this case?

A Not entirely. I did a neuropsychological evaluation which is different from a psychological evaluation.

Q Well, let's get to that next. What is neuropsychology?

A Neuropsychology is -- it can be both assessment and treatment -- in my case, my practice is all assessment -- of brain behavior relationships, how a person's brain is essentially functioning through the use of various tests of memory and attention and planning and problem solving and different things like that.

Q How much of your practice is clinical psychology versus neuropsychology?

A Well, clinical neuropsychology versus --

Q I'm sorry. Versus forensic.

A Forensic.

Q My mistake.

A That's okay. About 70 percent of my practice is clinical neuropsychology.

Q Okay. And the other 30 percent is forensic?

A Yes.

Q So is it fair to say, based on your description before, that neuropsychology is a subspecialty within psychology?

A That's correct.

Q Okay. Now, what is your -- when was the beginning of

your experience related to fetal alcohol spectrum disorder?

A When I completed my internship, received my Ph.D., I wanted to get a postdoctoral fellowship. I came back to the University of Washington to work at the fetal alcohol and drug unit at the University of Washington doing research on fetal alcohol spectrum disorder. So I was postdoc there from 1995 to 1999 and then stayed on as a faculty member.

Q What were your research areas?

A Fetal alcohol syndrome, neuropsychological impacts, mental health impacts and neuroimaging.

Q Okay. Have you published any articles on FASD for any peer-reviewed journals?

A Yes.

Q How many?

A Purely FASD articles, probably 16, 17.

Q And how about other aspects of neuropsychology?

A Closer to 20.

Q Have you taught any courses on either of those two subjects?

A Quite a lot.

Q Okay. More than 10?

A Closer to about 100.

Q Oh, okay.

MR. OWENS: And, Judge, if I can interject. I accept him as an expert as well as the other two if that helps counsel

or not, but I don't have any dispute regarding their qualifications.

MR. WISNIEWSKI: Just one more question then, Your Honor.

THE COURT: All right.

BY MR. WISNIEWSKI:

Q How many prior court settings, federal and state, have you been qualified as an expert on in the realm of FASD?

A In the realm of FASD, all 25 times that I've been called to testify.

Q Okay. And how about in the realm of neuropsychology?

A All 37 times I've been called to testify.

MR. WISNIEWSKI: So, Your Honor, based on the State's stipulation, we would move that Dr. Connor be designated as an expert in neuropsychology and fetal alcohol spectrum disorder.

THE COURT: Well, the Court doesn't designate them as an expert. There is no objection to his testifying, and I'm not excluding his testimony, but I don't put my blessing on him. That's not the role of the Court.

MR. WISNIEWSKI: Thank you, Your Honor.

THE COURT: Go ahead.

BY MR. WISNIEWSKI:

Q So, now, Dr. Connor, would you please flip to Exhibit 17 in your binder and review it, and let me know when you're done.

A Yes.
Q What is Exhibit 17?
A This is a copy of my report of neuropsychological assessment that I did with Mr. Chappell.
Q And is it a true and correct copy?
A His date of birth, year of birth is not on this form. It was on my original report, but, other than that, it looks the same.
MR. WISNIEWSKI: And, Your Honor, just for the Court's attention, that was redacted pursuant to court rules since this is a public filing.
BY MR. WISNIEWSKI:
Q Doctor, when was that court -- when was that report created?
A The report was created in July of 2016.
Q And do you regularly prepare reports such as this one in your work as a neuropsychologist?
A Yes.
Q Are these reports made at or near the time that you receive and review the information they contain?
A They often are. It's at the discretion of the attorneys as to when I generate a report. I'm not going to write a report unless they ask me to write a report.
Q For the occasions when you are asked to write a report, is it your practice to do it as soon as possible?

A Yes.

Q Are they comprised solely of information which is based on the reports of a person with knowledge of the information that they contain?

A Yes.

Q And are you responsible for the generation, retention and storage of these type of reports?

A Yes.

Q Okay. Now, do you see on page 3 of that report of the list of the -- a list of the documents reviewed in arriving at your results?

A 3 and 4, yes.

Q Okay. Between the dates that you prepared that report and today's hearing, did you review any additional materials related to Mr. Chappell?

A Yes. I was provided with a number of other records within the last couple of months.

Q Okay. And are those records the ones listed in Exhibit 18 in that binder?

A It looks like Exhibit 18 has both records that I reviewed as part of my report and also some of the new -- and also the new records, but, yes, it includes both of them.

Q Okay. So 18 is a comprehensive list then?

A Yes.

Q Okay. Is there any information that was not provided

to you that you feel would have been necessary for you to accurately opine about your conclusions today?

A No.

Q Did you create a PowerPoint presentation to assist you in presenting your conclusions to the Court?

A I did.

Q And if you could please flip to Exhibit 21 in the binder and review it. Are those printouts of the PowerPoint that you created?

A Yes.

Q Now, Doctor, do you do all your work for free?

A No.

Q Who hired you?

A I was retained by the defense counsel in this case.

Q The federal public defender's office?

A Federal public defenders, yes.

Q Did the fact that you were compensated for your services in any way affect your belief as to their accuracy?

A No.

Q Okay. Doctor, what did the federal public defender's office ask you to do in this case?

A They asked me to conduct neuropsychological testing and review records to determine if Mr. Chappell's current neuropsychological functioning is consistent with a diagnosis of fetal alcohol spectrum disorder.

Q Were you able to come to a conclusion?

A I was.

Q And what is that conclusion?

A That his function is consistent with the diagnostic guidelines for fetal alcohol spectrum disorders.

Q Thank you. Now, Doctor, I'm going to turn you to the PowerPoint that we talked about previously. What is fetal alcohol spectrum disorder?

A It's actually not a diagnosis itself. It's an umbrella term, and it is used to encompass a number of formal medical diagnoses. The first one is fetal alcohol syndrome, which are individuals that have a particular set of facial features, growth deficiencies and CNS cognitive impairments. Partial fetal alcohol syndrome are individuals that have some of those physical features but not all, but they have the same cognitive and CNS malformation impairments.

And then ARND, which is a condition where they don't have any of the physical features of FAS; they don't have facial features. They're not necessarily short statured when they were young, but they have the exact same set of cognitive CNS impairments.

Q So --

MR. OWENS: Judge, if I could interject for just a minute. I guess I have an objection or a question at least or a concern regarding the exhibits that we're using because the

record should now reflect that we've moved into a PowerPoint that I guess is in the exhibits as Exhibit 21, and that's now being displayed.

I'm not sure the manner in which we've been using these exhibits that are in a binder, 22 exhibits provided to me by the federal public defender, it seems to be documents already on file in this court for the most part from what I've seen so far, and they're being used to refresh witnesses' recollections. So I've been using them for that purpose. If some or more of them are going to be admitted at some point, I might very well have an objection, but if it's just to refresh memories, that's one thing.

And now we've got the PowerPoint going on. I don't know if they intend to, since it's in with the exhibits, I don't know if it's just for demonstrative purposes or they're offering the actual content of the PowerPoint for the truth. I just don't know where we're going with the exhibits, I guess.

THE COURT: Yes. Why don't you clarify.

MR. WISNIEWSKI: Your Honor, our -- our intention was going to be that at the conclusion of all of this we would address the issue of whether these documents should be admitted or not.

Now, for present purposes, this is being offered as a demonstrative aid. We believe that the witness is going to refer to it to elucidate the Court about his testimony. So I

think probably at this time an objection as to its admissibility is premature. We're simply offering it as a demonstrative aid and the Court can, you know, reply upon the testimony solely at this point.

THE COURT: Well, I don't know that an objection is premature at this point. If you're wanting to offer it as a substantive exhibit, generally you would lay the foundation and then move to admit it before the Court would consider it since I'm the finder of fact in this proceeding. If it's a demonstrative aid only, then generally what I do in those cases would be that it is marked as a court exhibit as something, you know, any time a PowerPoint is used, even in trial, where it's used I have marked those copies as court exhibits for a complete record of what was put forth in the hearing or in the trial in the case of a trial. So --

MR. WISNIEWSKI: So basically you would want to address this issue now?

THE COURT: So you need to make a decision. Is it a demonstrative aid, or, otherwise, you lay the proper foundation for why this should come in as an exhibit.

MR. WISNIEWSKI: We're fine with it being marked as a court exhibit as a demonstrative aid, Your Honor.

THE COURT: All right.

MR. OWENS: And I have no objection to its use in that way. The other exhibits I guess we'll deal with as they

come about, but so far, to my knowledge, they've just been used as refreshing memory.

THE COURT: All right.

BY MR. WISNIEWSKI:

Q So now, Doctor, you said that each of these three conditions you spoke about -- FAS, PFAS and ARND, they all feature central nervous system dysfunction as part of their effects?

A That's correct.

Q Okay. And what is central nervous system dysfunction?

A Central nervous system dysfunction is dysfunction in the brain. CNS consists of both the brain and spinal cord and peripheral nerves. We're looking at the central nervous system area which is more related to the brain, so regions of the brain, their functioning and the way that we test them through the neuropsychological assessment to look at how those regions are working.

Q Is there a difference between brain dysfunction and brain damage?

A Yes. Brain damage is a medical term, that structurally there is something damaged within the brain. As a neuropsychologist, I don't do that. I look to see what the person's functioning is, what the brain functioning is. So that's what I usually discuss is functioning.

Q And so that was -- is it fair to say that a diagnosis of FAS, PFAS and ARND cannot be made unless there's evidence of brain dysfunction?

A That's correct.

Q And now, Doctor, the PowerPoint also has a term FAE. What is that?

A FAE was a diagnostic term that was used back -- it started in the late '70s for individuals that didn't have the full fetal alcohol syndrome, all the facial features. They may have had some. They may have had none of the facial features, but, again, they had the exact same set of CNS or brain dysfunction, neuropsychological dysfunctions. In 1996, when the Institute of Medicine was released, the term FAE was phased out and replaced with either partial fetal alcohol syndrome when there's some physical features, or ARND when there's no physical features.

Q Doctor, what causes FASD?

A Maternal drinking during pregnancy.

Q Can other substances adversely affect a gestating infant?

A Yes.

Q Do they do so in the same manner that alcohol does?

A No.

Q During the course of your work on this case, some of the terminology you just talked about, did the federal public

defender's office ask you for your assistance in developing a poster board that could sort of serve as a glossary?

A They did.

MR. WISNIEWSKI: Okay. And, Your Honor, if I can approach?

THE COURT: Yes.

BY MR. WISNIEWSKI:

Q Is this the poster board that was generated, Doctor?

A Yes.

MR. WISNIEWSKI: And, Your Honor, just for the Court's information, we're going to hopefully be able to just display that as a glossary throughout the course of this presentation as the doctor relies on other slides.

THE COURT: Okay. Well, you better move it up closer for my eyes then.

MR. WISNIEWSKI: All right. How close would you like it? Towards a couple feet?

THE COURT: At least 2 feet.

MR. WISNIEWSKI: All right.

THE COURT: There you go. That's good. Thanks.

MR. WISNIEWSKI: Thank you.

BY MR. WISNIEWSKI:

Q All right. So, Doctor, why does alcohol affect a fetus in the way it does?

A Well, alcohol freely crosses the placenta. The

placenta offers no barrier, no filtration of alcohol, so that within a few minutes of the mother, the pregnant woman drinking alcohol, the blood alcohol level is equilibrated in the fetus. The trouble is that early on in pregnancy the fetus has no working liver, and so it has no way of processing out the alcohol. It's dependent upon the mother in order to process alcohol, and so, unfortunately, alcohol then stays on board in the fetus's system for longer periods than it would've if it had a functioning liver.

Q What are some of the -- what is the onset of CNS damage that can result from that alcohol exposure in the early stages of pregnancy?

A Well, in animal studies, they found damage that has occurred within 12 hours of exposure.

Q And what is this slide, Doctor?

A This is a study that was done by Kathy Sulik of rodents, and they administered alcohol to the moms, and then 12 hours later they sacrificed mom and fetus, and they stained the tissue of the fetus. And what they stained for are dead cells. And so where the arrows are pointing on the left, all those black dots are dead cells in the mouse fetus.

On the right, you notice that they're congregated in that kind of frontal tip area, and that area is the region of the fetal tissue that goes on to become the brain in a developed rat.

Q And this was after just 12 hours of alcohol exposure?

A This was 12 hours after alcohol was exposed -- they were exposed to alcohol.

Q Okay. Not 12 hours of constant exposure?

A No. No, it was not 12 hours of constant exposure.

Q Oh, okay. What are the biochemical processes by which this type of brain cell death develops?

A Well, alcohol is what's called teratogenic drug, and a teratogen is a substance that will kill fetal tissue. So let's say you have a petri dish. You put a live cell, I'll call it a nerve cell because that's what I most pay attention to, you put a live cell into there. It's perfectly happy to function in that -- in that petri dish. You put alcohol into that petri dish. It will kill that cell. So it has a direct toxic effect of killing the cell.

Also, as alcohol is metabolized by the mother through the liver, there is a -- one of its metabolites called acid alcohol -- acetaldehyde, and that is also a noted teratogenic drug. So even during the process of the mother's filtering out and breaking down alcohol, there are chemicals that are being created that also will directly kill the cells.

Alcohol also has a tendency to restrict flow of blood through the umbilical cord, and so you can get situations of essentially hypoxia, lack of oxygen, to the fetus. And then alcohol has an impact on the development of brain cells

throughout the course of pregnancy. It can affect when the cells are first being created, genesis. It can affect when the cells are copying themselves, proliferation.

It can affect when the cells are moving from a central location where they're developed to the location that they need to end up in the fully developed brain, and that's the migration process. In fact, some of the earliest autopsy studies found clumps of cell bodies in areas where they shouldn't be, in the middle of white matter pathways.

And then there's another process that's a normal process called pruning or apoptosis where we have a lot more connections within the brain than we need, and we have to pare them back. Alcohol can stop that process. So you have connections that are going to places that they shouldn't be going. Think of like an electric sort of a system. You're getting electric connections going to the wrong parts of the brain. So you get short circuits within the system because of that.

Q And now I just want to make sure I'm understanding you correctly. You spoke about that acetaldehyde. You know, some of your earlier testimony was that one of the reasons that alcohol was so damaging is that alcohol passes freely through the placenta and directly impacts the developing infant. Is that affect of the byproduct of the absorption of alcohol by the mother? What you're saying is that even if the mother's

liver fully processes that alcohol the byproducts of the alcohol breakdown still damage a developing infant?

A Right. Acetaldehyde itself gets broken down too. So the liver is taking care of that as well, but during that time when the acetaldehyde is in the mother's system, it's also in the fetus's system.

Q Okay. Now, this is sort of all on the cellular level. What are some of the observable disabilities that can result from prenatal alcohol exposure?

A Well, the one most, I guess, catastrophic is just death. The fetus may not be viable. So there may be spontaneous abortion, or the child may be stillborn or die very soon after birth, but then there are the physical malformations. I'm sure that Dr. Davies will be talking about these in much more detail, the physical facial features. There's also growth deficiencies that can occur, and then what I pay attention to, the functional deficits, the deficits in learning and attention and planning and problem solving and processing of information, things like that.

Q Now, is the brain dysfunction greater among persons who have the accompanying physical abnormalities, or is it -- or can it be the same regardless?

A It can be -- it can be the same. In fact, people that don't have the physical anomalies can actually have far worse impairments in cognitive function.

Q And now why is that? Because, you know, you might assume that it sort of progresses as a steady progression of damage, the effects of alcohol. Why does it seem to target some areas more than others?

A Well, it has to do with the timing of alcohol. The physical features, the facial features of FAS actually get laid down very early in pregnancy, like six to the eighth week of pregnancy, a lot of times before the woman even knows that she's pregnant. So if she drinks during that tight window, you can see the physical features of FAS. But if she doesn't drink during that window, no physical features.

But if she drinks after she finds out that she's pregnant and continues on drinking throughout the course of pregnancy, there are what, six more months plus of alcohol on board this fetus, on board the system as the fetus is developing. So you can get at least equal impairment, sometimes worse impairments.

Q Now, have any alcohol exposure tests been conducted in a laboratory setting?

A Yes. There have been quite a few. This is one particular one that really exemplifies the neuropsych side of things, the functional deficits for individuals with FAS.

Q And what is this detour learning test?

A So this is a test where you have this room set up of -- with a window, and you can look through the window, and

you see a food dish, and you put a chick in there, and the goal is, of course, to try and figure out how to get to the food. When you put a normal chick into that room, it sees the food. It runs towards the food. It bonks its beak on the window.

It may do that a couple of times, but it learns, and then it starts looking around the room. It starts problem-solving. It sees that there's a doorway. It goes out, gets to the food. You grab the chick. You throw it back into the room. It sees the food through the window and goes, oh, yeah, I figured this out. It goes out the door and goes to find the food. It's learned the problem-solving approach.

You take that chick away, put it in later, a few days later or a week later. It may take a couple of trials, but it quickly learns to go out the door and get the food.

When you put a chick that was exposed to alcohol in ovum, it will see the food. It will run towards the food. It will bonk its beak on the window, picks itself up, sees the food, runs towards the food, bonks its beak on the window. It does it over and over again. It's what we call perseverations, doing the same thing even though they have negative consequences for you.

It may eventually find that door. It goes out the door, gets to the food. You put it back in. It starts bonking its beak on the window. It takes it a lot longer to learn how to solve the problem, but it may learn it. You take the chick

away, bring it back a week later, put it back in. It's almost as if it had never seen this before. It starts bonking its beak on the window. It takes a long time to relearn the task. So they have a hard time retaining information over time.

Q Now, Doctor, you had said that Dr. Davies talks a lot about some of the physical characteristics. Does this slide demonstrate some of the neurological impairments that, you know, occur with alcohol exposure?

A Yeah. Well, part of the thing about alcohol exposure is it has different impacts on the body, on the fetus depending on when during pregnancy. Early in pregnancy, the first trimester is a lot of the physical anomalies, the facial anomalies.

Second trimester, that's when you get a lot more of the spontaneous abortions, when you're trying to actually bring the systems together and on line and it doesn't work out. It's spontaneously aborted.

And then the third trimester tends to be kind of this rapid growth. Most of the development's there, but you just got to get bigger to get ready for delivery, but any time during the course of the pregnancy the brain is developing, and you can impact the development during any time during the pregnancy, all three trimesters.

Q Is that continual brain development is that referenced on this slide as well?

A Yes.

Q What does this chart show?

A It's a little bit of a messy one. This is in the standard dysmorphology books. It shows kind of periods of time when these different regions of the fetus are being developed. So you got the CNS with the very dark blue lines which shows that the heaviest period of development is throughout most of the pregnancy all the way up to about 20 weeks. The light blue means that there's some going on, but it's not as critical of a time period.

The heart, the limbs, the eyes, notice that most of that is done by the eighth week of pregnancy. The pallet, which would be the lip and the philtrum that you see in FASD, again, about the seventh to eighth week of pregnancy. So that's what this chart is kind of showing in a different way.

Q Now, these CNS deficits that we have been talking about, would they reveal themselves in a person's IQ score?

A They can. Yes.

Q Okay. What do you mean by can as opposed to will?

A I should say -- I should amend that to say that yes, it does impact their IQ, but throughout our research, what we found was that it doesn't impact them necessarily to the level where they are considered intellectually disabled based off of a standard IQ score. People that have the full facial features of FAS had an average score of about 79 which is actually in

the borderline range.

But people who had fetal alcohol effects, so now we call them partial fetal alcohol syndrome or ARND, their average score was actually 90. It was definitely lower than average which is 100, and that's what the black line in the background is is the average for normal individuals. So it's definitely decreased, but it's not something that is decreased into the impaired range.

And that's why I often talk about IQ as being really kind of a poor predictor of fetal alcohol spectrum disorders. Yes, it's impacted, but it's not one where you would give just an IQ test and say, yes, this person has fetal alcohol spectrum disorder.

Q And there were other deficits that IQ alone doesn't encompass?

A Absolutely.

Q Okay. And I think you spoke about this a little bit, but are the deficits a person suffering from FAE, Fetal Alcohol Effects, now known as PFAS and ARND, are they more pronounced in certain areas as opposed to others?

A Yes. Yes, they are. Neuropsychologically in general, but this is some research that was done in the mid-90s that was showing that individuals with FAS and even more pronounced for those that had the FAE or PFAS, ARND impairments in academic functioning, especially arithmetic --

once you get past one plus one equals two, math is actually pretty -- very abstract concept -- and also in their adaptive skills, their daily living abilities, how they can function independently on their own in a real-world setting when they're not getting a lot of support around them.

And individuals with -- especially with the individuals with FAE, they tended to have a bigger difference between what you'd expect based off of their IQ and what you see on their actual testing of academic skills and adaptive skills, and, in fact, when you come to adaptive skills, on average they were functioning within the intellectually disabled range.

MR. WISNIEWSKI: And I'm going to see if this works. Nope, it doesn't.

Your Honor, can I approach the board?

THE COURT: Yes.

BY MR. WISNIEWSKI:

Q Okay. So, Doctor, I just want to, you know, draw this out a little bit more. This chart --

THE COURT: I need a microphone.

MR. WISNIEWSKI: Oh, you can't hear?

THE COURT: Right.

MR. WISNIEWSKI: I was trying to talk loud.

(Pause in the proceedings)

BY MR. WISNIEWSKI:

Q So, Doctor --

Is it on?

THE COURT: No, that's not close enough. I said like -- there you go.

MR. WISNIEWSKI: There we go.

BY MR. WISNIEWSKI:

Q So, Doctor, you were talking about that there are adaptive deficits that are even much lower than their IQ and learning disabilities would predict. Is this the adaptive deficits that you were talking about?

A Those four diamonds on the far right are the adaptive functioning scores in that study.

Q Okay. And these three diamonds in the middle, those are the learning disabilities?

A Yes.

Q Basically. And the dot that's up there is the IQ?

A That's the average IQ. Yes.

Q Okay. And these are all mean so that this graphical representation is basically showing you the level of deficit directly; correct?

A Yes.

Q Okay. Thank you. So now turning to the next slide. Were there formal guidelines ever developed on how to diagnose FASD?

A Yes. There have been guidelines developed from the

'70s all the way through. They've been refined as time goes on.

Q Okay. What are the -- what are the Institute of Medicine guidelines?

A These were published in 1996, and they're a set of guidelines that establish that fetal alcohol syndrome, partial fetal alcohol syndrome, ARND diagnostics scheme. What I've got up here on the slide is only my area, the CNS. It has specific criteria when it comes -- or criteria when it comes to facial features and growth, but with respect to the neuropsych side of things, these are the criteria that they put out as part of their -- for the diagnosis.

Q And when were these guidelines published?

A They were published early in 1996. I think around April.

Q Okay. Now, you said that diagnoses occurred though as far back as the '70s.

A Yes.

Q How did diagnosis occur prior to 1996?

A It was -- there were guidelines that had been developed, had been published. They tended to be a little bit less formalized. There was a lot more emphasis especially on the physical side of things of kind of doing more of a holistic evaluation, looking at them kind of overall, looking at the physical features, not necessarily doing very precise

measurements.

In the CNS again, the neuropsychological findings, they weren't very heavily codified. It was we're looking for a series of impairments. They are kind of complicated impairments. They're beyond what you would expect for somebody that would have, like, ADHD or things like that. So it was a little bit fuzzy. So the IOM was trying to codify that more formally, more -- a little bit more specifically.

Q I see. So is it fair to say that prior to publication of these guidelines there was a little bit more room for individual examiner discretion, whereas once they were codified, most of the country followed a very similar standard?

A Yes, the standards became much more "similarized". Yeah.

Q And now you said that as a neuropsychologist you focus on these areas, the CNS dysfunction. Just for everyone's awareness, what are the other guideline criteria for an eventual diagnosis of FASD?

A Well, with the exception of full fetal alcohol syndrome, there has to be some sort of knowledge about prenatal exposure to alcohol. The reason why you can do full fetal alcohol syndrome without is because the facial features, the three facial features are so specific to FAS that we haven't found it in any other condition at this point. So you can do it then.

Then it would be the facial features, the eyes. The list of the important facial features became the eyes, thin upper lip and the philtrum, the ridges between the nose and the upper lip, growth deficiencies, looking at size differences and then the CNS deficiencies. So with respect to the CNS, it was looking for a complex pattern of behavioral cognitive impairments that you can't explain just by family, that you can't explain just by environment.

Q Okay. Now, this, I guess to put it broadly, was sort of the state of the science in 1996?

A Yes.

Q What were the diagnostic criteria in use in 2007 when Mr. Chappell's penalty retrial occurred?

A In 2004, the CDC, Centers for Disease Control and Prevention, published some modified guidelines to FASD where they became much more specific in how you make the diagnosis. As far as the physical features, there were ranges of size that you're looking for and percentiles. Similarly, in the CNS side of things, you were -- they codified out that you needed to have either IQ that's within the intellectually disabled range or deficits in at least three domains of functioning, and these deficits had to be at least one standard deviation below the mean. So they were much more codified, much more rigid sorts of guidelines that were set out.

Q Perfect. And was there in your opinion need for

further codification and rigidity in this area?

A Yes. Even, you know, the IOM made great strides improving, but it's still talking about a complex pattern, and so that's still kind of fuzzy. The nice thing with the CDC was it's rigid. You need to have deficits in these -- in three domains, has to be at least one standard deviation. So you can apply it in every case.

It becomes much more reliable now because I can do it in this case. I can do it in another case, and I'm using the same criteria, that same cut point. I don't have to kind of go well, you know, it's a little bit fuzzier on this one. I'll give it to them here, but I won't give it to them there. No, I have to find these three domains -- or deficits in three domains. So it's much more rigid that way.

Q Now, generally speaking, when you engage in your neuropsychological assessments, what do you do? What are you looking for?

A I'm looking for that, again, the brain dysfunction. I'm looking for strengths and weaknesses that a person may be having. I'm not diagnosing brain damage. Having said that, when it comes to fetal alcohol syndrome, by definition, that is a form of brain damage. So at that point it becomes a brain damage issue.

The tests that neuropsychologists developed over the years were looking at different skills, different functions --

memory, attention, planning, problem-solving -- and a lot of times they were built off of studies of people that have had some sort of an injury to those regions of the brain, and so we measure those sorts of things. And what we're looking for is we're looking for impairments or good functioning, both.

And an impairment is a situation where the person is functioning at a level where at least 84 percent of the population is doing better than them. That would be the cut off for a mild impairment. From there on, as you get further and further away from the mean or less and less percentile, then the impairments become more and more severe.

And then with respect to the fetal alcohol diagnosis, my goal, what I am doing, what I'm asked to do in these cases is I'm looking for the strengths and weaknesses, just like any neuropsychologist would do for any kind of case, and I'm looking to see if the pattern of the functioning is consistent with an FASD, looking to see if they do meet those three domain deficit guidelines.

I look to see are there any other potential competing ideologies that needs to be brought to the attention of the MD because they need to take that into account when they make their formal diagnosis, and so I provide that information then to the MD who does the physical evaluation.

Q What do you typically see in your FASD diagnosis in the evaluations of people who have FASD?

A Yeah. When I see people with FASD, like we saw in that one -- that one chart, I don't expect to see people that have IQs within the intellectually disabled range. That's the minority, maybe 20 percent, but I often will see splits in IQ domains. So they may do really well on language-based tasks, but do really poorly on nonlanguage-based tasks. I often see that in people with FASD.

I expect to see kind of patchy functioning. They do well here; they do poorly here. And it's kind of -- it's very irregular sort of a pattern of functioning. This is compared to let's say a person that has an intellectual disability for some other reason. We typically will see a lot of the scores are low, kind of consistently low, similar to what you expect for their IQ. Or people that have much more focal injuries, like a stroke, you expect to see them doing fairly well in most areas, but that one part of the brain that's been affected by the stroke we expect to see impairments that are -- relate to that.

With FASD, because of the nature of alcohol exposure and how it can occur anytime during pregnancy, all the way across pregnancy, a lot of doses, we expect to see different skills being affected. We don't really see a set single profile for people with FASD because of that variability in exposure. So I expect that. However, I typically will see academic impairments, math especially.

I typically see some sort of social adaptive impairments with these individuals, and they're doing worse than you expect based off of IQ, oftentimes very close to or within the intellectually disabled range.

I expect to see executive function deficits, planning, problem-solving, learning from mistakes, those perseverations that we talked about. And I often will see them coming up more in types of tests where they don't have a whole lot of structure to go on.

You've got certain executive function tests where I give you basically the rules. You know what you can and you know what you can't do. You know what your goal is. You just have to do that task. Then I have other tests that I give them where I'm not going to tell you how to solve it. You have to figure that out on your own. Those are the lower structure tests. We tend to see people with FAS do much more poorly in those areas. That's where the perseverations often will come out.

And like we see the variability of functioning at any given time -- they do well in some areas, poor in other areas -- we often see variability over time. So one day they may be able to remember things reasonably well but the next day they can't. Parents and teachers complain about this all the time for people with fetal alcohol. It's like one day they just don't get it anymore, but then they get it again later.

It's very confusing to families because of that variability.

Q Now, turning our attention to Mr. Chappell in particular, did you conduct a neuropsychological assessment here for FASD?

A I did.

Q And when did that occur?

A I saw him over the course of two days, May 23rd and May 24th of 2016.

Q Okay. And where was that?

A At Ely State Prison.

Q How much time did you spend with Mr. Chappell?

A A little shy of nine hours with him.

Q Is that a typical amount of time for you to conduct these type of interviews?

A It was actually a little bit long in his case. He was very slow to process information.

Q Okay. Even among other people who have been diagnosed with FASD?

A Yes. I mean, there's a very large range of individuals with FASD. There are ones who tend to be much more fast, fast, fast, and I can get the testing done quickly. Then there are the ones that are kind of the very slow plodders. They have to think really hard about it.

Q Okay.

A And it takes longer.

Q And he was on the longer end of this?

A Yes.

Q How did you prepare for this meeting?

A Well, I have a battery of tests that I use in pretty much every case where I'm suspecting FASD. The tests are actually ones -- either the tests are or the skills that they're measuring are ones that specifically in research we've found to be sensitive to the impacts of prenatal alcohol exposure.

They're not specific to it necessarily. You can't say that his performance on the Rey complex figure test, his poor performance means that he's got FASD. It just means he's got an impairment when you look at the patterns overall. But the tests were ones that were sensitive to prenatal alcohol exposure, and they measure a broad range of domains of functioning.

Q Do you do the same test for every person you're assessing for FASD, or do you choose different testing methods based on the individual?

A I usually use pretty much the same tests for everybody with FASD because it's that battery that I know is something that's sensitive.

Q And that's something you've developed over your years of practice?

A Yes. Through the research that I did, through the

research that others did around the country.

Q Did you review any materials, documents to give you background on Mr. Chappell's case before meeting with him?

A I did.

Q Okay. And those were the ones that you previously talked about, were listed as Exhibit 18?

A Yes. Yes.

Q Now, you spoke a little bit about how some of your examinees, you know, speak very quickly. Others are more slow and methodical. They're really trying to think things through. Did you conduct any testing in particular on Mr. Chappell to see if he was giving optimal effort to his testing?

A Yes, I did.

Q Okay. And that effort testing, how does that relate to the concept of malingering?

A Malingering is kind of one end of the spectrum of effort. It's -- malingering is a situation where a person is actively trying to fake bad in order to gain -- get a secondary goal. The testing that I do, at one extreme, yes, it can pick up if a person is malingering, but what I'm also very interested in is just how much -- how much work is he doing for me? How hard is he working? How much effort is he putting out? And so that's why I do these tests.

Some of these tests are embedded within tests. They're hidden. Others are standalone. None of them are -- I

don't tell them, oh, here we are on our malingering test now, but they may be standalone tests that we do. They may be ones that are built right into tests.

Q And what were the results of the testing that you did for Mr. Chappell?

A In all cases he performed very well, made very few errors.

Q Now, I know that you said that IQ was a poor predictor of FASD, but did you perform intelligence testing on Mr. Chappell anyway?

A Yes.

Q Okay. And why do you do that nonetheless?

A Well, it may be a poor predictor of FASD, but it's very helpful at elucidating kind of comparisons. How is he doing on other neuropsychological adaptive tests compared to what the IQ would say? And also, like I said, oftentimes we do see these variability in functions across domains within the IQ test, and that is something that we see with fetal alcohol.

Q What was Mr. Chappell's full-scale IQ here?

A It was measured at 86. The challenge that we have is that there was quite a bit of variability between the domains, and when you do that, the full-scale IQ, which is essentially an average of those scores tends to be less -- less reliable from that perspective. It's not a good representation of his overall functioning.

Q And that variability, that's the splits that you talked about before?

A Yes.

Q So the chart here, it seems to show, and correct me if I'm wrong, that in verbal areas he was testing very near the mean?

A Correct.

Q And for areas like working memory, he was actually testing as borderline intellectual disability; is that correct?

A Correct.

Q Okay. And that's those type of splits you talked about?

A Right. And that's quite a significant split between the scores.

Q Did you compare Mr. Chappell's present results to any of his prior intellectual testing?

A I did.

Q Okay. And how did that testing compare?

A They were -- they were fairly consistent. Overall IQ again not a great predictor just because of the splits, was fairly similar to IQ testing back in 1996. They didn't give scores back in 1986 but kind of borderline low average which is actually a very similar range to what mine is at. There was a difference when it comes to the VIQ/VCI column, but that difference is a little bit of an artifact because with the

WAIS-R, they create a score called a VIQ, and that VIQ includes both the verbal test, like you see on the VCI down in the 2016, the 96 and --

Oh, I can do it.

-- and it includes the working memory component. So both of those end up going into the VIQ score, and so that accounts for some of the change.

There was also a bit of a change just in -- for Mr. Chappell in that he did do a lot better on one particular test, one particular subtest which was information which is basically fact, fact sorts of items. You know, who was the president during World War II, different things like that. He did do better on the second trial.

Q Was this -- was this confluence of current and prior intelligence testing, was that consistent with what you would expect in an FASD person?

A Yes.

Q Oh, it stayed up there.

A Stayed up there.

MR. WISNIEWSKI: Do we know how to clear that?

THE COURT: Yeah. I can get it. There we go.

MR. WISNIEWSKI: Thank you, Your Honor.

BY MR. WISNIEWSKI:

Q Now, you also compared Mr. Chappell's IQ intelligence testing to his prior academic testing; correct?

A Correct.

Q And what were the results of that comparison?

A Again, they were quite similar. He tended to do better on more language-based tasks, but math has consistently been an area of considerable weakness for him, and I found that on my testing, and it was being shown a lot throughout the course of his history.

Q All right. So now we've talked about the IQ. We've talked about the academic testing, and you previously stated, I believe, that there has to be evidence of deficit level functioning in three domains in order to be classified as potentially appropriate for an FASD diagnosis?

A Yes.

Q How many areas did Mr. Chappell fall into the deficit [unintelligible]?

A In nine domains.

Q Okay. And that's probably pretty small type, but can you tell the Court what those nine domains are.

A Within the academic domain, especially math, learning and memory domain, he had a very hard time learning new information, kind of like the chicks, although, when it was really concrete, he could retain it pretty well, but he had troubles learning. When it was more complex language-based skills, he had considerable difficulties learning and remembering; and on visual sorts of tasks, considerable

difficulty. So memory domain across both sides, significantly impacted.

Visual-spatial skills is another area that is kind of a hallmark for fetal alcohol. Show him a complex picture, he has to copy it. So he has to organize what he sees, take it in, understand what he's looking at and be able to reproduce it. So it takes a lot of effort on that part, and that was another area of impairment. So that's one of the domains.

Q Okay. And, Doctor, I'm sorry to interrupt, but, you know, just getting back a little bit, this chart, is this a profile of what his test scores are?

A Yes.

Q Okay. And, you know, our expectation was that we were just going to talk about a couple of the areas that Mr. Chappell scored particularly in rather than having to go over the full nine because we only have a one day hearing here. But you -- I believe you were starting to talk about the visual-spatial domain; correct?

A I pretty much finished with that one.

Q Oh, you finished with that one. Okay. And you spoke about memory as well?

A Yes.

Q Okay. So those were my top two that I wanted you to talk about. Is there anything that I cut you off from that you felt was --

A Yeah. The other one that was --

Q -- elucidating?

A I'm sorry. Now, I cut you off again.

Q No. No. No. My bad.

A The other one that's particularly telling is in the executive function domain where he was demonstrating considerable difficulties in planning. In problem-solving, he was perseverative in his testing. So those are kind of the three really cardinal key domains, and then he had deficits in other domains, including processing speed.

Q Okay. The executive functioning domain, what real-world skills does that domain govern?

A Well, it's something that very closely ties into adaptive skills because you have to -- you come on a situation that you don't know how to deal with. It's new for you. You have to, one, rely on your history -- what do you know that's similar to this -- to be able to apply that in order to try and solve this new problem; and it's also, once you have figured out how to do it, can you stick with it and not fall off track and suddenly do something different that's no longer helping you.

Q That's the control chickens who even a couple days later they may have made one mistake but still knew to find that door?

A Right.

Q Okay. And that ties into adaptive functioning you said?

A It does.

Q So getting to adaptive functioning, Doctor, what are the Vineland scales of adaptive behavior?

A They are a interview form that is administered to people that know the individual well at certain times during the life. They can be done retrospectively, and they ask a series of questions of can this person do this skill completely independently, no help whatsoever. Do they sometimes need help, or do they always need some sort of help, and these are just normal day-to-day skills that they have to -- that a normal person would have to do independently out in the real world.

Q And what domains does the Vineland test for?

A It assesses communication skills. It assesses kind of daily living skills -- hygiene, cleaning around the house -- also work-related skills, and then it also measures kind of social skills -- interactions, interpersonal interactions, coping, things like that.

Q Okay. Now, this test, was this geared towards Mr. Chappell's functioning in 2016 or prior to that?

A Prior to that.

Q Around what age of his?

A Age 25.

Q Okay. And why that age?

A Because that was a time in his life before he came into prison for this current case. So he was in the real world environment, and so all of these sorts of domains could be assessed because it's not a highly structured environment like a prison environment would be.

Q Did you administer this testing yourself?

A No, I didn't.

Q Who did?

A Joanne Sparrow. She's a -- she was a Ph.D. student. She had also previously been a psychometrist, and that's basically what she was doing on this. She was acting as a psychometrist for me under my supervision. She administered the interviews to these informants.

Q And you said she was one of your students?

A No, she was not one of my students.

Q Oh, okay.

A But she was a student in the Ph.D. program, clinical Ph.D. program, and we used her as a psychometrist for these interviews.

Q Okay. And is it normal in your field to have someone else perform psychometric testing on occasion?

A Absolutely.

Q Is it actually rare for you to do this testing yourself?

A It's relatively rare. I know a lot of neuropsychologists that do -- that have psychometrists do all of the testing. I don't do that. I like to do the testing myself a lot of times.

Q Okay. What steps go into the Vineland scales of adaptive behavior?

A I don't quite follow. I mean, it's an interview format asking them can they do this or that independently, semi-independently or can't do it at all independently.

Q Okay. And they take the statements from the reporters and work them into a scoring mechanism?

A Yes.

Q Okay. And how do you ensure that the people who are selected for testing, you know, are giving optimal effort, are reporting truthfully, things like that?

A Well, there's a couple methods that I do that. One of them is that at the same time that we do the Vineland we give a test called the BRIEF, which is another questionnaire, and part of that questionnaire is it asks questions about bias. Does the person look at this person as being -- in an overly negative way? It also looks to see if this person is consistent in their responses, and so it asks these sorts of questions to kind of catch on to those sorts of things, and so we did that in this case.

Q And now, did the reporters here pass the BRIEF?

A Yes, they passed the BRIEF.

Q Okay. And I see that the names of the reporters are James Ford, Terry Wallace and Myra Chappell-King. How are reporters chosen for the testing?

A Well, I give a list of criteria to the attorneys. We want to interview people that know the individual well, knew him during a period of time close to the time of the case but before that, and interacted with him on a frequent basis. That's really the main criteria that we give, and then the attorneys will provide us with contact information for individuals that they feel meet those criteria.

Q Now, you said that Ms. Sparrow took the reports of these people. What is the next step in the adaptive --

THE COURT: Let me ask a question.

MR. WISNIEWSKI: Yes, Your Honor.

THE COURT: Before I forget it. Thank you.

So when there's been a time gap of 20 years, and now you're asking these people to --

THE WITNESS: Right.

THE COURT: -- think about a time that was more than 20 years ago, does that -- is there some control for that in this?

THE WITNESS: There's no optimal control for that, but what we do is we do talk about, okay, what was kind of going on in life during that time? We try and bring them back

to that period of time of, you know, kind of linking it to events in the life so that they can kind of get into that, recalling more about that time period.

You know, also when it's people that have known them for a very long time, it's kind of a cumulative knowledge, up until they were 25. So that can kind of have a bolstering effect of understanding them better and being able to recall that sort of thing better about the individual.

And, you know, there are the challenges retrospectively. We all agree that there are challenges to these retrospective reports, but it's certainly a valid use. It's, you know, endorsed by the testing companies and has been used very frequently in these sorts of settings where you do have to look back in history in order to get a feel for how the person is doing back then.

THE COURT: Okay. And are -- the other testing was a couple slides back. So you're testing also these particular folks who are -- obviously have -- they're aligned with Mr. Chappell. They're from his family; right?

THE WITNESS: Family, friends.

THE COURT: Okay.

THE WITNESS: Family and friends.

THE COURT: So what is done to make sure they're not also reporting to you in a way that would be favorable to Mr. Chappell?

THE WITNESS: Right. And that's -- that's the two-pronged thing that I do. The first one is with the BRIEF. I look to see if they do tend to have a reporting bias -- do they tend to report him doing really, really bad in every aspect? That would be a negative bias -- and then also looking to see if they're kind of consistent reporters, things like that.

And then the second aspect is I look to see if the reporters are kind of consistent with each other. We are not interviewing them as a group together. We're interviewing them, sorry, separately, and we want to see if there's a lot of overlap between their reports, and so those are ways that we work towards kind of making -- taking into account and trying to control for whether there could be some sort of bias.

THE COURT: Thank you.

MR. WISNIEWSKI: Thank you, Your Honor.

BY MR. WISNIEWSKI:

Q And so, you know, Doctor, the one thing I was just going to ask you about was sort of that cross validation. That's something that you did here?

A Yes.

Q And now you also talked about the negative bias of everyone reporting Mr. Chappell as being very bad. What is positive bias?

A Positive bias is basically trying to say, you know,