

**IN THE CIRCUIT COURT OF THE FIFTH JUDICIAL CIRCUIT,  
IN AND FOR HILLSBOROUGH COUNTY, FLORIDA**

**CASE NO. 93-159-CF**

**STATE OF FLORIDA,**

**ACTIVE DEATH WARRANT**

**Execution Scheduled for**

**September 23, 2008 at 6:00 pm**

**Plaintiff,**

**v.**

**RICHARD HENYARD,**

**Defendant.**

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/

**APPENDIX**

**MOTION TO VACATE SENTENCE AND FOR STAY OF EXECUTION**

- A Judgment and Sentence
- B July 24, 2008 Affidavit from Jason Nawara
- C Verification
- D Article: Social Information Processing, Security of Attachment, and Emotion Regulation in Children with Learning Disabilities
- E Article: Human Abilities, Emotional Intelligence
- F Article: On the Criterion and Incremental Validity of Trait Emotional Intelligence
- G Abstract: Social Information Processing and Emotional Understanding in Children with LD
- H Abstract: Human Abilities: Emotional Intelligence
- I Abstract: Showing and Telling About Emotions: Interrelations Between Facets of Emotional Competence and Associations with Classroom Adjustment in Head Start Preschools
- J Abstract: On the Criterion and Incremental Validity of Trait Emotional Intelligence
- K Abstract: Socioemotional and Academic Adjustment Among Children with Learning Disorders: The Mediation Role of Attachment-Based Factors
- L Abstract: On the Interdependence of Cognition and Emotion
- M Abstract: How Distinctive is Affective Processing? On the Implications of Using Cognitive Paradigms to Study Affect and Emotion
- N Abstract: Affect is a Form of Cognition: A Neurobiological Analysis
- O Abstract: The Discrimination of Angry and Fearful Facial Expressions in 7-Month Old Infants: An Event-Related Potential Study
- P Abstract: The Role of Maltreatment in Children's Understanding of the Antecedents of Emotion
- Q Abstract: Gray Matter: Redefining Mental Retardation in Capital Murder
- R Preliminary Report from Dr. Janice Stevenson

## Appendix A

### Judgment and Sentence

CIRCUIT CO CRIMINAL  
MINUTE BOOK 2 PAGE 1120

--- PRECATION VIOLATOR  
--- COMMUNITY CONTROL VIOLATOR  
--- RETRIAL  
--- RESENTENCE

STATE OF FLORIDA

VS

RICHARD HENYARD, JR

A/K/A

DEFENDANT

IN THE CIRCUIT COURT, FIFTH  
JUDICIAL CIRCUIT, IN AND FOR  
LAKE COUNTY, FLORIDA  
FELONY DIVISION

CASE NUMBER: 9300159CFA0132

# JUDGMENT

THE DEFENDANT, RICHARD HENYARD, JR, BEING PERSONALLY BEFORE  
THIS COURT REPRESENTED BY MICHAEL JOHNSON, APO, THE ATTORNEY OF  
RECOC, AND THE STATE REPRESENTED BY BILL GROSS, AND HAVING

- \_\_\_ BEEN TRIED AND FOUND GUILTY BY JURY/BY COURT OF THE FOLLOWING CRIME(S)
- \_\_\_ ENTERED A PLEA OF GUILTY TO THE FOLLOWING CRIME(S)
- \_\_\_ ENTERED A PLEA OF NOT CONTENDERE TO THE FOLLOWING CRIME(S)

COUNT	CRIME	OFFENSE STATUTE NUMBER(S)	DEGREE OF CRIME	CASE NUMBER	CBTS NUMBER
001	KIDNAPPING WHILE ARMED	78701	F L	9300159CFA01	0002358834
002	KIDNAPPING WHILE ARMED	78701	F L	9300159CFA01	0002358834
003	KIDNAPPING WHILE ARMED	78701	F L	9300159CFA01	0002358834
004	SEXUAL BATTERY WHILE ARMED	794011 3	F L	9300159CFA01	0002358834
005	ATTEMPTED FIRST DEGREE MURDER	78204 1A	F 1	9300159CFA01	0002358834
007	ROBBERY WITH FIREARM OR DEADLY WEAPON	81213 2A	F 1	9300159CFA01	0002358834
008	MURDER, FIRST DEGREE	78204 1A	F C	9300159CFA01	0002358834
009	MURDER, FIRST DEGREE	78204 1A	F C	9300159CFA01	0002358834

- \_\_\_ AND NO CAUSE HAVING BEEN SHOWN WHY THE DEFENDANT SHOULD NOT BE  
ADJUDICATED GUILTY, IT IS ORDERED THAT THE DEFENDANT IS HEREBY  
ADJUDICATED GUILTY OF THE ABOVE CRIME(S).
- \_\_\_ AND PURSUANT TO SECTION 943.325, FLORIDA STATUTES, HAVING BEEN  
CONVICTED OF ATTEMPTS OR OFFENSES RELATING TO SEXUAL BATTERY  
(CH. 794) OR LEWD AND LASCIVIOUS CONDUCT (CH. 800) THE DEFENDANT  
SHALL BE REQUIRED TO SUBMIT BLOOD SPECIMENS.
- \_\_\_ AND GOOD CAUSE BEING SHOWN; IT IS ORDERED THAT ADJUDICATIONS OF  
GUILT BE WITHHELD.

00016

STATE OF FLORIDA  
VS

IN THE CIRCUIT COURT, FIFTH  
JUDICIAL CIRCUIT, IN AND FOR  
LAKE COUNTY, FLORIDA  
FELONY DIVISION  
CASE NUMBER: 9300159CFA0132

RICHARD HENYARD, JR  
A/K/A

DEFENDANT

CHARGES/COSTS/FEEES

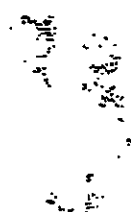
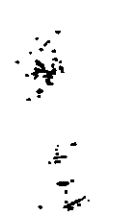





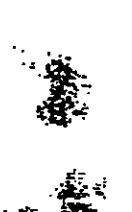


THE DEFENDANT IS HEREBY ORDERED TO PAY THE FOLLOWING SUMS IF CHECKED:

- \$50.00 PURSUANT TO SECTION 960.20, FLORIDA STATUTES (CRIMES COMPENSATION TRUST FUND).
- \$3.00 AS A COURT COST PURSUANT TO SECTION 942.25(3), FLORIDA STATUTES (CRIMINAL JUSTICE TRUST FUND).
- \$2.00 AS A COURT COST PURSUANT TO SECTION 943.25(13), FLORIDA STATUTES (CRIMINAL JUSTICE EDUCATION BY MUNICIPALITIES AND COUNTIES).
- A FINE IN THE SUM OF \$ PURSUANT TO SECTION 775.0835, FLORIDA STATUTES. (THIS PROVISION REFERS TO THE OPTIONAL FINE FOR THE CRIMES COMPENSATION TRUST FUND AND IS NOT APPLICABLE UNLESS CHECKED AND COMPLETED. FINES IMPOSED AS A PART OF A SENTENCE TO SECTION 775.083, FLORIDA STATUTES ARE TO BE RECORDED ON THE SENTENCE PAGE(S).)
- \$20.00 PURSUANT TO SECTION 939.015, FLORIDA STATUTES (HANDICAPPED AND ELDERLY SECURITY ASSISTANCE TRUST FUND).
- A 10% SURCHARGE IN THE SUM OF \$ PURSUANT TO SECTION 775.0836, FLORIDA STATUTES (HANDICAPPED AND ELDERLY SECURITY ASSISTANCE TRUST FUND).
- A SUM OF \$0.00 PURSUANT TO SECTION 27.3455, FLORIDA STATUTES (LOCAL GOVERNMENT CRIMINAL JUSTICE TRUST FUND).
- A SUM OF \$ PURSUANT TO SECTION 939.01, FLORIDA STATUTES (PROSECUTOR INVESTIGATIVE COSTS).
- A SUM OF \$ PURSUANT TO SECTION 27.56, FLORIDA STATUTES (PUBLIC DEFENDER FEES).
- RESTITUTION IN ACCORDANCE WITH ATTACHED ORDER.
- OTHER

DOE AND ORDERED IN OPEN COURT IN TAVARES, LAKE COUNTY, FLORIDA, THIS  
1ST DAY OF JUNE, 1994.

JUDGE MARK J. HILL

00017

1. R. Thumb	2. R. Index	3. R. Middle	4. R. Ring	5. R. Little
				
6. L. Thumb	7. L. Index	8. L. Middle	9. L. Ring	10. L. Little
				

Fingerprints taken by:

  
Name and Title

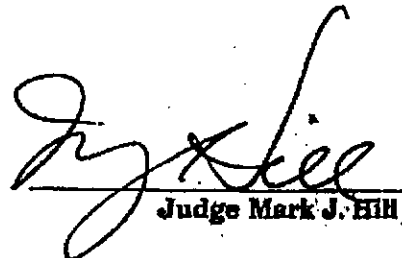
DONE AND ORDERED in Open Court at Tavares, Lake County Florida, this 1 day of  
June A.D., 19 94. I HEREBY CERTIFY that the above and foregoing  
fingerprints are the fingerprints of the Defendant, Richard Maynard, Jr., and that they  
were placed thereon by said Defendant in my presence in Open Court this date.

FILED IN OPEN COURT

6/1/94  
JAMES C. WATKINS  
Clerk of Circuit Court

By:

  
Michelle H. Adkins, Deputy Clerk

  
Judge Mark J. Hill


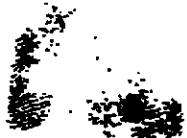


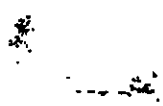





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00918

Case Number 97-159CEA

JIT COURT CRIMINAL

FINGERPRINTS OF DEFENDANT MINUTE BOOK 29 PAGE 1153

1. R. Thumb	2. R. Index	3. R. Middle	4. R. Ring	5. R. Little
				
6. L. Thumb	7. L. Index	8. L. Middle	9. L. Ring	10. L. Little
				

Fingerprints taken by:

Brent E. Evans  
Name and Title

DONE AND ORDERED in Open Court at Tavares, Lake County Florida, this 19th day of

August A.D., 1994. I HEREBY CERTIFY that the above and foregoing fingerprints are the fingerprints of the Defendant, Richard Huxford, Jr., and that they were placed thereon by said Defendant in my presence in Open Court this date.

FILED IN OPEN COURT

8-19-94

JAMES C. WATKINS  
Clerk of Circuit Court

By Joyce Scism  
Deputy Clerk

Michelle H. Adkins, Deputy Clerk

[Signature]  
Judge Mark J. Hill

Page \_\_\_\_\_ of \_\_\_\_\_

00019

DEFENDANT: RICHARD HENYARD, JR

A/K/A  
CASE NUMBER: 9300159CFA01  
DTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 001)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APD, AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 5% SURCHARGE REQUIRED BY SECTION 960.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF SUPERVISION SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF IMPRISONMENT, THE REMAINDER OF THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 001)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

- FIREARM --- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- DRUG TRAFFICKING --- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- CONTROLLED SUBSTANCE WITHIN 1,000 FEET OF A SCHOOL --- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(E)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- HABITUAL FELONY OFFENDER --- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.
- HABITUAL VIOLENT FELONY OFFENDER --- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.
- LA ENFORCEMENT PROTECTION ACT --- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.
- CAPITAL OFFENSE --- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.



CIRCUIT COURT | CRIMINAL  
MINUTE BOOK 29 PAGE 1151e

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM  
PROVISIONS OF SECTION 790.221(2), FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM  
SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:  
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RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT  
PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES  
(1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE  
ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME  
INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE  
ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED  
ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS  
PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED  
FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 009 OF THIS CASE.

DEFENDANT: RICHARD HENYARD, JR

A/K/A  
CASE NUMBER: 9300159CFA01  
OETS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 002)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APD, AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS ----- AS THE 5% SURCHARGE REQUIRED BY SECTION 980.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF  
SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF SUPERVISION SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF , THE BALANCE OF THE IMPRISONMENT SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 002)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

FIREARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

DRUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTROLLED SUBSTANCE  
WITHIN 1,000 FEET  
OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(E)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

HABITUAL FELONY  
OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

HABITUAL VIOLENT  
FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF \_\_\_\_\_ YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

LAW ENFORCEMENT  
PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF \_\_\_\_\_ YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

CAPITAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

CRIMINAL COURT  
MINUTE BOOK 29 PAGE 1159

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM PROVISIONS OF SECTION 790.221(2), FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES (1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 001 OF THIS CASE.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01  
DCTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 003)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APD, AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IS THE SENTENCE OF THE COURT THAT

THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 3% SURCHARGE REQUIRED BY SECTION 960.25, FLORIDA STATUTES.

THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS

THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA

THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF

SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

"SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

--- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRE IN A SEPARATE ORDER ENTERED HEREIN.

--- HOWEVER, AFTER SERVING A PERIOD OF IMPRISONMENT IN THE BALANCE OF THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

HE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS ICE OF THE SUPERVISION TERMS.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 003)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

FIREARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

DRUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTROLLED SUBSTANCE  
WITHIN 1,000 FEET  
OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(E)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

HABITUAL FELONY  
OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

HABITUAL VIOLENT  
FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

LAW ENFORCEMENT  
PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

CAPITAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1162

DEFENDANT: RICHARD HENYARD, JR

A/K/A

CASE NUMBER: 930D159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM PROVISIONS OF SECTION 790.221(2), FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES (1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE ALLOWED A TOTAL OF 585 DAYS AS CREDIT FOR TIME INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 002 OF THIS CASE.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1163

DEFENDANT: RICHARD HENYARD, JR

A/K/A  
CASE NUMBER: 9300159CFA01  
DBTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 004)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APO AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 5% SURCHARGE REQUIRED BY SECTION 960.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 950.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER:-----

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRE IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF IMPRISONMENT, THE BALANCE OF THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.



CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1664

DEFENDANT: RICHARD WENZARD, JR.

A/K/A

CASE NUMBER: 9300159CFA01

### SPECIAL PROVISIONS

(AS TO COUNT 004)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

#### FIREARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

#### DRUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

#### CONTROLLED SUBSTANCE WITHIN 1,000 FEET OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(C)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

#### HABITUAL FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

#### HABITUAL VIOLENT FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

#### LAW ENFORCEMENT PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

#### CAPITAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM  
PROVISIONS OF SECTION 790.22(2), FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM  
SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT  
PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES  
(1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE  
ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME  
INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE  
ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED  
ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS  
PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED  
FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 003 OF THIS CASE.

COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1166

DEFENDANT: RICHARD HENYARD, JR

A/K/A  
CASE NUMBER: 9300139CFA01  
OBT5 NUMBER: 0002358834

SENTENCE

(AS TO COUNT 006)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APD, AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 3% SURCHARGE REQUIRED BY SECTION 940.23, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF SUPERVISION SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF , THE BALANCE OF THE IMPRISONMENT IN THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1167

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 006)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

FIREARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

DRUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTROLLED SUBSTANCE  
WITHIN 1,000 FEET  
OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(C)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

HABITUAL FELONY  
OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

HABITUAL VIOLENT  
FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

LAW ENFORCEMENT  
PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

CAPITAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

DEFENDANT: RICHARD HENYARD, JR.  
A/K/A

CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM PROVISIONS OF SECTION 790.221(2), FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES (1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 004 OF THIS CASE.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1169

DEFENDANT: RICHARD HENYARD, JR

A/K/A  
CASE NUMBER: 9300159CFA01  
OBTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 007)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APO AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 5% SURCHARGE REQUIRED BY SECTION 960.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF NATURAL LIFE (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF  
SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF SUPERVISION SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF IMPRISONMENT, THE BALANCE OF THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

DEFENDANT: RICHARD HENYARD, JR.  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 007)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

FIREARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

DRUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTROLLED SUBSTANCE  
WITHIN 1,000 FEET  
OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(c)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

HABITUAL FELONY  
OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

HABITUAL VIOLENT  
FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

LAW ENFORCEMENT  
PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

CAPITAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1171

DEFENDANT: RICHARD HENYARD, JR.

A/K/A  
CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM  
PROVISIONS OF SECTION 790.221(2), FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM  
SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA  
STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE  
SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT  
PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES  
(1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE  
ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME  
INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE  
ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED  
ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS  
PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED  
FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 006 OF THIS CASE.



DEFENDANT: RICHARD HENYARD, JR.

CASE NUMBER: 9300159CFA01  
OBTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 008)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, APO AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 5% SURCHARGE REQUIRED BY SECTION 960.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF DEATH (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF SUPERVISION SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF IMPRISONMENT, THE BALANCE OF THE SENTENCE SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300189CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 008)

BY APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

- FIREARM** --- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- DRUG TRAFFICKING** --- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- CONTROLLED SUBSTANCE WITHIN 1,000 FEET OF A SCHOOL** --- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(c)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.
- HABITUAL FELONY OFFENDER** --- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.
- HABITUAL VIOLENT FELONY OFFENDER** --- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.
- LAW ENFORCEMENT PROTECTION ACT** --- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.
- CAPITAL OFFENSE** --- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1174

DEFENDANT: RICHARD WENYARD, JR.  
A/K/A

CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM PROVISIONS OF SECTION 790.221(2), FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES (1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED FOR THIS COUNT SHALL RUN (CHECK ONE):

--- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT OF THIS CASE.

DEFENDANT: RICHARD WENYARD, JR

A/K/A

CASE NUMBER: 9300139CFA01

DBTS NUMBER: 0002358834

SENTENCE

(AS TO COUNT 009)

THE DEFENDANT, BEING PERSONALLY BEFORE THIS COURT, ACCOMPANIED BY THE DEFENDANT'S ATTORNEY OF RECORD, MICHAEL JOHNSON, AND HAVING BEEN ADJUDICATED GUILTY HEREIN, AND THE COURT HAVING GIVEN THE DEFENDANT AN OPPORTUNITY TO BE HEARD AND TO OFFER MATTERS IN MITIGATION OF SENTENCE, AND TO SHOW CAUSE WHY THE DEFENDANT SHOULD NOT BE SENTENCED AS PROVIDED BY LAW, AND NO CAUSE BEING SHOWN,

- X- AND THE COURT HAVING ON THE 1ST DAY OF JUNE, 1994 DEFERRED IMPOSITION OF SENTENCE UNTIL THIS DATE.
- AND THE COURT HAVING PREVIOUSLY ENTERED A JUDGMENT IN THIS CASE ON THE DAY OF , 19, NOW RESENTENCES THE DEFENDANT
- AND THE COURT HAVING PLACED THE DEFENDANT ON AND HAVING SUBSEQUENTLY REVOKED THE DEFENDANT'S

IT IS THE SENTENCE OF THE COURT THAT

- THE DEFENDANT PAY A FINE OF \$ , PURSUANT TO SECTION 775.083, FLORIDA STATUTES, PLUS AS THE 3% SURCHARGE REQUIRED BY SECTION 988.25, FLORIDA STATUTES.
- X- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS
- THE DEFENDANT IS HEREBY COMMITTED TO THE CUSTODY OF THE SHERIFF OF LAKE COUNTY, FLORIDA
- THE DEFENDANT IS SENTENCED AS A YOUTHFUL OFFENDER IN ACCORDANCE WITH SECTION 958.04, FLORIDA STATUTES.

TO BE IMPRISONED (CHECK ONE; UNMARKED SECTIONS ARE INAPPLICABLE)

- X- FOR A TERM OF DEATH (999 YEAR 99 MONTH 99 DAY MINIMUM MANDATORY)
- FOR A TERM OF
- SAID SENTENCE SUSPENDED FOR A PERIOD OF SUBJECT TO CONDITIONS SET FORTH IN THIS ORDER.

IF "SPLIT" SENTENCE, COMPLETE THE APPROPRIATE PARAGRAPH.

- UNDER THE SUPERVISION OF THE DEPARTMENT OF CORRE IN A SEPARATE ORDER ENTERED HEREIN.
- HOWEVER, AFTER SERVING A PERIOD OF , THE BALANCE OF THE IMPRISONMENT SHALL BE SUSPENDED AND THE DEFENDANT SHALL BE PLACED ON PROBATION/COMMUNITY CONTROL FOR A PERIOD OF UNDER SUPERVISION OF THE DEPARTMENT OF CORRECTIONS ACCORDING TO THE TERMS AND CONDITIONS OF PROBATION/COMMUNITY CONTROL SET FORTH IN A SEPARATE ORDER ENTERED HEREIN.

IN THE EVENT THE DEFENDANT IS ORDERED TO SERVE ADDITIONAL SPLIT SENTENCES, ALL INCARCERATION PORTIONS SHALL BE SATISFIED BEFORE THE DEFENDANT BEGINS SERVICE OF THE SUPERVISION TERMS.

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1176

DEFENDANT: RICHARD HENTARB, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

SPECIAL PROVISIONS  
(AS TO COUNT 009)

APPROPRIATE NOTATION, THE FOLLOWING PROVISIONS APPLY TO THE SENTENCE IMPOSED  
MANDATORY/MINIMUM PROVISIONS:

WEARM

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 775.087(2), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

RUG TRAFFICKING

--- IT IS FURTHER ORDERED THAT THE MANDATORY MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.135(1), FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTROLLED SUBSTANCE  
WITHIN 1,000 FEET  
OF A SCHOOL

--- IT IS FURTHER ORDERED THAT THE 3-YEAR MINIMUM IMPRISONMENT PROVISIONS OF SECTION 893.13(1)(E)1, FLORIDA STATUTES, IS HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

HABITUAL FELONY  
OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(A), FLORIDA STATUTES. THE REQUISITE FINDINGS BY THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

HABITUAL VIOLENT  
FELONY OFFENDER

--- THE DEFENDANT IS ADJUDICATED A HABITUAL VIOLENT FELONY OFFENDER AND HAS BEEN SENTENCED TO AN EXTENDED TERM IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.084(4)(B), FLORIDA STATUTES. A MINIMUM TERM OF YEAR(S) MUST BE SERVED PRIOR TO RELEASE. THE REQUISITE FINDINGS OF THE COURT ARE SET FORTH IN A SEPARATE ORDER OR STATED ON THE RECORD IN OPEN COURT.

ARM ENFORCEMENT  
PROTECTION ACT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE A MINIMUM OF YEARS BEFORE RELEASE IN ACCORDANCE WITH SECTION 775.0823, FLORIDA STATUTES.

HABITUAL OFFENSE

--- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL SERVE NO LESS THAN 25 YEARS IN ACCORDANCE WITH THE PROVISIONS OF SECTION 775.082(1), FLORIDA STATUTES.

CIRCUIT COURT CRIMINAL

MINUTE BOOK 29 PAGE 1177

DEFENDANT: RICHARD HENYARD, JR

CASE NUMBER: 9300159CFA01

SHORT-BARRELED RIFLE,  
SHOTGUN, MACHINE GUN

--- IT IS FURTHER ORDERED THAT THE 5-YEAR MINIMUM PROVISIONS OF SECTION 790.221(2), FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

CONTINUING  
CRIMINAL ENTERPRISE

--- IT IS FURTHER ORDERED THAT THE 25-YEAR MINIMUM SENTENCE PROVISIONS OF SECTION 893.20, FLORIDA STATUTES, ARE HEREBY IMPOSED FOR THE SENTENCE SPECIFIED IN THIS COUNT.

OTHER PROVISIONS:

RETENTION OF  
JURISDICTION

--- THE COURT RETAINS JURISDICTION OVER THE DEFENDANT PURSUANT TO SECTION 947.16(3), FLORIDA STATUTES (1983).

JAIL CREDIT

-X- IT IS FURTHER ORDERED THAT THE DEFENDANT SHALL BE ALLOWED A TOTAL OF 565 DAYS AS CREDIT FOR TIME INCARCERATED BEFORE IMPOSITION OF THIS SENTENCE.

PRISON CREDIT

--- IT IS FURTHER ORDERED THAT THE DEFENDANT BE ALLOWED CREDIT FOR ALL TIME PREVIOUSLY SERVED ON THIS COUNT IN THE DEPARTMENT OF CORRECTIONS PRIOR TO RESENTENCING.

CONSECUTIVE/CONCURRENT  
AS TO OTHER COUNTS

IT IS FURTHER ORDERED THAT THE SENTENCE IMPOSED FOR THIS COUNT SHALL RUN (CHECK ONE):

-X- CONSECUTIVE TO  
--- CONCURRENT WITH

THE SENTENCE SET FORTH IN COUNT 008 OF THIS CASE

*see pg. 24 S.O.  
JH*

CIRCUIT COURT CRIMINAL  
MINUTE BOOK 29 PAGE 1178

DEFENDANT: RICHARD HENYARD, JR  
A/K/A  
CASE NUMBER: 9300159CFA01

CONSECUTIVE/CONCURRENT  
AS TO OTHER CONVICTIONS

IT IS FURTHER ORDERED THAT THE COMPOSITE TERM OF ALL  
SENTENCES IMPOSED FOR THE COUNTS SPECIFIED IN THIS  
ORDER SHALL RUN (CHECK ONE):

☐ CONSECUTIVE TO  
☒ CONCURRENT WITH

THE FOLLOWING (CHECK ONE):

☒ ANY ACTIVE SENTENCE BEING SERVED.  
☐ SPECIFIC SENTENCES:

IN THE EVENT THE ABOVE SENTENCE IS TO THE DEPARTMENT OF CORRECTIONS, THE  
SHERIFF OF LAKE COUNTY, FLORIDA IS HEREBY ORDERED AND DIRECTED TO DELIVER THE  
DEFENDANT TO THE DEPARTMENT OF CORRECTIONS AT THE FACILITY DESIGNATED BY THE  
DEPARTMENT TOGETHER WITH A COPY OF THIS JUDGMENT AND ANY OTHER DOCUMENTS  
SPECIFIED BY FLORIDA STATUTES.

THE DEFENDANT IN OPEN COURT WAS ADVISED OF THE RIGHT TO APPEAL FROM THIS  
SENTENCE BY FILING NOTICE OF APPEAL WITHIN THIRTY (30) DAYS FROM THIS DATE WITH  
THE CLERK OF THIS COURT AND THE DEFENDANT'S RIGHT TO THE ASSISTANCE OF COUNSEL  
IN TAKING THE APPEAL AT THE EXPENSE OF THE STATE ON SHOWING OF INDIGENCY.

IN IMPOSING THE ABOVE SENTENCE, THE COURT FURTHER RECOMMENDS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DONE AND ORDERED IN OPEN COURT AT TAVARES, LAKE COUNTY, FLORIDA, THIS 19TH  
DAY OF AUGUST A.D., 1994.

  
JUDGE MARK J HILL

00044

Rule 3.988 (j)  
**SENTENCING GUIDELINES SCORESHEET**

Primary Docket Number <b>93-159-A-CF-MH</b>		2. Additional Docket Numbers		3. OBTS Number <b>2358834</b>		4. Category: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9		
Name (Last Name First) <b>HENYARD JR, RICHARD</b>			6. Date of Birth <b>6/26/74</b>		7. Sex: <input checked="" type="checkbox"/> M <input type="checkbox"/> F		8. Race: <input checked="" type="checkbox"/> B <input type="checkbox"/> W <input type="checkbox"/> Other	
Judge at Sentencing <b>MARK J. HILL</b>		12. Date of Offense <b>1/30/93</b>		13. Date of Sentence <b>8-19-94</b>		14. <input type="checkbox"/> Plea <input checked="" type="checkbox"/> Trial		
						9. Violation <input type="checkbox"/> Prob <input type="checkbox"/> CC		
						10. County <b>LAKE</b>		
						15. DOC Number		

OFFICE USE ONLY

POINTS

I. PRIMARY OFFENSE AT CONVICTION

Counts	Degree	Statute	Description	POINTS
<u>1</u>	<u>Life</u>	<u>782.04</u>	<u>Att. Murder First Degree - Firearm</u>	<u>165</u>

II. ADDITIONAL OFFENSES AT CONVICTION

Counts	Fel. Misd	Degree	Statute	Description	POINTS
<u>3</u>	<u>F</u>	<u>Life</u>	<u>787.01</u>	<u>Kidnapping While Armed - Firearm</u>	
<u>1</u>	<u>F</u>	<u>Life</u>	<u>794.011</u>	<u>Sexual Battery - Armed - Firearm</u>	
<u>1</u>	<u>F</u>	<u>1st D.</u>	<u>812.13</u>	<u>Robbery - Firearm</u>	

II. 130

(Continue on Reverse)

III. A. PRIOR RECORD

Counts	Fel. Misd	Degree	Statute	Description	POINTS
<u>1</u>	<u>F</u>	<u>2°</u>	<u>810.02</u>	<u>Burglary - Dwelling</u>	
<u>1</u>	<u>F</u>	<u>3°</u>	<u>39.061</u>	<u>Escape</u>	
<u>1</u>	<u>M</u>	<u>2°</u>	<u>812.014</u>	<u>Pat. Theft</u>	

III. A. 28

(Continue on Reverse)

III. B. SAME CATEGORY PRIORS (categories 3, 5 and 6 only)

III. B. \_\_\_\_\_

III. C. PRIOR DUI CONVICTIONS (category 1 only)

III. C. \_\_\_\_\_

IV. LEGAL STATUS AT TIME OF OFFENSE

☒ (1) no restrictions \_\_\_\_\_ (2) legal constraint \_\_\_\_\_

**FILED IN OPEN COURT**  
**8-19-94**  
**CLERK CIRCUIT COURT**  
**LAKE COUNTY, FLORIDA**

IV. \_\_\_\_\_

V. VICTIM INJURY

Number of Scoreable Victim Injuries

Degree of Injury

none or no contact

slight or contact but no penetration

moderate or penetration

severe or death

1  
3

*Deputy Clerk*  
**Deputy Clerk**

V. 84

TOTAL POINTS

400

RECOMMENDED SENTENCE

Life

PERMITTED SENTENCE

27-Life

TOTAL SENTENCE IMPOSED

REASONS FOR DEPARTURE

JUDGE

PREPARER

*William M. Gross, ASA*

OFFICE USE ONLY

T.S.

C.C.

Prob.

S.P.

C.J.

F.F.

*in the written order - additionally*  
*there are unscored capital felonies.*  
*Hansbrough v St.*  
*Livingston v St.*



STATE OF FLORIDA

UNIFORM COMMITMENT TO CUSTODY  
OF DEPARTMENT OF CORRECTIONS

IN THE CIRCUIT COURT  
IN AND FOR LAKE COUNTY  
IN THE SPRING TERM, 1994.

CONVICTED: 060194

SENTENCED: 081994

CNT OFFENSE

SENTENCE TERM CREDIT STATUTE  
YEARS-MTHS-DAYS DAYS SECTION

01	KIDNAPPING WHILE ARMED	NATURAL LIFE	565	78701	
02	KIDNAPPING WHILE ARMED	NATURAL LIFE	565	78701	
03	KIDNAPPING WHILE ARMED	NATURAL LIFE	565	78701	
04	SEXUAL BATTERY WHILE ARMED	NATURAL LIFE	565	794011	3
06	ATTEMPTED FIRST DEGREE MURDER	NATURAL LIFE	565	78204	1A
07	ROBBERY WITH FIREARM OR DEADLY WEAPON	NATURAL LIFE	565	81213	2A
08	MURDER, FIRST DEGREE	DEATH	565	78204	1A
09	MURDER, FIRST DEGREE	DEATH	565	78204	1A

STATE OF FLORIDA

VS

RICHARD HENYARD, JR  
A/K/A

CASE NO: 9300159CFA01

IN THE NAME AND BY THE AUTHORITY OF THE STATE OF FLORIDA, TO THE SHERIFF  
OF SAID COUNTY AND THE DEPARTMENT OF CORRECTIONS OF SAID STATE, GREETINGS.

THE ABOVE NAMED DEFENDANT HAVING BEEN DULY CHARGED WITH THE ABOVE NAMED  
OFFENSE IN THE ABOVE STYLED COURT, AND HE HAVING BEEN DULY CONVICTED AND  
ADJUDGED GUILTY OF AND SENTENCED FOR SAID OFFENSE BY SAID COURT, AS IT APPEARS  
FROM THE ATTACHED CERTIFIED COPIES OF INDICTMENT/INFORMATION, JUDGMENT AND  
SENTENCE, WHICH ARE HEREBY MADE PARTS HEREOF:

NOW, THEREFORE, THIS IS TO COMMAND YOU, THE SAID SHERIFF, TO TAKE AND KEEP  
AND WITHIN A REASONABLE TIME AFTER RECEIVING THIS COMMITMENT, SAFELY DELIVER THE  
SAID DEFENDANT INTO THE CUSTODY OF THE DEPARTMENT OF CORRECTIONS OF THE STATE OF  
FLORIDA, AND THIS IS TO COMMAND YOU, THE SAID DEPARTMENT OF CORRECTIONS, BY AND  
THROUGH YOUR SECRETARY, SUPERINTENDENTS, WARDENS, AND OTHER OFFICIALS, TO KEEP  
AND SAFELY IMPRISON THE SAID DEFENDANT FOR THE TERM OF SAID SENTENCE IN THE  
INSTITUTION IN THE STATE CORRECTIONAL SYSTEM TO WHICH YOU, THE SAID DEPARTMENT  
OF CORRECTIONS, MAY CAUSE THE SAID DEFENDANT TO BE CONVEYED OR THEREAFTER TRANS-  
FERRED. AND THESE PRESENTS SHALL BE YOUR AUTHORITY FOR THE SAME.  
HEREIN FAIL NOT.

WITNESS THE HONORABLE MARK J HILL  
JUDGE OF SAID COURT, AS ALSO JAMES C. WATKINS  
CLERK, AND THE SEAL THEREOF, THIS 19TH DAY OF  
AUGUST, 1994.

JAMES C. WATKINS  
CLERK OF SAID COURT

BY: *James C. Watkins*



00046

STATE OF FLORIDA  
COUNTY OF LAKE

I, JAMES C. WATKINS, CLERK OF THE CIRCUIT COURT IN AND FOR  
THE AFORESAID COUNTY AND STATE, DO HEREBY CERTIFY THAT THE  
FOREGOING IS A TRUE COPY OF THE UNIFORM COMMITMENT, JUDGMENT,  
SENTENCE, INFORMATION, SCORESHEET, RESTITUTION ORDER, PSI,  
VICTIM NOTIFICATION DATA SHEET AS FILED AUGUST 19TH, 1994  
IN THE CASE OF:  
STATE OF FLORIDA

VS

RICHARD HENYARD, JR, 9300159CFA0132  
A/K/A

AS SAME APPEARS ON RECORD AMONG THE PUBLIC RECORDS OF LAKE  
COUNTY, FLORIDA, WITNESS MY HAND AND OFFICIAL SEAL THIS 19TH  
DAY OF AUGUST, 1994.

JAMES C. WATKINS, CLERK

BY:

*Jaeger L. L...*



00047

State of Florida

v.

RICHARD HENYARD, JR.  
Defendant

In the Circuit Court for Lake County, Florida

Case Number: 93-159-CF-MH-A

**RESTITUTION ORDER**

By appropriate notation, the following provisions apply to the sentence imposed in this section:

XX Restitution is not ordered as it is not applicable.

\_\_\_ Restitution is not ordered due to the financial resources of the defendant.

\_\_\_ Restitution is not ordered due to \_\_\_\_\_

\_\_\_ Due to the financial resources of the defendant, restitution of a portion of the damages is ordered as prescribed below.

\_\_\_ Restitution is ordered as prescribed below.

\_\_\_ Restitution is ordered for the following victim. (Victim refers to the aggrieved party, aggrieved party's estate, or aggrieved party's next of kin if the aggrieved party is deceased as a result of the offense. In lieu of the victim's address and phone number, the address and phone number of the prosecuting attorney or victim advocate may be used.)

THE STATE OF FLORIDA

Name of victim

Address:

City, State and Zip Code:

WILLIAM M. GROSS

Assistant State Attorney

Florida Bar #: 276642

JAMES C. VINTERS

CLERK OF COUNTY COURT  
By: \_\_\_\_\_

\_\_\_ The sum of \$\_\_\_\_\_ for medical and related services and devices relating to physical, psychiatric and psychological care, including non-medical care and treatment rendered in accordance with a recognized method of healing.

\_\_\_ The sum of \$\_\_\_\_\_ for necessary physical and occupational therapy and rehabilitation.

\_\_\_ The sum of \$\_\_\_\_\_ to reimburse the victim for income lost as a result of the offense.

\_\_\_ The sum of \$\_\_\_\_\_ for necessary funeral and related services if the offense resulted in bodily injury resulting in the death of the victim.

\_\_\_ The sum of \$\_\_\_\_\_ for damages resulting from the offense.

\_\_\_ The sum of \$\_\_\_\_\_ for \_\_\_\_\_

It is further ordered that the defendant fulfill restitution obligations in the following manner:

\_\_\_ Total monetary restitution is determined to be \$\_\_\_\_\_ to be paid at a rate of \$\_\_\_\_\_ per (check one) \_\_\_ month \_\_\_ week \_\_\_ other (specify) \_\_\_\_\_ and is to be paid through the (check one) \_\_\_ clerk of the circuit court, \_\_\_ to the victim's designee, or \_\_\_ through the Department of Corrections, with an additional 4% fee of \$\_\_\_\_\_ for handling, processing and forwarding said restitution to the victim(s).

FILED IN OPEN COURT, at Tavares, Lake County, Florida this 19 day of Aug., 1994.

8-19-94  
CLERK CIRCUIT COURT  
LAKE COUNTY, FLORIDA

BY Joyce L. Lamm  
Clerk of the Court

Mark J. Hill  
MARK J. HILL, CIRCUIT JUDGE

Certified Copy: Victim

00048

408

Appendix B  
July 24, 2008 Affidavit from Jason Nawara

WHILE INCARCERATED IN 1993-94 IN THE LAKE COUNTY JAIL, I WAS HOUSED IN THE SAME QUAD AS ALFONZA SMALLS, THE FOLLOWING IS WHAT I HEARD AND WHAT WAS SAID TO ME DIRECTLY BY SMALLS;

1<sup>ST</sup> ON NUMEROUS OCCASIONS SMALLS MADE THE STATEMENT "THAT WAS MY FIRST PIECE OF PLESSY." HE SAID IT OFTEN ENOUGH THAT IT BECAME A CRUDE JOKE. "IT WAS HIS PIECE AND HIS LAST"

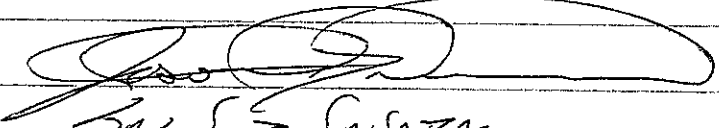
2<sup>ND</sup> ON MORE THAN A FEW OCCASIONS I HEARD ~~THE~~ HIM SAY "I'M A KILLA, YOU JUST A CAR THEEF" AND "I'VE KILLED BEFORE AND I'LL KILL AGAIN" AND OTHER STATEMENTS TO THAT EFFECT. THESE WERE NOT SAID PRIVATELY BUT IN A GROUP SETTING

~~3<sup>RD</sup>~~ I WAS HOUSED IN THE SAME QUAD WITH SMALLS FOR 14 MONTHS, IN THAT TIME I GOT TO KNOW HIS WAS AND HIS MOOD. WHEN HE WOULD MAKE THOSE STATEMENTS HIS BEARING WOULD CHANGE WHEN HE SAID HE WAS A KILLA, AND WOULD KILL AGAIN I COULD TELL THAT HE WAS DEAD SERIOUS.

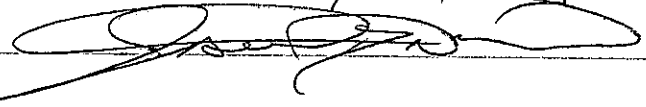
2

DURING THE 14 MONTHS WE LIVED TOGETHER  
HE NEVER DENIED ~~THE~~ KILLING DID HE  
SAY OR INSINUATE THAT THE KILLINGS WERE  
DONE BY HIS CODEFENDENT.

7/24/08

  
JASON J. SAWARA

I SWEAR THAT THESE STATEMENTS ARE THE TRUTH  
AND ONLY THE TRUTH, UNDER PENALTY OF PERJURY

AFFIRANT SAYETH NAUGHT  


Prison I.D. or —  
identification



Rose M Valdez

7-24-08

## Appendix C

### Verification

IN THE CIRCUIT COURT OF THE FIFTH JUDICIAL CIRCUIT,  
IN AND FOR LAKE COUNTY, FLORIDA

STATE OF FLORIDA,  
Plaintiff,

v.

RICHARD HENYARD,  
Defendant.

CASE NO.: 93-159-CF  
DEATH PENALTY WARRANT  
Execution Scheduled: September 23, 2008

VERIFICATION

STATE OF FLORIDA )

ss. )

COUNTY OF BRADFORD )

BEFORE ME, the undersigned authority, this day personally appeared **RICHARD HENYARD**, who, being first duly sworn, says that he is the Defendant in the above-styled cause, that he has read the foregoing Successive Motion to Vacate Judgments of Sentence and has personal knowledge of the facts and matters therein set forth and alleged; and that each and all of these facts and matters are true and correct.

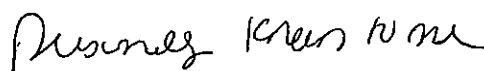
FURTHER AFFIANT SAYETH NAUGHT.

  
RICHARD HENYARD

SWORN TO AND SUBSCRIBED TO before me this 4 day of Aug, 2008, by **RICHARD HENYARD**, who is personally known to me or who provided the following identification:

  
NOTARY PUBLIC, STATE OF FLORIDA  
My Commission Expires:







Appendix D  
Article: Social Information Processing, Security of  
Attachment, and Emotion Regulation in Children  
with Learning Disabilities

# Journal of Learning Disabilities

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## **Social Information Processing, Security of Attachment, and Emotion Regulation in Children With Learning Disabilities**

Nirit Bauminger and Ilanit Kimhi-Kind

*J Learn Disabil* 2008; 41; 315 originally published online Apr 28, 2008;

DOI: 10.1177/0022219408316095

The online version of this article can be found at:  
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# Social Information Processing, Security of Attachment, and Emotion Regulation in Children With Learning Disabilities

Nirit Bauminger

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This study examined the contribution of attachment security and emotion regulation (ER) to the explanation of social information processing (SIP) in middle childhood boys with learning disabilities (LD) and without LD matched on age and grade level. Children analyzed four social vignettes using Dodge's SIP model and completed the Kerns security scale and the children's self-control scale. Study results demonstrated major difficulties in SIP, lower attachment security, and less ER in children with LD compared to children without LD. Attachment as well as the interaction between attachment and ER emerged as important contributors to most SIP steps, suggesting that children with higher security who also have better ER skills will have better SIP capabilities along the different steps, beyond group inclusion. Results were discussed in terms of practical and clinical implications regarding the importance of mother-child attachment and ER skills for social cognitive capabilities in children with LD.

**Keywords:** *social-emotional; social information processing; learning disabilities*

The purpose of the current study was to examine the contribution of attachment security and emotion regulation (ER) to the explanation of social information processing (SIP) in middle childhood boys with and without learning disabilities (LD). SIP is a major component of children's social competence that enables them to make sense of their social world, specifically regarding their social interactions within this world (Dodge, 1986; Gifford-Smith & Rabiner, 2004; Lemerise & Arsenio, 2000). SIP offers a detailed model of how children process and interpret cues in social situations and arrive at a behavioral or emotional decision regarding these cues (Crick & Dodge, 1994; Dodge, 1986). As a social cognitive capability, SIP can be considered one of the most challenging domains for children with LD in that it draws together their cognitive difficulties (e.g., attention, memory, reasoning, focusing, processing information; American Psychiatric Association, 2000) and their social-emotional difficulties (e.g., limited emotion recognition skills, poor social and emotion understanding, peer rejection; Bauminger, Schorr-Edelsztein, & Morash, 2005; Frederickson & Furman, 2001; Nabuzoka & Smith, 1993; Tur-Kaspa, 2002). However, among children with LD, SIP processes have been more extensively examined than have the related emotional processes such as attachment or ER (Arthur, 2003; Bryan, Burstein, & Ergul, 2004).

The core unit of SIP models includes six on-line active steps: (1) encoding social cues (i.e., attending to appropriate cues, chunking and storing information), (2) mentally representing and interpreting the cues (i.e., integrating the cues with past experience and arriving at a meaningful understanding of them), (3) clarifying goals, (4) searching for possible social responses, (5) making a response decision after evaluating the consequences of the various responses and estimating the probability of favorable outcomes, and (6) acting out the selected response while monitoring its effects on the environment and regulating behavior accordingly (Crick & Dodge, 1994; Dodge, 1986, 1991; Gifford-Smith & Rabiner, 2004; Lemerise & Arsenio, 2000).

Latent mental and affective processes are considered to influence and interplay with SIP's six on-line active steps (Crick & Dodge, 1994; Dodge, 1986, 1991; Lemerise & Arsenio, 2000). Past research has emphasized the importance of mental processes for efficient active SIP, such as children's memory capabilities, selective attention skills,

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and processing speed (Crick & Dodge, 1994; Dodge, 1986). Newer studies of SIP have added the child's emotional processes to the equation, emphasizing the quality of the child's affective ties (i.e., attachment security) and children's ability to regulate emotion, which are both perceived as undifferentiated latent SIP processes (Dodge, 1991; Lemerise & Arsenio, 2000).

### Attachment and SIP in Typical Development

Bowlby (1969) conceptualized attachment as the first affective bond that the child forms with the primary caregiver. Drawing from object relations theory, Bowlby suggested that in the first year of life, it is in the infant's interest to seek out proximity to the attachment figure when under stress (Bretherton, 1985). To foster proximity, the child is involved in many interactions with the main caregiver. According to Bowlby, the caregiver's responsiveness to the child's signals will determine the nature of their relationship, which the child will internalize via internal working models. These models comprise schemas representing the child's knowledge about the world and about significant persons in the world, including the self (Bowlby, 1969; Bretherton & Munholland, 1999). Such schemas/models may also govern what the child expects in relationships with others, such as teachers and friends (Berlin & Cassidy, 1999; Weinfield, Sroufe, Egeland, & Carlson, 1999). Positive experiences with a trustworthy and responsive caregiver will lead toward a secure type of attachment with others, which is linked with positive views of the self (e.g., self-confidence, flexibility) and positive expectations of others concerning relationships (e.g., "I am loved by my mother, so I deserve to be loved"). On the other hand, negative experiences with an unresponsive or inconsistent caregiver will lead to an insecure type of attachment with others, which is linked with negative views of the self and of others (Sroufe & Fleeson, 1986).

According to SIP theorists, attachment and SIP are conceptually linked (Gifford-Smith & Rabiner, 2004). Internal working models of attachment function as a latent SIP process that influences on-line processing of social cues. On-line SIP processing, then, impacts social behavior and adjustment (Crick & Dodge, 1994; Gifford-Smith & Rabiner, 2004; Price & Landsverk, 1998). For example, internal working models of insecure attachment that reflect negative views of self, others, and relationships will influence SIP in ways that may result in maladaptive behavioral responses or hostile attributions. Children who view others as hostile or rejecting are more likely to interpret ambiguous social information in an aggressive manner and to react accordingly (e.g., Cassidy, Kirsh, Scolton, & Parke, 1996; DeMulder, Denham, Schmidt,

& Mitchell-Copeland, 2000; Halberstadt, Denham, & Dunsmore, 2001; Laible & Thompson, 1998; Price & Landsverk, 1998; Rabiner, Keane, & MacKinnon-Lewis, 1993). Conversely, internal working models of secure attachment that consist of positive representations of self, others, and relationships will facilitate the processing of social information in ways that are unbiased, accurate, and competent, which in turn will lead to the display of competent and adaptive behavior. Increasing evidence suggests that children with a more secure internal working model are more skilled at accurately receiving emotional communication, and they expect people to be trustworthy, which may enrich their social experiences (DeMulder et al., 2000; Laible & Thompson, 1998).

### ER and SIP in Typical Development

Frijda (1986) claimed that "people not only have emotions, they also handle them" (p. 401). Most definitions of ER relate to children's self-control ability—their capacity to manage and modify their emotional reactivity and expressivity (Denham, 1998; Eisenberg & Fabes, 1992; Eisenberg & Spinard, 2004; Hubbard & Dearing, 2004; Saarni, 1999; Thompson, 1994). For example, Thompson (1994) defined ER as "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goal" (p. 27).

The child's capability for ER is considered a major contributor to efficient SIP (Dodge, 1991; Eisenberg et al., 1996, 1997; Hubbard & Dearing, 2004; Lemerise & Arsenio, 2000). Lemerise and Arsenio (2000) proposed that ER is relevant to each and every step of the on-line SIP steps. For example, poor regulatory skills may interfere with assessing a situation from different perspectives, prevent comprehensive interpretation of the situation, and impede a flexible approach to goal selection that takes into account contextual factors (Saarni, 1999). This may result in misinterpretation of the situation and in rigid goals due to "preemptive processing." In a like manner, children's process of searching for a response may be restricted by poor regulatory skills. Although conceptually ER seems highly relevant to SIP, empirical study of SIP and ER has been very limited. Studies have demonstrated the relevancy of ER to children's social competency in general or to peer relations (e.g., Eisenberg et al., 1997; Hay, Payne, & Chadwick, 2004) but have mostly focused on the links between ER, attachment, and children's social competency (e.g., Cole, Martin, & Dennis, 2004; Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000; Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993; Kobak & Sceery, 1988; Zimmermann, Maier, Winter, & Grossmann, 2001).

## Attachment, ER, and SIP in Typical Development

Developmentally, ER is thought to be organized first within the context of the interaction between the child and the main caregiver, namely, within attachment relations (Field, 1994). Theorists have suggested that during infancy and childhood, attachment figures may function as "external organizers" for their children by helping them regulate their emotions (Bowlby, 1973; Cassidy, 1994; Grossmann & Grossmann, 1993; Grossmann, Grossmann, & Zimmermann, 1999). As individuals grow, there is increasing autonomous adaptation and application of ER patterns learned during interaction with the attachment figure. Children who are flexible in their ability to integrate both positive and negative emotions are generally securely attached, whereas children who are characterized by limited or heightened negative affect are more likely to be insecurely attached (Bretherton & Munholland, 1999; Cassidy, 1994; Spangler & Grossmann, 1993; Spangler & Schieche, 1998). When compared to insecure adolescents, secure adolescents were found to be less hostile toward their peers, less anxious, and less helpless (Kobak & Sceery, 1988) and were also shown to be more socially competent and to use more active and less avoidant coping strategies (Zimmermann & Grossmann, 1997).

Altogether, conceptually both attachment and ER appear to be important contributors to SIP. However, due to the lack of solid empirical evidence to date, it is difficult to predict whether ER mediates between attachment and SIP, as it does for the link between attachment and social competence in general (e.g., Contreras et al., 2000), or whether the effect of the interrelations between attachment and ER add significantly to the understanding of SIP's on-line steps (via a moderator model; Baron & Kenny, 1986). The current study will examine the contribution of attachment security, emotion regulation, and their interaction as variables explaining SIP in children with and without LD.

## SIP, Attachment, and ER in Children With LD

Socially competent children, compared with average or less competent children, have better SIP skills. Such children (a) are better encoders of social information (Dodge & Price, 1994), (b) reveal less hostile interpretations of children's intent (Nelson & Crick, 1999), (c) prefer relational over instrumental goals and are less likely to endorse revenge goals (Rose & Asher, 1998), and (d) generate problem-solving strategies that are more prosocial and less aggressive or hostile (e.g., Erdley & Asher, 1998; Nelson & Crick, 1999; Rose & Asher,

1998). Overall, the SIP patterns of socially competent children reflect a priority for maintaining harmonious relationships with peers (Gifford-Smith & Rabiner, 2004). SIP appears deficient in children with LD, possibly contributing to their more general social-emotional dysfunction (American Psychiatric Association, 2000; Bryan et al., 2004; Kavale & Forness, 1996; Tur-Kaspa, 2002).

Two studies examined SIP's six on-line steps in children with LD during middle childhood (Bauminger et al., 2005; Tur-Kaspa & Bryan, 1994). Children with LD presented similar SIP deficiencies along the two studies, including lower encoding capabilities, less information recall, and the tendency to add more irrelevant information while processing social situations, compared to children without LD. Indeed, the ability to identify a problem and to interpret a situation as positive or negative was similar in children with and without LD, but the former group evidenced better attributions to the situation's social context. In addition, children with LD suggested fewer social solutions to problems than did their counterparts without LD, and even though they resembled the control group in evaluating the competency of solutions presented to them, children with LD showed a less appropriate response decision. These studies are unique in their comprehensive evaluation of the whole SIP model with regard to children with LD.

Other researchers demonstrated these children's difficulties in performing some specific steps of Dodge's model. In encoding and mentally representing social cues, children with LD evidenced problems in focusing attention on significant cues, attending instead to extraneous irrelevant information (Parrill-Burnstein, 1981; Tur-Kaspa & Bryan, 1994). These children exhibited difficulty in appropriately interpreting social situations, problematic comprehension of verbal and nonverbal social cues, and weak social perception processes (Bruno, 1981; Bryan, 1977; Markoski, 1983; Minskoff, 1980), and they sometimes found social codes to be meaningless and confusing (Schumaker & Hazel, 1984). In addition, children with LD demonstrated lower competence levels than did average-achieving children in taking others' perspectives and in understanding others' intentions (Weiss, 1984; Wong & Wong, 1980). When dealing with problem-solving processes (response search → evaluation → decision → enactment), children with LD (a) lacked planning strategies and developed nonsophisticated social goals (Olivia & LaGreca, 1988; Parrill-Burnstein, 1981), (b) evidenced a lower number and quality of social alternatives compared with average-achieving children (Carlson, 1987; Toro, Weissberg, Guare, & Liebenstein, 1990), and (c) did not utilize feedback to correct their mistakes and were deficient in predicting the consequences of social situations

or of their own or others' actions (Bruno, 1981; Derr, 1986). Thus, children inevitably revealed difficulties in selecting responses (Bryan, Werner, & Pearl, 1982). Although some of the aforementioned findings should be taken with caution due to methodological shortcomings, such as weak design or underspecified sample, the findings as a whole portray a coherent picture of difficulties along the different SIP steps.

Altogether, studies have focused on identifying SIP difficulties in children with LD but not on the processes that may contribute to these difficulties. Notwithstanding their importance to the understanding of social-emotional functioning in children with LD and to their difficulties in SIP, both attachment and ER processes are overlooked areas of studies.

Indeed, very few studies have examined the possible role attachment may play in explaining LD individuals' social-emotional difficulties; however, these studies' findings were consistent (Al-Yagon, 2003; Al-Yagon & Mikulincer, 2004a, 2004b; Barzel, 2002; Smith & McCarthy, 1996). School-age children with LD (Al-Yagon & Mikulincer, 2004a, 2004b; Barzel, 2002), adults with LD (Smith & McCarthy, 1996), and children at risk for LD (Al-Yagon, 2003) consistently demonstrated less attachment security and more insecurity compared with children without. Furthermore, attachment was found to contribute to a sense of loneliness and self-perceived coherence among children with LD, where negative representations of significant others (insecure internal working models) contributed to a high sense of loneliness and low sense of coherence, and the opposite picture emerged for positive representations of others (secure internal working models; Al-Yagon, 2003; Al-Yagon & Mikulincer, 2004a, 2004b). These results underscore the role secure attachment plays in the social-emotional functioning of children with LD. The aforementioned higher risk for insecure attachment style may have implications for children's SIP performance.

Studies probing the negative feelings that increase the likelihood of ER problems such as depression, anxiety, and loneliness (Eisenberg et al., 1996, 1997) have demonstrated that children with LD are at risk for experiencing these emotions more often than children without LD (Bryan et al., 2004; Huntington & Bender, 1993; Margalit & Al-Yagon, 2002; Pavri & Monda-Amaya, 2000). However, studies have not yet investigated children's ER skills while coping with these negative emotions. Negative affect may also "color" children's perceptions and interpretations of others' behaviors toward them as well as others' responses to them, thus possibly influencing children's SIP processes (Bryan, Sullivan-Burstein, & Mathur, 1998).

In sum, children with LD demonstrate difficulties along the different on-line steps of SIP and are at higher risk for developing insecure internal working models and for experiencing ER difficulties. Insecure working models and ER difficulties may influence these children's SIP performance; however, these possible influences have not yet been explored. Thus, the current study had three aims: (a) to compare children with and without LD in their SIP, internal working models of attachment, and ER skills; (b) to examine the relations between attachment models, ER skills, and SIP within each study group; and (c) to investigate the possible contribution of internal working models and ER skills to the explanation of SIP in children with and without LD. We also examined if the interaction of internal working models and ER would add to the explained variance of SIP's different on-line steps to test a possible moderator model (Baron & Kenny, 1986). Based on the theory that ER is formed within the attachment context and only later in development appears to function more autonomously (Bowlby, 1973; Cassidy, 1994; Grossmann & Grossmann, 1993), internal working models were entered into the regression equation first, followed by ER and their interaction. The moderator model had three causal paths: Path A included the impact of internal working models as the predictor, Path B included the impact of ER as the moderator, and Path C included the interaction of the Predictor  $\times$  Moderator. According to Baron and Kenny (1986), the moderator hypothesis is supported only if the interaction is significant, not if significant main effects emerge for the predictor and the moderator.

## Method

### Participants

The present study included 100 boys in the fourth through sixth grades (age range: 10 to 12.9 years; for LD:  $M = 137.42$  months,  $SD = 9.40$ ; for non-LD:  $M = 137.74$  months,  $SD = 9.69$ ) who attended four large public elementary schools in central Israel. All schools served students of middle socioeconomic status and of similar racial backgrounds (Caucasian Jews). The experimental group comprised 50 students with LD, and the control group comprised 50 average-achieving children who were matched to the former group on age, grade, and class distribution. Class distribution was even in both groups and included 14 fourth graders, 19 fifth graders, and 17 sixth graders. Children in each group were sampled from 23 classes. All male children with LD who met our full inclusion criteria (as specified in the following) were included in the study, except for 5 students whose parents

did not consent. The control group consisted of average-achieving students from the same classes of the children with LD who according to teacher report evidenced average grades and did not reveal any specific or consistent learning or behavioral problem. Out of the 230 boys without LD who met our selection criteria based on teacher report, we randomly selected 90 male students (30 for each class grade) and sent consent forms to their parents. In all, 71 parents consented; we then randomly selected 50 children to participate in the study who were matched to the children with LD based on age and class distribution.

**LD sample.** In line with the educational policy of the Israeli Ministry of Education, students with LD had been formally diagnosed by the school district psychological services agency. The diagnostic assessment included instruments such as the *Wechsler Intelligence Scale for Children—Third Edition* (Wechsler, 1974), *Bender-Gestalt Test* (Koppitz, 1975), figure drawings (Koppitz, 1968), *Kaufman Assessment Battery for Children* (Kaufman & Kaufman, 1983a, 1983b), and achievement tests in one or more learning processes (i.e., reading, writing, mathematical calculation, or mathematical reasoning) as well as additional tests where necessary. Students received an LD diagnosis based on the criteria in Israel for LD classification, which includes (a) achievement test scores at least 2 years below grade level and (b) average or above-average intelligence with a marked deficit in academic achievement. Exclusion criteria were (a) absence of extreme behavioral or attentional difficulties that would impede completion of the study measures, (b) absence of frank neurological problems, (c) absence of sensory impairments, and (d) absence of problems presumed to be due to environmental, economic, or cultural factors. In line with the Israeli Law of Special Education (Ministry of Education, Culture, and Sports, 1996), students with significant LD were assessed in their schools, diagnosed by the school district psychological services, and identified by an interdisciplinary placement committee as in need of remedial help or special education services. In line with this educational policy, in all schools, students with LD received an individual educational program that included between 2 to 5 weekly hours of tutoring from resource teachers specializing in LD, and they were entitled to testing accommodations (e.g., longer test duration, disregard of spelling mistakes, task reductions). Children with LD were given this tutoring assistance either individually or in small groups in a school-based learning center during school hours or within their regular classes. Children's IQ scores were not available to the research team owing to Israeli regulations for privacy protection.

However, by definition for an LD diagnosis, these IQ scores were in the normal range (Ministry of Education, Culture, and Sports, 1996).

**Reported academic grades.** To validate the classification and matching process, we examined the two groups of students' academic grades based on school records from the previous academic year in three subjects: reading, mathematics, and English. A significant difference emerged between the children with and without LD on reading, LD:  $M = 71.0$ ,  $SD = 9.31$ ; non-LD:  $M = 82.3$ ,  $SD = 9.95$ ;  $F(1, 94) = 10.20$ ,  $p < .01$ ; math, LD:  $M = 63.5$ ,  $SD = 11.39$ ; non-LD:  $M = 76.3$ ,  $SD = 12.15$ ;  $F(1, 94) = 29.45$ ,  $p < .001$ ; and English, LD:  $M = 63.3$ ,  $SD = 16.05$ ; non-LD:  $M = 73.2$ ,  $SD = 16.24$ ;  $F(1, 94) = 33.31$ ,  $p < .001$ . The Israeli school system considers grades between 70 and 85 as indicative of average performance.

## Assessment Measures

In line with the study objectives, we examined three main domains in the present study: SIP, attachment, and ER.

### *Child's SIP Skills Measure*

To tap children's SIP, we utilized the modification of Tur-Kaspa and Bryan's (1994) SIP measure that was reported in Bauminger et al. (2005) for use with LD children. This tool is based on Dodge's (1986) SIP model and on Crick and Dodge's (1994) revised SIP model. The modified instrument includes four short social vignettes with the following contents: peer entry, told from the point of view of the child attempting entry; intentional provocation; ambiguous provocation in which the child is the provoker; and ambiguous provocation in which the child is the victim. The examiner (the second author) read each of the four vignettes aloud to the child individually; for example, the peer entry vignette was: "One free period Dan has nothing to do. He walks outside and sees two of his classmates playing a game. Dan really wants to play with them. He walks up to them but they just keep on playing." After each vignette, the examiner asked the child a series of questions that aimed to examine the child's SIP steps as described in Crick and Dodge's model.

**Step 1. Encoding social cues.** To measure children's ability to attend to appropriate cues and to chunk and store information, we asked, "Tell me everything you remember about the story." We coded children's responses along two dimensions: core informational units and embellishments (items not included in the scenario). We summed all core informational units that each child

provided along all four of the stories together. Our four social vignettes included 17 information units. We also computed the number of embellishments, with a score of 1 point for each bit of extraneous information.

*Step 2. Representing/interpreting social cues.* This step included three variables and a combined score:

- A. Problem identification: To measure mental representation of social cues, we asked: "What is the problem here?" We coded answers on a 3-point scale: 0 = *incorrect identification of the problem*, 1 = *identification of the problem with no attribution or inclusion of social aspects* (e.g., "Dan was bored" for the peer entry vignette; "The tower got knocked over" for the provocation vignette with child as a victim), and 2 = *a definition of the problem that related to its social aspects* (e.g., "The kids ignored him" for peer entry; "Guy destroyed Dan's tower and Dan was not happy" for provocation with child as victim).
- B. Content interpretation: We asked children to interpret social cues, which would require integrating the cues with past experience and arriving at a meaningful understanding of them, for example: "Why do you think the two classmates keep on playing without inviting Dan to join them?" (peer entry). We scored responses as either a *negative, hostile interpretation* (0) (e.g., "because everybody hates him") or a *positive, nonhostile interpretation* (1) (e.g., "because they were busy with their game").
- C. Context attribution: We also scored whether children's interpretation took into account the multiple contextual and situational aspects related to the scenario, with a score of either *referring to situational aspects* (1) or *lacking reference to situational aspects* (0).
- D. Combined score: Due to moderate to high intercorrelations ( $r = .40-.69$ ) between the problem identification, content interpretation, and context attribution variables within this step, we also created an overall interpretation score to be used in the regression analysis based on the combination of the three variables above.

*Step 3. Clarifying goals.* To measure children's ability to anticipate a desired outcome for the situation, we asked questions that tapped their social goal, for example: "If you were in the same situation as Dan, what would you like to have happen?" We coded responses on the content of the goals in terms of positive goals (e.g., that they

include him in their game) versus negative goals (e.g., that they destroy his tower).

*Step 4. Searching for possible social responses.* To measure how the child evaluated the consequences of the various responses and estimated the probability of favorable outcomes, we asked a question like: "Tell me all the different ways you can think of that Dan could deal with this situation. . . . What else? . . . What else?" We scored the total number of solutions that the child generated (or 0 for none). In addition, we executed content analysis of children's solutions and calculated the frequency of children's responses along each of the following five categories: competent solutions (e.g., politely asking the kids if he could join them), aggressive solutions (e.g., grabbing the ball from the kids), passive-avoidant solutions (e.g., sitting and watching the kids playing), solutions involving a third person (e.g., asking the teacher to tell the kids to play with him), or any other ineffective solution.

*Step 5. Making a response decision and evaluating given alternatives.* This step included two parts:

- A. Response decision: "You've suggested several solutions to this problem. Let's pretend that you're in the same situation as Dan. Which of these solutions would you choose?" We coded children's choice as either a *competent solution* (1) or an *incompetent solution* (0).
- B. Solution evaluation: After the child made a decision, we also examined how the child evaluated the following given types of solutions: competent solutions, aggressive solutions, passive solutions, third-party intervention solutions, and incompetent solutions. We said to the child: "Now, here is a list of other possible solutions to this problem. Listen carefully to each one of them, and tell me if you think it is a bad, fair, or good solution." We scored children's response evaluations on a scale of 0 to 2, with 2 as the highest endorsement.

*Step 6. Enactment process.* To measure how the child would act out the selected response while monitoring its effects on the environment and regulating behavior accordingly, we asked a question like: "One of the things you could do is to ask your classmates nicely to join their game. Let's pretend again that you're in the same situation as Dan. Could you show me how you would go about saying this to your classmates?" We excluded the enactment step from the analysis because all children in both groups provided an effective, although artificial, response.



To calculate interrater agreement for the coding of the social information steps, two raters who were blind to the participants' diagnostic status independently coded the same randomly selected 40% of children's responses. Interrater agreement was 85% for encoding, 91% for representation/interpretation, 98% for clarification of goals, 87% for response search, and 86% for response decision and response evaluation. All disagreements were discussed until the raters reached agreement. In line with the procedure in former SIP studies (e.g., Bauminger et al., 2005; Bryan et al., 2004; Tur-Kaspa, 2004; Tur-Kaspa & Bryan, 1994), we composed a sum score for each of the different on-line SIP steps based on the four social vignettes together.

### *Child's Attachment Measure*

To tap children's attachment quality, we utilized the *Kerns Security Scale* (KSS; Kerns Aspelmeier, Gentzler, & Grabill, 2001; Kerns, Klepac, & Cole, 1996), the most widely used self-report for children in middle childhood that provides a continuum of security scores among individuals. The frequency and intensity of attachment behaviors decline across childhood, and the child's perception of parents' availability becomes a more salient characteristic of attachment in middle childhood; thus, self-reports seem more apt to tap attachment quality in this age group. KSS items are intended to reflect those aspects of attachment (e.g., availability, reliance) that are thought to reflect security of attachment in the middle childhood years.

The KSS is a 15-item, forced-choice, self-report measure that was designed to evaluate children's perceptions of security in mother-child and father-child relationships in middle childhood. Items on the security scale tap the following: (a) the degree to which children believe a particular attachment figure is responsive and available (e.g., whether a child worries that a parent will not be there when needed), (b) the children's tendency to rely on the attachment figure in times of stress (e.g., whether a child goes to the parent when upset), and (c) children's reported ease and interest in communicating with the attachment figure (e.g., whether a child likes to tell a parent what she or he is thinking and feeling). Items are rated on a 4-point scale using Harter's (1982) "Some kids . . . Other kids" format. For example: "Some kids find it easy to trust their mom BUT other kids are not sure if they can trust their mom;" "Some kids feel like their mom really understands them BUT other kids feel like their mom does not really understand them." Children are asked to indicate which statement is more characteristic of them and then indicate whether this statement is really true for them or somewhat true. Scores across items are

summed so that children receive a score on a continuous dimension of security, with higher scores indicating more secure attachment. Also, Kerns et al. (1996) suggested a cutoff score of 45 for the differentiation of secure and insecure attachment style. A score of 45 and below reflects an insecure attachment style, whereas a score above 45 reflects a secure attachment style.

The KSS has good internal consistency for mother-child and father-child security perceptions (Cronbach's alphas of .79 and .87, respectively) and a high test-retest correlation over a short time interval,  $r(30) = .75$ , indicating stability in children's perceptions of security over a short period of time (Kerns et al., 1996, 2001). Efforts to validate the instrument have examined how children's security scores are related to concurrently administered projective measures of attachment. Child security scores have been significantly correlated with ratings derived from the *Separation Anxiety Test* (SAT; Resnick, 1993), a projective interview that taps children's state of mind with respect to attachment. Security scores were related to both the ratings and classifications from the SAT; for example, children who reported greater security to mother were less dismissing and had more coherent discourse during the SAT interview (Contreras et al., 2000; Kerns, Tomich, Aspelmeier, & Contreras, 2000). In a different study, children's security scores were significantly related to secure classifications and ratings obtained from an attachment-doll interview measure (Granot & Mayseless, 2001). In the current study, we used the Hebrew version of the KSS (Granot & Mayseless, 2001) for mother-child relationships, and we obtained a high internal consistency, Cronbach's alpha of .90.

### *Child's ER Skills Measure*

To tap children's ER, we utilized the *Children's Self-Control Scale* (CSC; Rosenbaum & Ronen, 1991), a self-report developed to assess the extent to which an individual regulates everyday stressful situations by applying ER self-control methods. Its 16 items reflect different skill areas: delaying immediate gratification, coping with physical discomfort, dealing with disturbing emotions or distress, and giving self-instruction such as use of self-talk when planning. The scale includes individuals' cognitive, emotional, and behavioral ER skills. For example, cognitive skills include usage of self-statements to control emotional responses and planning skills. The emotion component includes strategies to cope with regulation of negative emotions, and the behavior component includes the child's understanding that a favorable action can modify negative emotions that are related to a stressful situation. Examples of items were: "When I lose something

I really want, I tell myself it does not matter—I will have it again someday”; “After I see scary things on TV, it’s hard for me to shake them off and forget the fear”; “When I am very thirsty and there is nothing to drink, I try not to think about drinking.” Each item is rated on a 6-point scale ranging from *does not characterize me at all* (1) to *is very characteristic of me* (6), where higher scores indicate a higher level of ER skills. Originally developed by Rosenbaum (1980a, 1980b) for young adults, the CSC was adapted for children by Rosenbaum and Ronen (1991). The children’s version demonstrates good internal consistency (Cronbach’s alphas of .78–.81) and a high test-retest correlation over a short-term interval,  $r(47) = .89$ , indicating stability in children’s perceptions of their self-control skills over a short period of time (3 months). Evidence for scale validity was also presented, for example, in Hamama, Ronen, and Feigin (2000), where a link emerged between feelings of anxiety and loneliness in the healthy sibling of a child with cancer and that sibling’s ability for self-control as a skill in coping with emotional distress. Findings demonstrated a link between higher ability for self-control and less anxious and lonely feelings. In our study, the CSC yielded high internal reliability, Cronbach’s alpha = .90.

## Procedure

Based on the procedure in Bauminger et al. (2005), the examiner administered the three study measures (KSS, CSC, and SIP) in a quiet room in children’s schools during one individual interview with each child, lasting about 45 minutes. Despite the deficient cognitive processes previously documented among children with LD, the participants were able to complete all assessment measures in a single meeting without apparent fatigue. The SIP scales’ four different vignettes, the KSS attachment scale, and the CSC measure of ER were all counterbalanced between the children to prevent order effects. Children’s academic grades were obtained from their teachers, based on school records. Middle childhood period was chosen for this study (Grades 4–6) due to the fact that children in this period are considered to have complex social-emotional understanding (e.g., understanding of complex emotions, mixed emotions, and rules for display of emotions; Denham, 1998), which will enable more reliable self-reflection on the attachment and the ER scales. Also, children’s age and grade level were chosen based on Bauminger et al., who successfully implemented the SIP assessment with children with LD at middle childhood. Lastly, grade level differences were not significant for any of study variables (SIP steps, KSS attachment scale, or the CSC of ER).

## Results

### Between-Group Comparisons for SIP, Attachment Security, and ER

#### *The SIP Measure*

To examine differences between the children with and without LD on the SIP steps, we performed multivariate analysis of variance (MANOVA) according to Wilks criterion, followed by univariate analysis of variance (ANOVA) for each of the SIP components.

*Step 1. Encoding.* A MANOVA for encoding social cues yielded a significant effect of disability status,  $F(2, 97) = 30.05, p < .001, \eta^2 = .38$ . As can be seen in Table 1, univariate ANOVAs were significant for both recall of core information units and for embellishments, indicating that children with LD were likely to recall significantly fewer core information units from the social vignettes and to provide significantly more extraneous irrelevant information units that had not been included in the stimuli, compared to children without LD.

*Step 2. Representation/interpretation.* The MANOVA for disability status effect was significant with regard to the interpretation of social cues,  $F(3, 96) = 8.44, p > .001, \eta^2 = .21$ . A series of univariate ANOVAs for problem identification, content interpretation, and context attribution revealed a significant difference only with regard to the latter. Children without LD considered the multiple contextual and situational aspects related to the vignette’s social context to a significantly greater degree in their interpretations than did their counterparts with LD (see Table 1).

*Step 3. Clarification of goals.* Children’s responses on the clarifications of goals were coded according to the goals’ quality (positive or negative). We conducted a MANOVA on the positive or negative content of children’s goals suggested for solving the vignettes’ social problems. The MANOVA revealed a significant disability status effect,  $F(2, 97) = 19.06, p < .001, \eta^2 = .28$ . Univariate ANOVAs were significant for both positive and negative goals (see Table 1). Children with LD provided significantly fewer positive and significantly more negative goals to solve the problem compared with children without LD (see Table 1). The gap between children with and without LD was higher for the positive goals than for the negative goals.

*Step 4. Response search.* The ANOVA examining the total number of solutions that the children generated

**Table 1**  
**Means, Standard Deviations, and *F* Values for the Group Differences Between Children With and Without Learning Disabilities (LD) Regarding Social Information Processing Components**

Components	Children With LD		Children Without LD		Group Differences	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i> (1, 98)	<i>Eta</i> <sup>2</sup>
1. Encoding						
Information units	10.38	2.87	13.44	2.25	35.07***	.26
Embellishment	3.46	1.37	1.72	1.16	46.80***	.32
2. Interpretation						
Problem identification	5.90	1.38	6.26	1.31	1.78	.01
Content interpretation	2.28	0.83	2.42	0.97	0.59	.00
Context attribution	1.18	1.30	2.34	1.09	23.12***	.19
3. Goal clarification						
Positive goals	2.74	1.53	4.80	1.89	35.65***	.27
Negative goals	2.14	0.85	1.74	0.80	5.79*	.06
4. Response search						
Number of solutions	9.56	1.76	11.90	1.65	46.77***	.32
Contents generated						
Competent	5.76	2.29	7.74	2.48	17.13***	.15
Aggressive	0.40	0.60	0.30	0.54	0.75	.00
Passive avoidant	1.18	0.91	0.92	0.83	2.21	.02
Third-person	0.72	0.53	1.08	0.63	9.45**	.08
Other ineffective	1.50	0.88	1.86	1.04	3.43*	.03
5a. Response decision						
Competency of solutions	2.64	1.22	3.04	1.14	2.85	.02
5b. Response evaluation						
Competent	7.20	0.95	7.44	0.84	1.80	.01
Aggressive	0.78	0.84	0.32	0.82	7.68**	.07
Passive	2.76	1.36	1.98	1.22	9.08**	.08
Third-person	5.66	1.02	5.30	1.03	3.06	.03
Incompetent	4.46	1.12	3.88	1.13	6.55**	.06

Note: Several *SD*s were higher than their *Ms*; therefore, we performed an additional Mann-Whitney nonparametric test for independent samples for these cases, and the same significant differences emerged.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

revealed a significant disability status effect. Children with LD suggested significantly fewer solutions compared to children without LD (see Table 1). Next, we conducted a MANOVA on the five different contents of solutions (competent, aggressive, passive-avoidant, those involving a third person, or other ineffective solutions). Disability status effect was significant,  $F(5, 94) = 10.74$ ,  $p < .001$ ,  $\eta^2 = .36$ . ANOVAs showed significant differences for competent solutions, solutions involving a third person, and other ineffective solutions (see Table 1); in all cases, children with LD suggested significantly fewer solutions compared to children without LD.

**Step 5a. Response decision.** To examine the competency level of children's chosen solutions, we computed an ANOVA, but no significant disability status difference emerged (see Table 1). Selection of competent solutions among children with LD resembled that of their peers without LD.

**Step 5b. Response evaluation.** To examine children's ability to evaluate given solutions (competent, aggressive, passive, third-person, and other incompetent solutions), we computed a MANOVA that yielded a significant disability status effect,  $F(5, 94) = 3.89$ ,  $p < .01$ ,  $\eta^2 = .17$ . ANOVAs showed a significant difference with regard to children's evaluation of aggressive solutions, passive solutions, and incompetent solutions. Children with LD endorsed those nonadaptive types of solutions significantly more than did the children without LD.

**Summary of SIP skills.** As a whole, children with LD revealed lower social informational capabilities compared to children without LD, specifically, poorer encoding skills, less inclusion of the social context within their representation of social cues, a lower quality of social goals, and a lower quantity of solutions generated during their response search. Interestingly, response decision

and the evaluation of competent solutions did not differ between the groups.

#### Attachment Security Measure

To examine disability status differences on the continuous security of attachment score, we performed an ANOVA on the child's KSS attachment scale score. Children without LD revealed significantly higher security scores compared to children with LD,  $F(1, 98) = 9.33$ ,  $p < .01$ ,  $\eta^2 = .09$  ( $M = 49.50$ ,  $SD = 7.16$  and  $M = 44.54$ ,  $SD = 8.97$ , respectively). Next, based on Kerns et al. (1996), we assigned the children in each disability status group to either a secure or insecure classification, using the cutoff score of 45. Of the children with LD, 64% were assigned a secure classification, versus 84% in the control group. Chi-square analysis was significant,  $\chi^2(1, 100) = 5.19$ ,  $p < .05$ .

Both evaluations of attachment security showed that children with LD were less likely to evaluate their relationships with their mothers as secure compared to their matched peers without LD.

#### ER Measure

To examine disability status differences on ER, we performed an ANOVA on the child's CSC score, yielding a significant difference. Children with LD revealed significantly lower ER capabilities compared to children without LD,  $F(1, 98) = 6.65$ ,  $p < .01$ ,  $\eta^2 = .07$  ( $M = 3.65$ ,  $SD = 1.18$  and  $M = 4.24$ ,  $SD = 1.09$ , respectively).

#### Within-Group Associations Between SIP, Attachment Security, and ER

As can be seen in Table 2, in children with and without LD, attachment security and ER were found to be significantly correlated with most of the SIP steps, indicating that children who were more secure and had better ER skills were also better in their SIP capabilities. More specifically, whether with or without LD, children having higher security scores also recalled more information units in the encoding phase, offered more positive attributions regarding children's intentions, included the context more often in their social interpretations, suggested more positive goals and offered more competent solutions, and chose a more competent solution to the problem. Likewise, children in both disability status groups who had higher ER capabilities demonstrated better SIP capabilities.

On the other hand, children with lower security scores in both disability status groups proposed more negative goals, suggested more aggressive solutions, and only in the group without LD also suggested more passive and

**Table 2**  
**Within-Group Correlations Between Social Information Processing, Attachment Security, and Emotion Regulation**

Components	With Learning Disabilities		Without Learning Disabilities	
	Kerns Security Scale	Emotion Regulation	Kerns Security Scale	Emotion Regulation
1. Encoding				
Information units	.50***	.45***	.58***	.45***
Embellishment	-.17	-.08	-.07	-.09
2. Interpretation				
Problem identification	.14	.39**	.46***	.30**
Content interpretation	.32**	.37**	.47***	.54***
Context attribution	.33**	.38**	.50***	.48***
3. Goal clarification				
Positive goals	.47***	.47***	.56***	.46***
Negative goals	-.32**	-.27*	-.54***	-.33**
4. Response search				
Competent	.46***	.54***	.63***	.35**
Aggressive	-.27*	-.28*	-.26*	-.07
Passive avoidant	-.03	-.08	-.25*	.03
Third-person	-.16	-.04	-.09	-.12
Other ineffective	.05	-.20	-.32**	-.27*
5. Response decision				
Competency of solutions	.39**	.44***	.58***	.36**

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

incompetent solutions. Likewise, children with lower ER capabilities in both disability status groups proposed more negative goals. In addition, children with lower ER capabilities offered more aggressive solutions in the LD group and offered more incompetent solutions to the social problem in the non-LD group.

The Z Fisher test to examine disability status differences in correlations was significant only for two correlations: first, between security of attachment and problem identification (in the interpretation step),  $r = .14$ ,  $p > .05$  for LD;  $r = .46$ ,  $p < .001$  for non-LD; Z Fisher = 1.75,  $p < .05$ ; and, second, for the correlation between security of attachment and the "other" category of ineffective responses (in the response search step),  $r = .05$ ,  $p > .05$  for LD;  $r = -.32$ ,  $p < .01$  for non-LD; Z Fisher = 1.84,  $p < .05$ .

#### Hierarchical Regressions

Inasmuch as we were primarily interested in predicting the child's competent SIP capabilities, we focused on the following competency aspects of the SIP steps in our regression analyses: encoding of information units (Step 1), general interpretation category (Step 2), positive goals (Step 3), competent solutions (Step 4b), and response

**Table 3**  
**Hierarchical Regression Analysis of Social Information Processing by Disability Status (With/Without Learning Disabilities), Attachment Security, Emotion Regulation (ER), and Their Interactions**

Predictors	Social Information Processing Step									
	Encoding		Interpretation		Positive Goals		Competent Solutions		Response Decisions	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
Regression Step 1		.26***		.10***		.26***		.15***		.03
Disability status	.51***		.32***		.52***		.38***		.17	
Regression Step 2		.21***		.19***		.19***		.24***		.22***
Disability status	.37***		.18*		.38***		.23**		.02	
Security	.48***		.46***		.45***		.52***		.49***	
Regression Step 3		.03**		.10***		.04**		.04*		.03*
Disability status	.35***		.15		.36***		.21**		.00	
Security	.37***		.26**		.33***		.40***		.37***	
ER	.21**		.39***		.24**		.22**		.22*	
Regression Step 4				.02*		.05**		.12***		.06**
Disability Status			.12		.33***		.16**		-.03	
Security			.38***		.49***		.69***		.56***	
ER			.36***		.21*		.14		.19 <sup>a</sup>	
Security $\times$ ER			.18*		.17**		.36***		.29**	
Disability Status $\times$ ER						-.24**				
Disability Status $\times$ Security						.19*				
$R^2$		.50***		.42*		.54**		.55*		.34**

a.  $p = .06$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

decision (Step 5a). We computed a series of regression analyses to predict the different SIP steps, as follows: The first step of the analysis introduced children's LD status (with/without LD) to control for its influence on the predictors. Based on the conceptual perception of the influence of attachment figures' support and emotional availability on children's development of adaptive emotion regulation (Bowlby, 1973; Cassidy, 1994; Grossmann & Grossmann, 1993), security of attachment was introduced as the second step of the regression equation, and ER was entered into the regression equation as its third step. The last step consisted of the interactions between the predictors (Security  $\times$  ER, Disability Status  $\times$  ER, and Disability Status  $\times$  Security). The addition of the interaction step enabled the examination of the possible differential contributions of the predictors between the LD/non-LD study groups as well as indicating if the combination of internal working models and ER added to the explained variance in SIP, thus testing a moderator model. In all regression analyses, variables' entrance was forced in the first three steps, but in the interactions step, variables entered according to the significance of their contribution to the explained variance of SIP (stepwise approach,  $p < .05$ ).

Overall, as seen in Table 3, the explained variance by the predictors for all SIP steps was high ( $R^2$  ranges

from .34 to .55). The dependent variables and their interactions best predicted the suggestion of a competent solution ( $R^2 = .55$ ), followed by the establishment of positive goals ( $R^2 = .54$ ), the encoding of information units ( $R^2 = .50$ ), and the interpretation step ( $R^2 = .42$ ). The independent variables and their interactions contributed the least (but still significantly) to the explained variance in response decision ( $R^2 = .34$ ).

As can be seen in Table 3, the LD status (entered as the first step in the regression analyses) significantly contributed to the explanation of all the SIP steps except response decision, ranging from an explained variance of 26% for encoding information and for creating positive goals, to 15% for a competent solution, and to 10% for interpretation. Higher SIP skills emerged among children without LD versus children with LD along these SIP steps, indicating that learning disorders place children at risk for reduced SIP capabilities. Security of attachment (introduced in the second step of the regression equation) added significantly to the explained variance of all SIP steps: 24% for competent solutions, 22% for response decision, 21% for encoding information, and 19% for interpretation and for positive goals, demonstrating that attachment security predicts better SIP skills in children, beyond disability status. Likewise, the addition of ER in the third step contributed significantly to the explained

variance for all SIP steps, although to a lower extent than attachment, ranging from 3% in encoding and response decision steps up to 10% in the interpretation step. These findings revealed that higher ER skills contributed to better SIP skills, beyond disability status.

The contribution of the internal working models by ER interaction was statistically significant for all SIP steps except encoding, adding low to moderate percentages of explanation (2%–6%) to the variance for interpretation, positive goals, and response decisions and high percentages of explanation (12%) to the variance for competent solutions, supporting a moderator model. In addition, only for competent solutions, the interactions of LD status (with/without LD) by secure attachment and of LD status by ER were also both significant.

To clarify the interaction between secure attachment and ER, we divided the participants into two attachment status classifications, secure and insecure children, based on Kerns et al.'s (1996) suggested cutoff score of 45 on the KSS questionnaire. Then we calculated the correlation between ER and the different SIP steps for each attachment status (secure/insecure). Higher correlations emerged between ER and SIP steps in the secure status group than in the insecure status group for four out of the five competent SIP capabilities that were tested, with significant Z Fisher tests examining differences in correlations between the attachment status groups. The differences in the correlations for secure versus insecure status were significant for the interpretation step,  $r = .53, p < .001$  versus  $r = .05, p > .05$ , respectively, Z Fisher = 2.25,  $p < .05$ ; for positive goals,  $r = .46, p < .001$  versus  $r = -.24, p > .05$ , respectively, Z Fisher = 3.08,  $p < .001$ ; for competent solutions,  $r = .48, p < .001$  versus  $r = -.31, p > .05$ , respectively, Z Fisher = 3.50,  $p < .001$ ; and for competent response decisions,  $r = .42, p < .001$  versus  $r = -.27, p > .05$ , respectively, Z Fisher = 3.04,  $p < .001$ . To verify these findings, we repeated the correlation analyses dividing the two attachment status groups according to a median score of 49.5, and the correlation results were similar. This finding suggests that the contribution of ER to the performance of SIP is more relevant and significant for children who are securely attached to their mothers, indicating that attachment security and higher ER contribute to better SIP skills. ER was found to contribute less to SIP performance among insecurely attached children. Only for the competent solution step was the picture more complex.

As noted before, for the competent solution step only, all possible interactions between the predictors contributed significantly to the explained variance. To clarify the source of the interaction between attachment security and ER, we calculated correlations separately within the LD and non-LD groups. Findings demonstrate a higher

correlation between ER and competent solutions ( $r = .54, p < .001$ ) than between attachment security and competent solutions ( $r = .46, p < .001$ ) among the children with LD (Z Fisher, *ns*), whereas for children without LD the opposite pattern emerged: Competent solutions correlated more strongly with attachment security than with ER ( $r = .63, p < .001$  and  $r = .35, p < .001$ , respectively, Z Fisher = 1.79,  $p < .05$ ). For children without LD, security of attachment is more important for a competent solution, whereas for children with LD, higher ER skills seem to play a more important role.

In sum, learning disorders in children did lower their SIP skills, but the security of attachment and ER skills and their interactions emerged as important predictors of children's different SIP capabilities, beyond LD status. Thus overall, more securely attached children with better ER skills showed better SIP performance regardless of disability status.

## Discussion

Social cognition is considered a major difficulty in children with LD and as a significant contributor to their social maladjustment (e.g., Tur-Kaspa, 2002). SIP is a core aspect of children's social cognitive capabilities, influencing how they perceive and interpret the social world and how they decide to act in its social interactions (Cowan, 1982; Gifford-Smith & Rabiner, 2004). Former studies have already demonstrated significant difficulties in SIP among children with LD (Bauminger et al., 2005; Tur-Kaspa, 2004; Tur-Kaspa & Bryan, 1994), corroborated by the current study. However, the components that may contribute to dysfunctional SIP processes are less understood. The unique contribution of the current study, in line with most recent SIP models (e.g., Lemerise & Arsenio, 2000), lies in its examination of the role played by two major social-affective processes, namely, internal working models of attachment and ER in the SIP of children with LD. We will first discuss the differences in SIP, attachment security, and ER between children with and without LD, followed by a discussion of the unique influences of attachment security, ER, and the interaction between them on children's performance in the on-line SIP steps.

### Between-Group Differences on SIP, Attachment Security, and ER

On the whole, children with LD showed lower functioning compared to children without LD on most of the SIP steps. Current findings are consistent with two previous studies examining Dodge's SIP model in middle

childhood for children with LD (Bauminger et al., 2005; Tur-Kaspa & Bryan, 1994). Can we portray a SIP profile for children with LD based on difficulties that appeared along the three studies? Deficient encoding skills were consistent across studies, where children with LD recalled fewer information units and added more extraneous information that was not originally presented in the social vignettes. When interpreting social cues, children with LD exhibited difficulties in relating to important situational clues within the social context. All three studies showed that children with LD were less likely than their nondisabled counterparts to generate multiple contextual interpretations of the scenarios. The higher ability of children without LD to take contextual components into account enabled them to imagine a broader spectrum of possible peer intentions and situational outcomes, whereas lower sensitivity to contextual cues among children with LD seemed to lead them to interpret peers' social intentions and the situation's outcome as either "black or white," that is, as either hostile or amicable. Another common finding across the three studies was that the LD group produced a smaller repertoire of possible solutions when searching for responses to the social problems presented, compared to their nondisabled peers. One related finding, which was only supported by two of the studies, should be mentioned: In Bauminger et al. (2005) and in the current study, children with LD revealed an impairment in their ability to generate a feasible competent solution on their own. Also, in the current study, when children with LD were asked to evaluate a given solution, they misjudged the solution's social usefulness, giving higher scores to aggressive, passive, and other ineffectual solutions than did the group without LD. This may imply social understanding difficulties related to restricted social knowledge in these children, compared to their nondisabled peers.

Nevertheless, it should be noted that despite overall lower functioning along the different SIP steps in children with LD, some processes were found to be intact for these children, across studies. For example, children's identification of the problem in the interpretation step did not differ between the groups. Also, when given alternative solutions to evaluate, they resembled their peers without LD in assessing competent responses. More striking and hard to construe was the lack of group differences in response decisions, found only in the current study. This finding indicates that even if children with LD generated a less competent solution in the response search step and endorsed more nonadaptive types of solutions compared to their peers without LD, their ability to select the most competent solution in their repertoire was as accurate as their counterparts without LD. Indeed, speculations

based on only one study are difficult. However, based on this current finding and other processes that were found intact in these children, we may perhaps assume a continuum of difficulties in social knowledge rather than an "all or nothing" dichotomy paradigm. This issue should be further explored.

In an attempt to explain SIP deficits in children with LD, McNamara (1999) focused on deficient cognitive processes that characterize the performance of children with LD (American Psychiatric Association, 2000; Swanson, 1998; Swanson, Ashbaker, & Lee, 1996). For example, ineffective short-term memory processing may affect the step of encoding, which requires selective attention to multiple social cues presented in the social scenario, which must be processed quickly. These children's difficulties in generating multiple interpretations may relate to problems in executive functions, with an emphasis on the working memory necessary to enable children to integrate between prior relevant knowledge from long-term memory and recent information. The developmental lag in utilizing organizational strategies, needed for recalling information when searching in long-term memory, may explain their difficulties in response generation.

It may indeed be the case that deficient cognitive processes, specifically those related to storage and retrieval of information, influence SIP capabilities in children with LD. Due to the current study's lack of formal cognitive assessment, we cannot support or rule out the cognitive source hypothesis for the SIP deficit in children with LD. Our focus here was to explore the feasibility of possible social-affective resources to the SIP deficit in children with LD, namely, internal working models of attachment and emotion regulation. These two variables may conjoin with the cognitive explanation to demonstrate logico-affective deficits in children with LD. Dodge (1991) discussed the role of emotions in SIP and claimed that drawing a clear line between emotion and cognition as a dichotomy is problematic. Cowan (1982) suggested that the constructs of emotion and cognition are entangled, with both cognitive structures and emotional energy composing the basic "building blocks" of the symbol system. According to this view, emotion and cognition are part of a single symbolic scheme. Emotion is the scheme's energy, indicating the arousal level and the strength of movement toward or away from a stimulus, whereas cognitions are the scheme's content and rule structure. Inasmuch as every action needs energy and rule-structured content, every action may be both emotional and cognitive. Theory also suggests that a significant portion of this cognitive-affective scheme is governed by the child's internal working models with significant others (Bretherton

& Munholland, 1999). Our study coincided with other recent research demonstrating a higher level of insecurity among children with LD compared to children without LD (Al-Yagon, 2003; Al-Yagon & Mikulincer, 2004a, 2004b; Barzel, 2002). Indeed, it is important to note that even if group differences in attachment security were significant but not large, a significant portion of the LD group (36%) obtained a score that reflected insecurity, compared to 16% among the children without LD. Lower emotion regulation capabilities were also noted in the group means for children with LD versus the control group, despite the fact that again this size effect was significant but not large. Lower functioning in children with LD, both on security of attachment and on ER, may possibly prevent efficient SIP functioning.

### **The Contribution of Internal Working Models of Attachment and ER to SIP Performance: A Moderator Model**

Our hierarchical regressions presented consistent effects of attachment and ER on all SIP steps beyond the effects of disability status, highlighting the important contributions of both these factors to children's SIP performance. The fact that disability status (with/without LD) when entered as a first step to the regression equation was not meaningful in its contribution to response decision is not surprising because children with LD resembled their nondisabled counterparts regarding the competency level of their chosen solution. However, in all other SIP steps, the significant contribution of disability status emphasized that LD placed children at risk for SIP difficulties. Yet, securely attached children with LD showed better SIP capabilities. Secure attachment when entered in the second step to our regression equation reduced disability status  $\beta$ s and added significant percentages to the explained variance in all SIP steps, with  $R^2$  change ranging from 19% to 29%. The highest  $\beta$ s were obtained for children's ability to generate a competent solution ( $\beta = .52$ ). Attachment theory assumes that children with a more positive view of themselves and others will reveal less hostile perceptions of others and more competent social behaviors (Bretherton & Munholland, 1999). Indeed, studies so far have examined the link between attachment and different aspects of social adjustment, such as children's perceptions (Cassidy et al., 1996), children's social status (Allen, Moore, Kuperminc, & Bell, 1998; Rabiner et al., 1993), and children's emotional communication (DeMulder et al., 2000; Laible & Thompson, 1998). However, to date, none have presented the contribution of attachment to a complete SIP model, including all on-line processing steps. Uniquely, in this

study we demonstrated the importance of parent-child interaction for social-cognitive skills as reflected during the process of SIP. Children in our study who were securely attached to their mothers could make more competent social decisions, had better encoding skills, produced more positive social goals, and exhibited fewer "black and white" interpretations of social cues.

Adding ER to the third step of our regression equation also significantly contributed to children's SIP functioning, contributing most to the interpretation SIP step ( $R^2 = .10$ ;  $\beta = .39$ ). Children's better ER skills over negative emotions contributed the most to their ability to competently interpret social scenarios. Indeed, research has shown that heightened arousal may impair children's intention-cue interpretation accuracy, with increased tendencies toward overattribution of hostile intentions to peer (Dodge, 1991; Frijda, 1986). Importantly, children's interpretation of a scenario may significantly influence the ensuing SIP steps such as response solution; the solution must address the problem identified in the earlier interpretation step. Indeed, ER emerged as most relevant for interpretation; yet, its contribution to the explained variance in SIP was found important for all other steps as well. Children who possessed better ER skills demonstrated better SIP skills. In fact, the significant interaction between ER and attachment security for all SIP steps but encoding indicates that the contribution of ER to SIP is even higher.

The interaction between attachment and ER in the fourth step added between 2% and 6% to the explained variance in the various SIP steps, supporting a moderator model. More specifically, children who were more secure and showed better ER skills derived less hostile interpretations of social information, generated more positive goals, and also reached more competent response decisions. Yet, children who are insecure have a more limited capability to compensate for their insecurity by applying high-level ER skills when processing social information. This finding holds significant implications specifically for the children with LD, who, considering their lower functioning in both internal working models and ER skills, appear to face heightened risk for maladaptive SIP skills, compared to their nondisabled counterparts.

For children's generation of a competent solution, we found a significant interaction between attachment and ER but also a significant interaction between disability status and attachment and between disability status and ER. Based on our analysis of the source of the interaction, we may suggest that security of attachment leads to better generation of a competent solution in children without LD, whereas ER seems more crucial for a competent solution in children with LD. This finding is difficult to explain and requires further examination in future studies,



but it highlights the seemingly critical skill of ER for LD children to produce competent social solutions. Thus, even if they are securely attached to the caregiver, children with LD may exhibit ER difficulties that can impede their ability to generate competent solutions to social situations.

## Conclusions and Implications

On the whole, the current study contributed to the understanding of SIP processes in both children with typical development and with learning disorders. Even if attachment theory assumes that security of attachment will influence children's overall social-cognitive functioning (with positive perceptions of the world and of people leading to less biased and more accurate perceptions of social situations; Bowlby, 1973), only limited studies have investigated the link between attachment and social-cognition processes, especially information processing in the social domain. Also, studies have assumed the relations between attachment, ER, and social functioning but have focused less on SIP. Data are accumulating to support the critical role that SIP plays in children's social adjustment (Gifford-Smith & Rabiner, 2004). Overall, we have shown that attachment and ER each significantly contributed to the understanding of children's performance along the different on-line SIP steps. However, the best prediction of SIP's on-line steps (excluding encoding) was obtained when we considered the interrelations between attachment and ER as supporting a moderator model, both in typical development and in LD.

Two other studies have examined the role that emotion plays in SIP for children with LD (Bauminger et al., 2005; Bryan et al., 1998). Bryan et al. (1998) demonstrated that various affect states differently influence children's SIP; for example, positive self-induced mood correlates with the generation of a higher number of responses. Although this refers to quantity rather than quality of responses, failure to compose competent solutions may stem in part from depressed or negative affect triggered by former negative social experiences. In Bauminger et al. (2005), children with LD showed consistent difficulties in understanding or recognizing complex social emotions such as embarrassment, pride, guilt, or loneliness—which rely heavily on the consideration of social context and of the perspectives held by the individuals involved in the situation (Kasari, Chamberlain, & Bauminger, 2001) in addition to their SIP difficulties. A logico-affective theoretical model to explain these children's social cognition difficulties may be examined in future studies to encompass the possible dynamic

interaction between social-emotional and cognitive processes during coping with the social world. It may be interesting to include in future studies a combination of cognitive variables such as memory, speed of processing, and executive functions together with social-emotional processes such as attachment, emotion regulation, emotionality, and emotion understanding to test for their prediction of SIP capabilities in children with LD.

Our study also suffers from several limitations that should be noted. First, to control for sample heterogeneity, we only included boys, thus restricting generalization for girls, although no evidence is available to suggest that attachment and ER contribute differently to SIP functioning for boys and girls. In line with the same aim for sample homogeneity, we excluded children with LD who have comorbid attention-deficit/hyperactivity disorder (representing approximately 30% of the LD population), thus restricting generalization to such children. Also, we did not divide the LD group into subgroups such as verbal versus nonverbal learning disabilities, better readers versus better calculators, and so on. Thus, we do not know if these specific characteristics influence children's SIP capabilities and if attachment or ER may differ between these subgroups. Second, we lacked formal cognitive or language assessment, thus we are unable to evaluate their specific contribution to the deficient SIP functioning that appeared within the LD group. Third, future studies would do well to examine a broader battery of ER skills, such as observations of children's concrete behaviors while coping with negative emotions or with stressful situations. Finally, more comprehensive information on children's family and environmental characteristics could add to the understanding of the specific influences of family, neighborhood, and school experiences on children's social cognitive functioning in SIP.

However, despite the study's shortcomings, the present findings regarding the role that attachment and ER play in SIP capabilities for children with LD suggest possible significant clinical and practical implications. Clinically, the current outcomes emphasize that children with LD are at risk for social maladjustment based on their insecure internal working models as well as their ER difficulties. Also, this study underscores the importance of early intervention for children with LD, considering that both security of attachment and ER skills are formed very early in life and have a long-term impact on child development. Early screenings for these children would enable intervention as early as possible, before ER skills are already formed. Practically, the present results should lead interventionists to focus on the quality of the child's interaction with the mother (or other significant caregiver) as well as on strategies to develop more skillful emotion regulation capabilities. Also, we

would like to call attention to the role that emotion and social processes play in the social-cognitive functioning of children with LD, possibly in addition to their well-documented cognitive deficits.

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Appendix E  
Article: Human Abilities, Emotional Intelligence



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# Human Abilities: Emotional Intelligence

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## Key Words

emotional intelligence, cognitive abilities, emotional knowledge, emotional perception, psychological assessment

## Abstract

Emotional intelligence (EI) involves the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought. We discuss the origins of the EI concept, define EI, and describe the scope of the field today. We review three approaches taken to date from both a theoretical and methodological perspective. We find that Specific-Ability and Integrative-Model approaches adequately conceptualize and measure EI. Pivotal in this review are those studies that address the relation between EI measures and meaningful criteria including social outcomes, performance, and psychological and physical well-being. The Discussion section is followed by a list of summary points and recommended issues for future research.

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**Emotion:** an integrated feeling state involving physiological changes, motor-preparedness, cognitions about action, and inner experiences that emerges from an appraisal of the self or situation

**EI:** emotional intelligence

## EMERGING RESEARCH IN EMOTIONAL INTELLIGENCE

In Ancient Greece, the development of logical thought—syllogisms, arguments, inquiry—was the burgeoning information technology of the day. The Stoics of Ancient Greece believed that logic was superior to feelings because people could agree as to rational arguments but often disagreed as to feelings. Although Stoic philosophy was influential, the idea that rationality was superior to emotionality was not accepted by all. For example, the sentimentalists of eighteenth-century Europe espoused a “follow your heart” credo, arguing that truth might be a property of one’s feelings

and intuition, and that such feelings were truer than reason (Reddy 2001). The recently introduced concept of emotional intelligence (EI) offers a new way of looking at the debate—that people can reason about emotions and use emotions to assist reasoning.

If EI were to exist, some argued, it could strengthen our current understanding of both emotions and intelligence (e.g., Sternberg 2001). It might enrich our sense of the functionality of human emotion and the breadth of human intelligence. EI also directs attention to the role of emotion at home, in schools, and at the workplace and how the effects of emotion may ripple through groups and

society (Barsade 2002, Barsade et al. 2003, Ciarrochi et al. 2006, Elias et al. 1997, Izard 2002, Matthews et al. 2007).

In this review, we describe research on EI covering a roughly 18-year span from 1990 to early 2007. During that time, work on the topic expanded from a few articles and book chapters to an active research area. Over the same period, research continued in emotion, intelligence, and their interaction, as reflected in *Annual Review of Psychology* coverage (a partial list includes Cacioppo & Gardner 1999, Eisenberg 2000, Lubinski 2000, Oatley & Jenkins 1992, Phelps 2006, Rosenbaum et al. 2001, Sternberg & Kaufman 1998, Voss & Wiley 1995). EI is related to both emotion and intelligence, but it also is distinct from them.

Our aim has been to collect what represents, to us, some of the best and most promising research in the EI field. A review of such research can help define EI, indicate its relation to other concepts, and illustrate its influence on practical outcomes. In the opening of our review, we provide a context for the present-day field, examine uses of the term "emotional intelligence," and describe the scope of research in the area. Our challenge in covering the field is considerable because the term "emotional intelligence" is used in many different ways. One of our goals is to identify the core elements of EI and its study.

## THE SCOPE OF EMOTIONAL INTELLIGENCE

### What Is Emotional Intelligence?

The term "emotional intelligence" has been employed on an occasional basis at least since the mid-twentieth century. Literary accounts of Jane Austen's *Pride and Prejudice* refer to various characters possessing this quality (Van Ghent 1953, p. 106–107). Scientific references date to the 1960s. For example, emotional intelligence had been mentioned in relation to psychotherapy treatments (Leuner

1966) and to promoting personal and social improvement more generally (Beasley 1987, Payne 1986).

During the 1980s, psychologists expressed a renewed openness to the idea of multiple intelligences (Gardner 1983, Sternberg 1985). Simultaneously, research on emotion and on how emotions and cognition interacted were on the ascendancy (for historical background, see Matthews et al. 2002, Mayer 2000, Mayer et al. 2000a, Oatley 2004). It was amid such lively inquiry that scientific articles on EI first began to appear (Mayer et al. 1990, Salovey & Mayer 1990).

Interest in studying EI grew dramatically throughout the late 1990s, propelled by a popularization of the topic (Goleman 1995). With the term's newly found cachet, and with the excitement surrounding the identification of a potential new intelligence, many used the term—but often in markedly different ways (Bar-On 1997, Elias et al. 1997, Goleman 1995, Mayer & Salovey 1993, Picard 1997). So, what does the term "emotional intelligence" really mean?

### Can Emotional Intelligence Be Conceptualized Validly?

By 2007, the wide diversity of those interested in EI was matched by the wide diversity in the conceptions of EI they employed. Some researchers defined EI as an ability to reason about emotion; others equated the concept with a list of traits such as achievement motivation, flexibility, happiness, and self-regard. Still others found the addition of such traits, which seemed to be ad hoc, to be troubling, and wondered whether a theoretically sound conceptualization of EI could be identified (Locke 2005).

**The conceptual network of psychological concepts.** A scientific concept such as EI arises in the context of associated scientific terms and their meanings. Cronbach & Meehl (1955) referred to this context as a nomological network—a system of meanings

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**Intelligence:** a mental ability (or set of mental abilities) that permit the recognition, learning, memory for, and capacity to reason about a particular form of information, such as verbal information

**Nomological network:** the interconnected terms and ideas that scientists use to understand their field of study. Scientists' ideas are characterized as connected with one another in logical fashion, and as tied to real-world phenomena, in an integrated, meaningful way

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**Mental ability:** a person's capacity to perform a psychological task, such as solving a problem, so as to meet a specified criterion such as correctness, novelty, or speed

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with which most scientists are familiar and that have been established because of their utility. For the term "emotional intelligence" to be valid, it must fit with such a network of concepts (or provide a rationale for why it does not). We begin by examining some concepts that are closely related to EI and then consider how EI might fit within this nomological network.

**Our view and definition of human mental abilities and intelligence.** Intelligence is a type of mental ability that concerns the handling of—and reasoning about—information of various sorts (Carroll 1993, Spearman 1927, Sternberg & Detterman 1986). The information involved can be very specific (relations among auditory frequencies) or very general (strategic planning). Often, these abilities are described as falling along a hierarchy from simple perceptual processes and information processing to higher and more general forms of problem solving (Carroll 1993).

We view intelligence as a general descriptive term referring to a hierarchy of mental abilities. At the lowest level of this hierarchy are basic, discrete, mental abilities. These include, for example, the ability to recognize words and their meanings in the verbal realm, or, as another instance, to see how puzzle pieces fit together in the perceptual realm, or to understand how objects are rotated in space. At a middle level of the hierarchy are broader, cohesive groups of abilities. These abilities include verbal-comprehension intelligence—a group of abilities focused on understanding and reasoning about verbal information, and, as a second example, perceptual-organizational intelligence—a group of abilities focused on recognizing, comparing, and understanding perceptual patterns. At the highest level of the hierarchy, general intelligence, or *g*, involves abstract reasoning across all such domains. Our working definition of intelligence appears in the margin.

**Our view and definition of emotion.** As an emotion emerges, it entails coordinated changes in physiology, motor readiness, behavior, cognition, and subjective experience (Izard 1993; Parrott 2002, p. 342; Simon 1982). For example, as a person becomes happy, she may experience lower blood pressure and greater motor readiness to approach others; she also may smile, think happy thoughts, and feel good inside. These emotional reactions emerge in response to perceived or actual alterations in the person's environment. Our working definition of emotion appears in the margin.

Our definitions of both intelligence and emotion are consistent with longstanding—we would say, consensual—approaches in their respective disciplines, but there are alternative views of both concepts (Averill & Nunley 1993, Kleinginna & Kleinginna 1981, Sternberg 1985, Sternberg & Detterman 1986). For example, some views of intelligences divide the concept into a crystallized, learned portion, including especially verbal aspects, and into a fluid portion that involves on-the-spot reasoning and emphasizes perceptual-organizational and spatial skill (e.g., Carroll 1993, Vernon 1971). Alternative views of emotion exist as well (Averill 1992, Averill & Nunley 1993). Acknowledging such complexities, we continue to examine how intelligence and emotion might connect with EI in a conceptual network.

## The General Scope and Boundaries of Emotional Intelligence

Emotional intelligence is a term parallel to such others as verbal-comprehension intelligence, perceptual-organizational intelligence, or broad-visualization intelligence (Carroll 1993). In each such term, the descriptor—verbal-comprehension, perceptual-organizational, broad-visualization—modifies the noun: intelligence. For example, verbal comprehension concerns an individual's understanding and reasoning with verbal information.

Many forms of intelligence concern learning and reasoning about a particular type of material and then are enhanced further by the learning they have fostered. For example, verbal-comprehension intelligence describes the capacity to learn and reason about words and their meanings. The more words one understands, however, the more the verbal knowledge one already has gained promotes the intelligence. Thus, verbal intelligence is the ability to reason about words and the use of acquired verbal knowledge to promote such reasoning. Perceptual-organizational intelligence concerns the ability to reason about visual patterns and the use of acquired knowledge about patterns to enhance the intelligence. Following such precedents, an initial working description of EI is as follows:

Emotional intelligence concerns the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought.

To study EI means to focus on the ability itself. Some have made the case that characteristics such as assertiveness and self-regard should be considered part of EI because both involve emotion and intelligence to some degree. Virtually all mental activities, however, from color perception to self-insight, potentially involve emotion and intelligence, simply because emotion and intelligence are active throughout most of one's mental processes; that is, mental functions are highly interconnected (Hilgard 1980, LeDoux 2000). EI is distinct from other mental processes in involving a primary focus on a specific area of problem solving.

As an analogy, consider again verbal-comprehension intelligence. The primary focus on the meaning conveyed by language is crucial. Someone could argue, for example, that assertiveness (or self-regard, etc.) is a part of verbal intelligence because asserting oneself often requires words. The argument fails, however, in regard to the criterion of the primary focus. Assertiveness is not part of the

ability to reason verbally, although it may be influenced by such reasoning; equating characteristics such as assertiveness with the ability diverts attention from the intelligence itself. Returning to EI, its primary focus has to do with reasoning about emotions and the use of emotions to enhance thought.

## APPROACHES TO EMOTIONAL INTELLIGENCE IN THE SCIENTIFIC LITERATURE

### Theoretical Approaches to Emotional Intelligence

EI represents abilities that join intelligence and emotion to enhance thought. Some of the abilities that make up EI can be found in the top of **Figure 1**, in the box labeled "emotional intelligence." The box contains specific skills, such as the ability to accurately identify emotion, and indicates that these individual skills may also be viewed as forming an integrated, global EI. Theoretical approaches to EI, in fact, can be divided according to whether they focus on specific abilities or on more global integrations of those capacities.

The specific-ability approaches concern individual mental capacities important to EI. The integrative-model approaches regard EI as a cohesive, global ability. There exists a third approach to EI as well, called a mixed-model approach to the field (Matthews et al. 2004, Mayer et al. 2000b, McCrae 2000, Neubauer & Freudenthaler 2005). This approach mixes in a variety of non-EI qualities, and, consequently, appears to fall partway or largely outside the boundaries of the concept (**Figure 1, bottom**). These three approaches to EI are described in detail below.

### Specific-Ability Approaches to Emotional Intelligence

**Emotional perception and identification.** Specific-ability approaches to EI focus on a particular skill or skills that can be considered

**DANVA:**  
Diagnostic Analysis  
of Nonverbal  
Accuracy Scales

**JACBART:**  
Japanese and  
Caucasian Brief  
Affect Recognition  
Test

**LEAS:** Levels of  
Emotional  
Awareness Scale

fundamental to EI. In this section, we outline some of these abilities, beginning with accuracy in emotional perception. The study of perceptual accuracy grew out of an extensive body of research in nonverbal perception. Nonverbal perception includes deciphering social information, such as power and intimacy relationships, along with the accurate recognition of emotional expression. From the nonverbal research, specialized models of emotional accuracy emerged. For example, one model aimed to study a person's accuracy at perceiving emotion in child and adult faces, voices, and postures (Nowicki & Duke 1994). A number of reviews and key papers provide excellent descriptions of research in nonverbal sensitivity more generally (e.g., Buck 1984, Hall & Bernieri 2001, Rosenthal et al. 1979).

Two frequently used measures of perceptual accuracy in emotion are the Diagnostic Analysis of Nonverbal Accuracy Scales (DANVA and DANVA-2; Nowicki & Duke 1994) and the Japanese and Caucasian Brief Affect Recognition Test (JACBART; Matsumoto et al. 2000), though there are others (e.g., Elfenbein et al. 2006). Generally speaking, these scales present pictures of faces and of postures, gestures, or recordings of voice tones; the participant's task is to correctly identify the emotion expressed. For example, the DANVA-2 employs stimuli that express one of the four emotions of happiness, sadness, anger, and fear.

**Use of emotional information in thinking.** Some specific-ability models address the ways in which emotions facilitate thinking. For example, emotions may prioritize thinking (Mandler 1975) or allow people to be better decision makers (Lyubomirsky et al. 2005). A person who responds emotionally to important issues will attend to the more crucial aspects of his or her life. By contrast, if the person is constantly frustrated, say, by her subordinate's minor clerical errors, then broader concerns that are more important may not be addressed (Parrott 2002). In addition, certain specific emotions can foster given types

of thinking. For example, positive emotions promote greater creativity in some contexts (Amabile et al. 2005, Averill & Nunley 1992, Isen 2001, Lyubomirsky et al. 2005).

Part of emotional facilitation is to know how to include emotions in, and exclude emotions from, thought. On the Emotional Stroop test (Richards et al. 1992), people first see neutral words printed in varying colors and must say the colors without being distracted by the words. In a second condition, negative/anxiety emotion words are employed; in a third condition, positive emotion words might be employed. It is common for people to be distracted and read the emotion word rather than say the color. Those with higher EI might exhibit less interference from the emotion words (e.g., Masia et al. 1999, Richards et al. 1992).

**Reasoning about emotions: emotional appraisal, labeling, and language.** Another set of specific-ability models concerns emotional reasoning and understanding. For example, emotion-appraisal researchers have developed decision rules for matching a given emotion to the class of situation that has elicited it. If a person experiences fear, for example, it is likely that he is facing a situation that is threatening, raises thoughts of bad things happening, and elicits a need to escape (Roseman 1984, p. 210; Scherer et al. 2001). Related to such appraisals also are the accurate labeling and categorization of feelings (Clore et al. 1987, Innes-Ker & Niedenthal 2002). Theorists have argued that accurate appraisal may be a hallmark of emotionally intelligent responding (MacCann et al. 2004, p. 41; Parrott 2002, pp. 354–355). If a person's appraisal process is awry, then he or she may misunderstand an event or its consequences and react inappropriately.

As another example, emotional understanding may involve being able to describe one's own and others' feelings. For instance, the Levels of Emotional Awareness Scale (LEAS; Lane et al. 1990) presents 20 emotionally evocative situations involving the test

taker and a fictional person. Participants write both about how they and the other person would feel in the situation. Responses are scored according to whether the test taker appropriately includes emotional responses and the degree of sophistication (complexity) of those responses, including, for example, the individual's capacity to differentiate between his or her own and others' responses.

**Emotion management.** Another relevant ability area concerns emotional self-management. This area grew out of clinical findings that, for example, one's emotionality could become more positive by reframing perceptions of situations (Beck et al. 1979), as well as from the idea that when at work, individuals often exert considerable emotional self-control (Hochschild 1983). A sizeable amount of research on emotional self-management and regulation has emerged in parallel with that on EI (Gross 1998, Lazarus 1994), including in the child development domain (Eisenberg 2000). Denham and colleagues (2003), for instance, have used behavioral observations of children in order to assess their frustration tolerance, asking observers to rate the children's degree of distress, crying, and tantrums, among other indices.

### Integrative-Model Approaches to Emotional Intelligence

**Izard's Emotional Knowledge Approach.** The key element in integrative models of EI is the joining of several specific abilities to obtain an overall sense of EI. For example, Izard's Emotional Knowledge Test (EKT; Izard et al. 2001) asks test takers to match an emotion such as sadness with a situation such as "your best friend moves away," as well as to identify emotions in faces. It provides an integrative measure of EI, focusing in particular on emotional perception and understanding. Izard's test also is important because it is designed for use with younger age groups (e.g., as early as 3–4 years old) relative to other measures of EI.

Izard (2001) sometimes prefer to speak of emotional knowledge as opposed to emotional intelligence. Psychologists often speak about an aptitude-knowledge continuum (e.g., Lichten & Wainer 2000). At one end of this continuum, aptitude refers to the capacity to reason and learn; at the other end, knowledge refers to what a person actually has learned. Both intelligence and knowledge tests operate according to similar principles and rely on assessing a person's knowledge. Generally speaking, intelligence tests emphasize general breadth and rate of learning as well as the ability to reason with unfamiliar problems. Knowledge tests, by contrast, measure attained knowledge. Both concepts fit within the scope of EI studies, as defined here.

**The Four-Branch Model of Emotional Intelligence.** The Four-Branch Model of EI is another integrative approach (Mayer & Salovey 1997, Salovey & Mayer 1990). The model views overall EI as joining abilities from four areas: (a) accurately perceiving emotion, (b) using emotions to facilitate thought, (c) understanding emotion, and (d) managing emotion (Mayer & Salovey 1997, Mayer et al. 2003). Each of these areas is viewed as developing from early childhood onward. For example, in perceiving emotion, a person's ability to recognize basic emotions in faces is likely to precede the ability to detect the faking of emotional expressions (Mayer & Salovey 1997, p. 10). As skills grow in one area (e.g., perceiving emotions), so will skills in other areas, such as understanding emotions and being able to regulate them.

The Four-Branch Model has been measured by a series of instruments, the most recent of which is the Mayer-Salovey-Caruso Emotional Intelligence Test, or MSCEIT (Mayer et al. 2002b). This test is composed of eight individual tasks similar to those described in individual areas above. Two tasks are used to measure each branch of the model. For example, emotional perception is measured by asking participants to identify

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EKT: Emotional Knowledge Test

MSCEIT: Mayer-Salovey-Caruso Emotional Intelligence Test

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**MEIS:** Multifactor Emotional Intelligence Scale

**Mixed Model:** a theoretical approach that equates diverse psychological traits, abilities, styles, and other characteristics to EI

emotions in faces and landscapes. Emotional facilitation is assessed, in one subscale, by asking participants to identify which emotions promote which kinds of thoughts and activities. Emotional understanding is measured via understanding how emotions blend [e.g., “Which two emotions together are closest to contempt: (a) sadness and fear or (b) anger and disgust?”]. Emotional management of oneself and others is measured by presenting test takers with vignettes describing a social situation and asking them how emotions might be managed in the situation (Mayer et al. 2002a). The MSCEIT replaced the earlier, lengthier, Multifactor Emotional Intelligence Scale (MEIS; Mayer et al. 1999).

### Mixed-Model Approaches to Emotional Intelligence

The third approach to EI is often referred to as a Mixed Model approach because of the mixed qualities that such models target. These approaches use very broad definitions of EI that include “nongenerative capability, competency, or skill” (Bar-On 1997) and/or “emotionally and socially intelligent behavior” (Bar-On 2004, p. 122), and “dispositions from the personality domain” (Petrides & Furnham 2003, pp. 278–280). Tett et al. (2005) drew on Salovey & Mayer’s (1990) original EI model, which they interpreted in a broader, more mixed-model fashion than the authors had intended (see Mayer et al. 2000b, p. 401).

More concretely, most measures in this category assess one or more EI attributes, such as accurate emotional perception, but then to varying degrees mix in other scales of happiness, stress tolerance, and self-regard (Bar-On 1997); adaptability, (low) impulsiveness and social competence (Boyatzis & Sala 2004, Petrides & Furnham 2001); and creative thinking, flexibility, and intuition versus reason (Tett et al. 2005). Relative to the conceptual development we described above, these mixed-in attributes lack a primary focus on EI, as described in this review.

### Relating Emotional Intelligence to Other Psychological Variables

Variables included in mixed models such as assertiveness and need for achievement surely are important to study—but are not part of EI, as that concept is developed here. A clearer approach is to consider EI a discrete variable and then study it in relation to such other characteristics. Several theorists have examined EI in the context of positive and negative affect and stress tolerance (Izard 2001; Parrott 2002, pp. 351–355; Zeidner et al. 2003); others have positioned EI, the need for achievement, and other diverse traits in the context of personality (Mayer 2005, 2006). These latter models connect EI to related variables in a way that is consistent with the great majority of psychologists’ nomological networks.

## MEASURES OF EMOTIONAL INTELLIGENCE

### An Evaluation of Emotional Intelligence Measures

In this section, we examine more closely the measures proposed to assess emotionally intelligent skills and abilities. Our focus is on several of the scales introduced above, including scales of emotional perception (e.g., the DANVA and JACBART) and emotional understanding (e.g., the LEAS), as well as measures that integrate across such areas (e.g., the MSCEIT and EKT). We categorize and summarize these and other scales in Table 1.

The key purpose of this section is to ask, “Do these tests measure what they claim to?” In particular, do they measure EI? Standards of test validity have changed and developed over the past century, and still are developing. We have distilled from the current *Standards for Educational and Psychological Testing* (Joint Comm. Standards 1999) a group of desirable criteria that seem particularly relevant to EI research at this time. These criteria are grouped into three broad categories: (a) adequate test design relative to theories of EI, (b) the structure of EI measurement (which tells

**Table 1** A guide to emotional intelligence measures frequently mentioned in the review

Key test name, related tests, and source(s)	Acronym(s)	Description of the test
<i>Specific Ability measures</i>		
Diagnostic Analysis of Nonverbal Accuracy 2 The test has three versions: 1. Adult Facial Expressions (Nowicki & Carton 1993) 2. Adult Paralanguage (e.g., auditory) (Baum & Nowicki 1998) 3. Posture Test (Pitterman & Nowicki 2004)	1. DANVA 2-AF 2. DANVA 2-AP 3. DANVA 2-POS	The Adult Facial version consists of 24 photographs of an equal number of happy, sad, angry, and fearful facial expressions of high and low intensities, balanced also by gender. For this and the related tests described below, the participants' task is to indicate which of the four emotions is present in the stimuli. A youth form is also available. The Paralanguage version includes two professional actors (one male, the other female) who say a neutral sentence, "I am going out of the room now but I'll be back later" in one of four emotional states. The Posture test includes 32 stimuli of two men and two women in standing and sitting postures representing high- and low-intensity happiness, sadness, anger, and fear.
Japanese and Caucasian Brief Affect Recognition Test (Matsumoto et al. 2000)	JACBART	Fifty-six Japanese and Caucasian faces are presented in a video format. Each target face portrays one of seven emotions: happiness, contempt, disgust, sadness, anger, surprise, and fear. Each such facial expression is presented for 0.2 seconds between identical initial and trailing neutral facial expressions posed by the same individual—that is, between backward and forward masks. The test-taker's task is to identify correctly the emotion present.
Levels of Emotional Awareness Scale (Lane et al. 1990)	LEAS	Twenty social scenes involving two characters, "you" and an additional individual, elicit four types of emotion: anger, fear, happiness, and sadness. After a test taker reads a scene, he or she is asked, "How would you feel?" and "How would the other person feel?" Participants are required to describe their anticipated feelings (and those of a second person) for each scene. Scoring is according to a continuum of low emotional awareness (no emotional response) to high emotional awareness (appropriate emotions for "you" and the character).
<i>Integrative Model measures</i>		
Emotion Knowledge Test (umbrella label for an evolving set of tests, including the Assessment of Children's Emotional Skills, Perceiving and Labeling Emotion, and Emotion Matching Test) (Izard et al. 2001, Mostow et al. 2002, Trentacosta & Izard 2007)	EKT (or ACES, PLE, or EMT)	The most recent ACES contains three subscales. Facial Expressions contains 26 faces; children are asked if they are happy, sad, mad, scared, or express no feeling. The Social Situations subscale includes 15 two- to three-sentence vignettes describing a social situation; the Social Behavior scale similarly contains 15 two- to three-sentence descriptions of behavior; children respond to each scale by estimating the emotion of the main character. An overall emotion-knowledge score is calculated.
Mayer-Salovey-Caruso Emotional Intelligence Scale (Mayer et al. 2002a, Mayer et al. 2003) Multibranch Emotional Intelligence Scale (Mayer et al. 1999)	MSCEIT; MEIS	Eight tasks (141 items) measure various aspects of EI including emotional perception in (a) faces and (b) landscapes, using emotions in (c) synesthesia and in (d) facilitating thought, understanding emotional (e) changes across time and (f) blends, and managing emotions in (g) oneself and (h) relationships. Responses are scored for correctness (e.g., against answers from an expert or consensus-based scoring). Each task uses a different item type; different response scales are used by different tasks. Scores for overall EI as well as Perceiving, Facilitating, Understanding, and Managing emotions, and other composites, can be calculated. The longer MEIS test (402 items) consists of 12 scales, also arranged into four branches; there is considerable conceptual overlap, but no item overlap, between the two tests.
<i>Mixed Model measures</i>		
Emotional Quotient Inventory (Bar-On 1997)	EQ-i	A 133-item self-judgment inventory. Items are divided over 15 subscales such as adaptability, assertiveness, and self-regard that also can be formed into five higher-order factors: intrapersonal, interpersonal, adaptation, stress management, and general mood.

(Continued)

Table 1 (Continued)

Key test name, related tests, and source(s)	Acronym(s)	Description of the test
Self-Report Emotional Intelligence Test (Schutte et al. 1998)	SREIT	A 33-item self-report inventory that has most often been used to assess an overall level of EI.
Multidimensional Emotional Intelligence Assessment (Tett et al. 2005, 2006)	MEIA	A 118-item self-report inventory employing 10 scales, many of which are based on the original Salovey & Mayer (1990) model of EI and some of which are added.

Measures are organized according to the categories presented in the main body of the text.

DANVA scores are usually reported in articles as "Coding Errors"—we have reversed this to "Coding Skill" in the main body of the text.

us whether EI is one thing or many things), and (c) test relationships with key benchmarks.

### Adequate Test Design

We use the term "adequate test design" to refer to evidence of appropriate test content, evidence that test takers employ proper response processes to answer a question, and evidence of acceptable test reliability.

**Content evidence of validity.** Evidence for a test's validity includes the extent to which a test's content addresses what should be measured. For example, evidence that the DANVA-2 measures EI comes from the fact that the scale presents pictures of emotionally laden faces and body postures to participants who must then identify whether the content they see is mostly happy, angry, sad, or fearful. As another example, evidence that the MSCEIT measures EI stems from its content, which is divided into four areas corresponding to the Four-Branch model of EI: the capacities to (a) perceive emotions, (b) use emotions to facilitate thought, (c) understand emotions, and (d) manage emotions. For example, item content reflecting understanding emotion provides a participant with an emotion definition and then asks him or her to select the emotion that was defined (see Figure 2).

**Response-process evidence of validity.** The standard practice in measuring mental abilities is to ask people to solve problems

and then compare their answers to a criterion of correctness. Such ability testing elicits a response process in which a person demonstrates an ability by actively solving the problem and then recording a correct answer. Significant reviews of intelligence—including those covering dozens of diverse abilities—rely exclusively on such ability testing (Carroll 1993). In other words, response-process evidence for the validity of an EI measure includes that the test poses questions of a test taker and then matches the individual's answers to a criterion of correctness.

The Specific Ability and Integrative Model scales discussed here meet such standards. For example, the JACBART asks participants to look at an emotional facial expression and then match the expression to an emotion. The correct answer is decided by reference to the Facial Affect Coding system, a well-regarded system for determining emotional facial expressions (Ekman & Friesen 1975). The MSCEIT has employed two scoring systems. The expert-consensus scoring method involves matching a participant's response to the correct answers nominated by emotion experts. The general-consensus scoring method matches participant answers to the preferred responses of the standardization sample. The rationale for the latter method is that, because human beings have evolved to understand emotional information, unselected groups of people can identify correct scores almost as well as can experts. A study of test scores, assessed across roughly 2000 individuals, indicated that these two scoring methods are

**Response-process evidence:** a form of validity evidence that concerns whether the questions posed by a test elicit the actual to-be-measured mental activities targeted for study

**Specific ability approach:** a theoretical approach to EI focused on a specific skill area within the domain (e.g., effective emotional management)

correlated,  $r = 0.96$  to  $0.98$  (Mayer et al. 2003); that is, the two methods converge well on correct answers (for a discussion, see Mayer et al. 2001, Roberts et al. 2001).

**Reliability of emotional intelligence measures.** Reliability refers to the consistency with which a test measures; without consistency, measurement is compromised. One way to assess reliability is through a scale's internal consistency—that is, whether a participant's responses are consistent across items. The measures listed in Table 1 generally possess moderate to high internal-consistency reliability. For example, the coefficient alpha ( $\alpha$ ) reliability of the LEAS ranges from  $0.81$  to  $0.89$  (Ciarrochi et al. 2003, Lane et al. 1990). Reported  $\alpha$ s for the JACBART range from  $0.73$  to  $0.92$  (see Matsumoto et al. 2004, Roberts et al. 2006). Reports of the MSCEIT indicate total scale split halves of  $r = 0.91$  and  $0.93$ ; split half estimates of reliability are employed because of the test's item heterogeneity (Mayer et al. 2003). However, the reliability of several other tests of emotion perception, especially those involving auditory modalities, are closer to  $r = 0.45$  (MacCann 2006, Roberts et al. 2006). A second sort of reliability—test-retest reliability—concerns consistency across time. The MSCEIT's test-retest reliability is  $r = 0.86$ , with an  $N = 60$  (Brackett & Mayer 2003). The test-retest reliability of the JACBART is  $r = 0.78$  with an  $N = 56$  (Matsumoto et al. 2000).

In sum, reliability ranges from  $r \approx 0.80$  to  $0.92$  for most full-scales measures, which is adequate for research and, in the higher instances, for reliable assessment of an individual.

### Validity Evidence from Factor Structure

Few topics concerning EI are as central as whether the abilities it consists of can be modeled as a unified intelligence. If so, then it is

possible to speak of EI as a coherent area of information processing. Moreover, it would become possible to develop a taxonomic model that placed component abilities in relation to one another in a relatively invariant manner across subpopulations, time, and test administrators (e.g., Carroll 1993).

A number of studies suggest that measures of EI do form coherent, recognizable factors, despite the often low correlations among them (see below). Most centrally, a single, global EI factor can be used to describe both MEIS and MSCEIT test data (Ciarrochi et al. 2000; Mayer et al. 2003, 2005; Palmer et al. 2005; Roberts et al. 2001). The same studies also extract intercorrelated, more specific factors within the general factors. For example, two factors, Experiential and Strategic EI, are often obtained (Ciarrochi et al. 2000, Mayer et al. 2003, Roberts et al. 2006), as well as a three- or four-factor model emphasizing Emotional Perception, Understanding, and Management (Mayer et al. 1999, 2003; Palmer et al. 2005, Roberts et al. 2001). These findings are consistent with a hierarchical view of intelligence, in which a general EI divides into more specific factors and then into subfactors.

### Test Relations to Key Benchmarks

**Convergent validity evidence among emotional intelligence measures.** We have identified a number of measures as related to EI. If they are all measures of EI, then they should correlate with one another—that is, converge toward a common criterion. Here, however, there is some concern. It has long been observed that correlations among various measures of the ability to perceive nonverbal expressions are low (Boone & Buck 2004, Buck 1984, Hall 2001). For example, most correlations among measures of perceiving interpersonal affect (and other nonverbal behavior) are in the range  $r = -0.10$  to  $0.20$  (Hall 2001, p. 135). One exception is a reported  $r = 0.80$  between two newer scales, the DANVA-2 and the



JACBART (Nowicki 2007, p. 6). Comparisons between such scales and the perception scales of the MSCEIT seem consistent with the less strong, earlier findings: The JACBART and emotional perception scales of the MSCEIT correlated essentially zero, although the JACBART correlated  $r = 0.20$  to  $0.26$  with other scales of the MSCEIT and MSCEIT Total EI (Roberts et al. 2006). Turning to other measures, the MSCEIT and the LEAS intercorrelate at about the  $r = 0.15$  to  $0.20$  level (Ciarrochi et al. 2003). Yet, in principle, it seems possible to develop scales that intercorrelate more highly. For example, the four branches of the MSCEIT (which share no items in common and use different response scales) intercorrelate  $r = 0.27$  to  $0.51$  (Mayer et al. 2003).

These measures appear, on a theoretical level, to be assessing abilities within the EI domain, yet reports to date indicate that the scales tap different sources of variance. Although the correlations within a test such as the MSCEIT are reassuring, the lack of correlation across tests is both perplexing and troubling. More studies relating these scales are needed, as is a better understanding of the basis of their divergence.

**Relation to biopsychological processes.** Another key question concerns how EI relates to biopsychological processes. One argument for EI is that distinctly emotional regions of the brain might carry out information processing differently from more purely cognitive centers. A recent fMRI study indicated that the brain areas most activated when solving MSCEIT problems are the left frontal polar and left anterior temporal regions, which are closely linked with social cooperation (Reis et al. 2007). Similarly, people with higher LEAS scores exhibit greater responsiveness to stimuli in area 24 of the anterior cingulate cortex, which is involved in emotional processing (Lane et al. 1998). Intelligence researchers have long found that higher-IQ participants are able to solve problems with less brain activity (i.e., more efficiently) than those

with a lower IQ. Employing this paradigm, researchers have found that those higher in EI exert less brain activity to solve emotional problems, as indicated by brain wave activity (Jausovec & Jausovec 2005, Jausovec et al. 2001).

**Relation to intelligences and related mental abilities.** Based on the conceptualizations of EI as a form of intelligence, moderate relations should exist between EI and other measures of cognitive abilities. Studies with the MEIS, MSCEIT, LEAS, and various developmental measures do exhibit positive correlations with verbal, knowledge-based intelligence tests. The overall relationships between the MSCEIT and MEIS scales with verbal intelligence and verbal SAT are about  $r = 0.36$ ; the correlations are lower ( $r = 0.10$  to  $0.20$ ) for other cognitive intelligences such as perceptual-organizational intelligence. MSCEIT Emotional Understanding scores show the strongest individual relations with verbal/crystallized intelligence measures, with an average  $r = 0.38$  across seven studies (Roberts et al. 2007).

The vast majority of EI measures of emotional perception are related  $r = 0.20$  or less to tests of reasoning ability (often equated to fluid intelligence; Barchard 2003, Ciarrochi et al. 2000, Mayer et al. 1999, Roberts et al. 2001). One exception to this general finding is the JACBART, which, perhaps because of its speeded component, relates  $r = 0.27$  to fluid intelligence (Roberts et al. 2006, Roberts & Stankov 1999).

Some aspects of EI also may intersect with social intelligence. In a factor analysis bearing both on the structure of EI and its relation to other intelligences, the MSCEIT subscales divided into two factors, the first related to Experiential EI (MSCEIT Perception and Facilitation) and the second, Strategic EI, related to socio-emotional reasoning that loaded MSCEIT Understanding as well as scales from the O'Sullivan-Guilford Social Intelligence measure (Barchard & Hakstian 2004).

Intelligence tests (including EI) assess the ability of participants to converge on a correct answer. This contrasts with creativity tests, which emphasize divergent forms of thinking—that is, the capacity to think in novel ways (Averill & Thompson-Knowles 1991). In fact, emotional creativity measured as an ability and MSCEIT Total EI appear entirely independent of one another (Ivcevic et al. 2007).

Overall, the evidence above suggests that ability-based EI measures index emotional knowledge, which is related to verbal-comprehension and/or crystallized intelligence. The magnitude of this correlation is typically  $r = 0.30$  to  $0.40$ , which indicates that EI is different from, say, verbal-comprehension intelligence. EI also may exhibit relations with social intelligence, but apparently not with creativity.

**Relation to ongoing emotion and emotional empathy.** EI theories, although specifying accurate reasoning about emotions, generally are agnostic as to the emotions a person might feel at a given time. Research evidence indicates that few relations exist: MEIS Total EI was unrelated to emotional state in a large sample (Mayer et al. 1999). Nevertheless, the definition of EI includes key aspects of empathy—especially that part of empathy having to do with recognizing others' feelings. Higher EI on the LEAS, MEIS, and MSCEIT does correlate,  $r = 0.20$  to  $0.43$ , with self-judgments of empathic feeling (Brackett et al. 2006; Caruso et al. 2002; Ciarrochi et al. 2000, 2003; Mayer et al. 1999; Mayer & Geher 1996).

**Relation to benchmark personality traits.** EI measures also have been examined in relation to benchmark personality traits such as the Big Five. The frequently studied Big Five traits are Extraversion-Introversion, Neuroticism-Emotional Stability, Openness-Closedness, Conscientiousness-Carelessness, and Agreeableness-Disagreeableness (Goldberg 1993). Mayer & Salovey (1993)

predicted EI would have a low but significant relation to the trait Openness (with which many intelligences correlate; Ackerman & Heggestad 1997). Two reviews of studies indicate that Total MEIS/MSCEIT EI does correlate with Openness,  $r = 0.17$  to  $0.18$ , but has its highest relation among the Big Five with Agreeableness,  $r = 0.21$  to  $0.28$ , a scale sometimes viewed as reflecting compassion and cooperation.

## Measurement Issues Regarding Mixed-Model Scales

**Conceptual issues.** Mixed Model scales—those that mix in attributes from outside EI—have their own specific measurement characteristics and concerns. The theories behind these instruments mix many attributes with EI, and their measures reflect this (Bar-On 2000, Schutte et al. 1998, Tett et al. 2005). Mixed Model tests include items such as “I can express my needs much of the time” (e.g., assertiveness) or “I am a fairly easygoing person” (e.g., flexibility). Consequently, the instruments lack content evidence for their validity in assessing EI because they fail to focus either on intelligent reasoning about emotion or on using emotions and emotional knowledge to enhance intelligence.

As a matter of practice, Mixed Models all are operationalized with self-judgment scales rather than ability items (Bar-On 2000, Schutte et al. 1998, Tett et al. 2005). (Some scales also use observer reports as a secondary operationalization.) Self-judgment assessments ask questions that measure a person's self-estimated ability, such as “Do you usually clearly perceive the emotional state you are in?” Conceptually, such a response process is not valid for the direct assessment of a mental ability. Moreover, empirical evidence indicates that, generally, self-estimates of intelligence are related only minimally to measured ability (Paulhus et al. 1998); self-estimates of EI appear even less related to such abilities (Brackett et al. 2006). In the case of EI, appropriate feedback may be hard to come

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**The Big Five:** a set of five personality traits: Extraversion, Neuroticism, Openness, Conscientiousness, and Agreeableness, each of which is a composite of more specific intercorrelated traits

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**EQ-i: Emotional Quotient Inventory**

**Integrative model approaches:** theoretical approaches to EI focused on how multiple relevant abilities operate together to predict outcomes

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by, and low ability can impede accurate self-understanding. Self-judgments, therefore, introduce a substantial proportion of variance unrelated to EI.

**Indicative findings.** The mixed-model scales' use of self-judgment questions, combined with their diverse content, leads to measures that are difficult to assess empirically, and often appear to assess a global pleasant versus unpleasant emotional style. Empirically, for example, many of the individual subscales or test totals of the Bar-On EQ-i, the Self-Report Emotional Intelligence Test, and the Multidimensional Emotional Intelligence Assessment correlate in the range of  $r = 0.60$  to  $0.70$  with single scales of established personality dimensions such as (lower) Neuroticism from the Big Five (Brackett & Mayer 2003, Study 2; Dawda & Hart 2000; Petrides & Furnham 2001; Tett et al. 2005). Two studies indicate that the Big Five scales together predict EQ-i scores in a range of multiple  $r$ 's =  $0.75$  to  $0.79$  (Brackett & Mayer 2003, Grubb & McDaniel 2007). Similarly, a scale of psychological well-being predicts the Schutte Self-Report Emotional Intelligence Scale at  $r = 0.70$  (Brackett & Mayer 2003); EI ability scales have far lower relations in comparison (see Relation to Benchmark Personality Traits, above).

Empirical research confirms that self-reported EI does not predict ability assessments of EI well. Brackett and colleagues (2006) developed a self-judgment scale based on the Four-Branch Model, correlated it with the MSCEIT's measure of the same four branches, and found a correlation of only  $r = 0.19$  between 275 participants' estimates and their actual abilities. More commonly used self-judgment scales of EI, such as the Bar-On EQ-i and Schutte scales, predict the MSCEIT at about the same level (Brackett & Mayer 2003, Zeidner et al. 2005).

Moreover, participants can readily portray more positive self-judgments under conditions of high-stakes selection. For example,

under "fake good" conditions, participants raised their average score on the (self-judgment) Bar-On EQ-i by  $0.80$  of a standard deviation—before any coaching or training (Grubb & McDaniel 2007).

Mixed Model scales do not define EI in a manner consistent with reasonable scientific terminology. They further employ measurement approaches that are invalid for assessing EI, as the concept is developed here. That said, some of the scales do possess specific merits, such as good standardization, reliability, or factorial validity, as measures of other constructs (e.g., Barchard & Christensen 2007, Grubb & McDaniel 2007).

A growing number of researchers have questioned whether there is a good rationale to label Mixed Models as measuring EI at all (Davies et al. 1998, Matthews et al. 2007, Mayer & Ciarrochi 2006, Murphy 2006). Our review leads us to the same question. The remainder of the review focuses on measures from the specific ability and integrative model approaches that we judge as possessing validity for assessing EI.

## WHAT DOES EMOTIONAL INTELLIGENCE PREDICT (OR NOT) IN LIFE OUTCOMES?

A more complete understanding of EI requires an appreciation of how its measures relate to life outcomes. In this section, we attempt to create a condensed version of what one might take away from reading, one by one, a series of articles relevant to this literature. The summary conveys some of the major topics of study, some of the methods, and some of the many findings—both consistent and inconsistent. We present the material without much commentary, allowing readers to obtain a sense of the relationships on their own. In the Discussion section below, we offer some observations on the work, which are further developed in our Summary Points section. Our overview is divided into EI in social relationships, in school, at work, and in relation to well-being.

## Social Relations in Childhood and Adolescence

EI consistently predicts positive social and academic outcomes in children (Eisenberg et al. 2000, Schultz et al. 2004). For example, Izard et al. (2001a) found that EKT Emotional Knowledge scores assessed among 5-year-old preschoolers positively predicted the students' third-grade social skills, such as assertion, cooperation, and self-control, as rated by teachers. The same assessment also negatively predicted a composite of problem behaviors such as internalizing and hyperactivity. These findings from economically disadvantaged families held after verbal ability, sex, and selected personality traits all were controlled. Similar findings have been reported by Fine et al. (2003).

Children's skill at emotional regulation appears to influence their social well-being as well (for reviews, see Cole et al. 2004, Eisenberg 2000). In a longitudinal study of children ages 3–4, Denham et al. (2003), collected multimethod ratings of children's emotional regulation and emotion knowledge. In a structural equation model, children's higher emotional regulation and emotional knowledge predicted social competence at ages 3–4 and later on in kindergarten (Denham et al. 2003).

In a study of adolescents, Mestre et al. (2006) found that 15-year-old Spanish students with higher MSCEIT Strategic (Understanding and Management) scores were more frequently nominated as friends by their peers. This finding still held for young women after controlling for IQ and the Big Five personality factors.

## Social Relations in Adulthood

**Diary studies and self-perceptions of social competence.** Lopes and colleagues (2004) conducted a two-week daily diary study of German undergraduates' social interactions, for which participants reported every face-to-face social interaction they participated in lasting 10 minutes or longer. In these

## UNCOVERING NEW INTELLIGENCES

The 1980s and 1990s saw a resurgence in theoretical attention to specific intelligences (e.g., Gardner 1983, Sternberg 1985). For many years, some scientists argued that general intelligence (or *g*) could suffice empirically to represent an individual's many cognitive abilities in predicting occupational, educational, and life success generally (Jensen 1998). Although *g* is a plainly powerful and efficient index of mental ability, the idea that one construct might have such universal importance was hotly debated.

From the 1990s to present, researchers have explored the possibility that intelligences are a more diverse and looser confederation of abilities than once was thought. A particular focus among researchers has been the exploration of "hot intelligences"—intelligences that pertain to personally relevant information—such as practical, social, and emotional intelligence. Social intelligence for example, includes capacities to appraise and understand human relationships (Lee et al. 2000, Weis & Süß 2007). Practical intelligence involves the ability to understand often unstated rules (technically, tacit information) that surround us (Sternberg et al. 2006, Wagner 2000). A specific but often overlooked cognitive intelligence—spatial intelligence—is coming into its own as well (Lubinski 2000, Lubinski et al. 2001). Empirical investigations of many of these intelligences are advancing in a promising fashion. It appears likely that other intelligences beyond EI will add to the prediction of critical life outcomes such as academic and work performance, social relationships, and how well one attains psychological well-being.

interactions, one or more of participants' scores on MSCEIT Perceiving, Facilitating, and Managing (but not Understanding) significantly predicted participants' perceptions of how enjoyable and/or interested, wanted, and respected they felt in the interactions.

Brackett and colleagues (2006, Study 2) found that higher EI among close friends led to higher self-perceived competence in reacting to their friends' life events. Among friendship pairs, higher EI participants reported making fewer critical remarks,  $r = -0.33$ , in response to others' successes (perhaps better managing their envy) as well as fewer passive-destructive responses such as "I

don't pay much attention" to the other's positive event. In the same study, higher EI also predicted fewer destructive responses to conflict in close relationships,  $r = -0.22$  to  $-0.27$ , including fewer active responses, such as "I scream at him," and fewer passive responses, such as "I avoid her." This latter pattern held only for males in the sample.

**Others' perceptions of the emotionally intelligent person.** A number of findings indicate that having high EI leads others to perceive an individual more positively. For example, Brackett et al. (2006, Study 3) videotaped U.S. undergraduate students engaged in a "get to know you" conversation with a confederate. Four judges later rated the videotape of the target interaction for various attributes. For men, MSCEIT Total EI correlated in the  $r = 0.50$  range with judges' ratings of the participants' overall social competence, including how much of a team player they were, how socially engaged they were, and their expressed level of interest in the confederate. There was, however, no significant relationship between EI and any of these variables for the women in the study.

Similar findings come from Lopes et al. (2005). In this study, undergraduates first completed self-report measures that asked about the general quality of their social interactions. The participants then nominated up to eight peers in their same college class who exhibited several aspects of EI. Similar to the findings above, MSCEIT Managing scores correlated  $r = 0.28$  to  $0.29$  with the participants self-reports—and with peer nominations—for such attributes as "sensitive to the feelings and concerns of others" and "willing to help others." These relationships were significant above and beyond variance accounted for by other personality traits and verbal intelligence. In this same study, people high in EI, compared with those who scored lower, more often nominated as friends those people who also had nominated them. Additional support for this phenomenon was found by Lopes et al. (2004).

Conversely, MSCEIT Total EI correlated  $r = -0.20$  with social deviance, as indexed by getting into fights or vandalizing property (Brackett & Mayer 2003). In a partial replication, the relationship was also found, but for men only,  $r = -0.40$  (Brackett et al. 2004).

**Emotional intelligence, family, and intimate relationships.** EI also relates to one's family and other intimate relationships. In two studies of parental relations, MEIS EI skills in Perception, Understanding, and Management correlated  $r = 0.15$  to  $0.23$  with self-judgments of perceived parental warmth (Ciarrochi et al. 2000, Mayer et al. 1999). However, perceived social support from parents (as opposed to warmth) shows a more mixed relationship: Only the MSCEIT Managing scale correlated with perceived support from parents, after controlling for the Big Five traits and verbal intelligence ( $r = 0.22$ ; Lopes et al. 2003). No relationship was identified between MSCEIT EI and a report of interacting with one's mother and father (Brackett et al. 2004).

Although a few studies show weak or no influence of EI on intimate relationships (Brackett et al. 2005, Hampel 2003), several studies demonstrate significant correlations between the two. For example, higher DANVA-2 Face and Voice Perception accuracy scores correlated,  $r = 0.57$  and  $0.63$ , respectively, to relationship well-being (Carton et al. 1999). MEIS General EI also predicted relationship quality,  $r = 0.22$ , remaining significant after controlling for the Big Five personality traits and general intelligence (Ciarrochi et al. 2000). MSCEIT Managing Emotion also was positively correlated to the perceived quality of romantic partners (Lopes et al. 2004).

Brackett and colleagues (2005) examined the MSCEIT EI match between partners within a couple. If both members of the couple were low on EI, they experienced more conflict and poorer relationship quality overall, as predicted. Unexpectedly, couples in which one partner was higher in EI than the other

had equivalent (or often better) relationship quality than the high-high EI couples.

### Scholastic Outcomes from Grade School to College

A number of studies have examined the impact of EI on academic performance. The previously discussed developmental study by Izard et al. (2001a) found that five-year-old preschoolers' emotional knowledge predicted third-grade teachers' ratings of academic competencies (e.g., arithmetic skills, reading skills, the motivation to succeed),  $r = 0.43$ . The correlation remained significant after controlling for verbal ability, sex, and socio-emotional traits.

Moving upward from elementary- through college-age students, Halberstadt & Hall (1980) reviewed 22 studies (5 of which included adult populations) of nonverbal sensitivity (including emotional perception) and found a small but significant positive relationship between the ability to identify nonverbal expressions, on the one hand, and cognitive ability assessed by standard tests and school performance, on the other.

Mestre et al. (2006) found that MSCEIT Strategic (Understanding and Managing) EI correlated,  $r = 0.47$ , with teacher ratings of academic achievement among 15-year-old Spanish boys—above and beyond IQ and the Big Five personality traits. A similar relation for teacher ratings for girls dropped below significance after controlling for IQ and personality. Scores on the MSCEIT Total EI also were higher for gifted compared to nongifted seventh- through tenth-grade Israeli students (Zeidner et al. 2005).

The MSCEIT Total, Strategic, and Understanding scales can predict school grades, between  $r = 0.14$  and  $0.23$  (Brackett et al. 2004, O'Connor & Little 2003). This relationship (as well as others discussed above), however, may be accounted for in part by the overlap between these scales and cognitive intelligence. Predictions from the MSCEIT and LEAS regarding academic achievement often

decrease or become nonsignificant when controlling for cognitive intelligence and other personality measures (Amelang & Steinmayr 2006, Barchard 2003, Bastian et al. 2005, Brackett & Mayer 2003).

### Emotional Intelligence at Work

**Decision making and negotiation.** People's work performance—and EI's relation to it—can be studied by simulating work environments in a laboratory setting. For example, Day & Carroll (2004) studied research participants in a group decision-making task. The participants' task was to determine the order in which employees should be laid off during an organizational downsizing. The ranking of which employees to layoff was first completed individually and then together in a meeting to achieve group consensus. Participants with high MSCEIT Total scores received higher organizational-citizenship ratings from other group members. MSCEIT Perception exhibited an  $r = 0.17$  relation with individual (but not group) performance on the layoff task.

Managerial in-basket exercises allow researchers to study participants' performance at fact-finding, analyzing problems, and decision making more generally. In an organizational simulation with undergraduates, JACBART Emotional Perception correlated  $r = 0.28$  with successful problem analyses, although not with related criteria (Matsumoto et al. 2004, Study 3).

In a negotiation study, Elfenbein et al. (2007) studied undergraduate buyers and sellers. Their Emotion Perception accuracy was measured on the Singapore Picture Scale, a test similar to the JACBART. Higher Emotion Perception on the part of sellers increased the amount of money gained overall by the negotiating pair and was marginally related to the proportion of money the seller individually received. Buyers' Emotional Perception showed no effect.

Mueller & Curhan (2007) examined a group of U.S. negotiators, all students in a Master of Business Administration program.

**Transformational leadership:** an approach to motivating others through emphasizing a particularly inspiring vision of work and its impact

They found that high MSCEIT Understanding predicted that one's negotiation partner would feel more positively about his/her outcome,  $r = 0.23$ , even after controlling for the partner's positive affect and how much the negotiation partner received. The creation of positive affect by people with higher EI may be especially important because it can spread among groups via emotional contagion (Barsade 2002, Hatfield et al. 1994).

**Field studies of emotional intelligence and performance.** In a meta-analysis, Elfenbein et al. (2007) found that Emotion Recognition Accuracy predicted a modest but significant and consistent rise in workplace effectiveness in professionals as diverse as physicians, human service workers, school teachers and principals, and business managers. Also, Elfenbein & Ambady (2002) found that DANVA Facial (but not Vocal) Emotional Perception scores correlated  $r = 0.25$  to  $0.45$  with employee performance, measured via senior staff members' ratings, in a yearlong U.S. not-for-profit public service program.

Lopes et al. (2006) examined the work performance of a sample of 44 analysts and clerical/administrative employees from the financial staff of a U.S.-based insurance company. After controlling for relevant personality and demographic variables, MSCEIT Total EI correlated  $r = 0.28$  to  $0.45$  with company rank, higher merit increases, peer and supervisor rated sociability, and rated contribution to a positive work environment. A similar study by Rosete & Ciarrochi (2005) examined 41 executives from a large Australian public service organization. Executives' MSCEIT Total, Perception, and Understanding scores correlated in the  $r = \text{mid } 0.30\text{s}$  range with rated "cultivates productive working relationships" and rated personal drive and integrity—but not with "achieves results." In this case, their EI scores, in other words, correlated with how they achieved rather than with what they achieved. Correlations remained significant after controlling for IQ and other personality traits.

A recent study builds on research that extraverts, relative to introverts, may be better able to employ emotional information since they are stimulated rather than overwhelmed by the emotion information. In a study of 177 managers in a U.S.-based global corporation, DANVA Facial Recognition correlated with transformational leadership styles as rated by 480 subordinates, and this relationship was strongest for managers higher in extraversion (Rubin et al. 2005). Turning to the moderating influence of cognitive intelligence, Côté & Miners (2006) found that MSCEIT EI predicted supervisor-assessed task performance and organizational citizenship (in some instances) in a sample of 175 full-time university employees, and it did so more strongly for people with lower cognitive intelligence. This suggests that higher EI may compensate for lower skill levels in other areas.

## Psychological and Physical Well-Being

**Psychological well-being.** A person's inner well-being and external performance often mutually influence one another. Given that high EI appears to influence positive relationships and other outcomes, does it enhance a person's overall psychological well-being? The MSCEIT Total EI correlates  $r = 0.16$  to  $0.28$  with psychological well-being (Brackett & Mayer 2003, Brackett et al. 2006), whereas MEIS Total EI relates to life satisfaction between  $r = 0.11$  and  $0.28$  after controlling for other personality variables, including cognitive intelligence and socio-emotional variables (Ciarrochi et al. 2000, Mayer et al. 1999). The MEIS and MSCEIT Total EI, as well as the DANVA 2 Standing scales, correlate with self-esteem from  $r = 0.19$  to  $0.33$  (Brackett et al. 2006, Ciarrochi et al. 2000, Pitterman & Nowicki 2004), though the relationship for the DANVA held for men only. Moving from well-being to distress, DANVA-2 Emotional Accuracy scores relate inversely overall with depression,  $r = -0.42$  (Carton et al. 1999). MSCEIT EI relates  $r = -0.24$  with anxiety (Bastian et al.

2005), and controlling for relevant personality variables,  $r = -0.23$  and  $-0.16$  with feeling worried and distressed before beginning a challenging task (Bastian et al. 2005, Matthews et al. 2006).

**Physical health behaviors.** EI also has been studied in relation to some health behaviors. For example, higher MEIS Total EI scores correlated  $r = -0.16$  and  $-0.19$ , respectively, with lower tobacco and alcohol use among adolescents (Trinidad & Johnson 2002). The MSCEIT Total EI did not predict tobacco use among college students in two other studies; however, it again predicted alcohol use in one study (for men only,  $r = -0.28$ ) (Brackett & Mayer 2003, Brackett et al.

2004). The MSCEIT Total EI either did not predict (Brackett & Mayer 2003) or moderately predicted illegal drug use,  $r = -0.32$ , for men only (Brackett et al. 2004). Finally, high emotional perception skills reduced the risk of (self-reported) Internet addiction, as measured among a sample of 41 undergraduates from the Stockholm School of Economics (Engelberg & Sjöberg 2000).

## Overall Trends and Intriguing Findings

As we examined these and other findings, we identified trends that appeared to extend across several studies or more; these are summarized in Table 2. The trends include, for

Table 2 Summary of selected trends in emotional intelligence outcome studies

General effect	EI measures	Representative studies*
1. <b>Better social relations for children.</b> Among children and adolescents, EI positively correlates with good social relations and negatively correlates with social deviance, measured both in and out of school as reported by children themselves, their family members, and their teachers.	DANVA ER Q-Sort EKT ESK MSCEIT	<ul style="list-style-type: none"> <li>• Denham et al. (2003)</li> <li>• Eisenberg et al. (2000)</li> <li>• Fine et al. (2003)</li> <li>• Izard et al. (2001)</li> </ul>
2. <b>Better social relations for adults.</b> Among adults, higher EI leads to greater self-perception of social competence and less use of destructive interpersonal strategies.	EARS MEIS MSCEIT	<ul style="list-style-type: none"> <li>• Brackett et al. (2006)</li> <li>• Lopes et al. (2004)</li> </ul>
3. <b>High-EI individuals are perceived more positively by others.</b> Others perceive high-EI individuals as more pleasant to be around, more empathic, and more socially adroit than those low in EI.	MSCEIT	<ul style="list-style-type: none"> <li>• Brackett et al. (2006)</li> <li>• Lopes et al. (2004)</li> <li>• Lopes et al. (2005)</li> </ul>
4. <b>Better family and intimate relationships.</b> EI is correlated with some aspects of family and intimate relationships as reported by self and others.	DANVA-2 MEIS MSCEIT	<ul style="list-style-type: none"> <li>• Brackett et al. (2005)</li> <li>• Carton et al. (1999)</li> </ul>
5. <b>Better academic achievement.</b> EI is correlated with higher academic achievement as reported by teachers, but generally not with higher grades once IQ is taken into account.	LEAS MSCEIT	<ul style="list-style-type: none"> <li>• Barchard (2003)</li> <li>• Izard et al. (2001)</li> <li>• O'Connor &amp; Little (2003)</li> </ul>
6. <b>Better social relations during work performance and in negotiations.</b> EI is correlated with more positive performance outcomes and negotiation outcomes in the laboratory and with more success at work, according to some preliminary research.	DANVA JACBART MEIS MSCEIT	<ul style="list-style-type: none"> <li>• Côté &amp; Miners (2006)</li> <li>• Elfenbein et al. (2007)</li> <li>• Rubin et al. 2005</li> </ul>
7. <b>Better psychological well-being.</b> EI is correlated with greater life satisfaction and self-esteem and lower ratings of depression; EI also is correlated inversely with some negative physical health behaviors, but this has not yet been found as a strong set of relationships.	MSCEIT LEAS	<ul style="list-style-type: none"> <li>• Bastian et al. (2005)</li> <li>• Gohm et al. (2005)</li> <li>• Matthews et al. (2006)</li> </ul>

\* More studies are indicated in the corresponding portion of the Outcomes section of the review.

Acronyms: DANVA, Diagnostic Analysis of Nonverbal Accuracy Scales; EARS, Emotional Accuracy Research Scale; EI, emotional intelligence; EKT, Emotional Knowledge Test; ER Q-Sort, emotional regulation Q-Sort; ESK, emotion situation knowledge; JACBART, Japanese and Caucasian Brief Affect Recognition Test; MEIS, Multifactor Emotional Intelligence Scale; MSCEIT, Mayer-Salovey-Caruso Emotional Intelligence Test.



**Incremental validity:** an attribute of a test that refers to its capacity to predict a criterion over and above other empirically or conceptually related tests

example, that EI correlates with better social relationships for both children and adults, including in family relationships. Higher EI also predicts academic achievement (although this may be due to its overlap with cognitive intelligence), better social relationships at work, and better psychological well-being (see Table 2).

A few other individual findings caught our eye as well, including correlations between EI and (a) career interests (Caruso et al. 2002), (b) attitudes toward money (Engelberg & Sjöberg 2004), (c) money gained in a negotiation (Elfenbein et al. 2007), (d) emotional eavesdropping (Elfenbein & Ambady 2002), and (e) knowing how one would feel after an event—emotional forecasting (Dunn et al. 2007). Another set of studies concerned whether people who are more emotionally overwhelmed may be unable to use their EI (Gohm et al. 2005) and how EI related to adult attachment (Kafetsios 2004). Finally, we note the beginnings of research on EI training and its outcomes (e.g., Brackett & Katulak 2006, Izard et al. 2004).

## DISCUSSION

### The Scope and Measure of Emotional Intelligence

Over the past 18 years, research on EI has emerged and a remarkable amount has been learned. At the same time, EI is still a new field of research, and much remains to be done. In the preceding sections of this review, we examined mainstream conceptions of intelligence and emotion, defined EI, and described the scope of research in the field. We also described Specific-Ability, Integrative-Model, and Mixed-Model approaches to studying the field. We noted that there have been some real inroads into providing construct validity evidence for a range of EI measures since the field's inception. Specific Ability and Integrative Models, in particular, have generated promising measures of a unique psychological construct.

### Outcomes of Emotional Intelligence

In the Outcomes section, we surveyed key findings regarding EI. Accumulating findings indicate that EI may predict important criteria in several areas, which are summarized in Table 2. Those findings include, for example, that EI correlates with better social relationships and with fewer problem social behaviors, and that this relationship begins in childhood continuing through adulthood.

As with much research of this sort, the overall consistencies in research findings that we have identified are accompanied by many inconsistencies as well. For example, measures of EI such as the MSCEIT sometimes predicted an outcome with one subscale, and in another study, predicted the same outcome but with a different subscale. Another inconsistency is that higher EI predicted some but not other specific indices of a general outcome such as good work performance.

Such issues reflect the realities of empirical research, in which research designs may be less than perfect, chance effects may lead to spurious significant or nonsignificant outcomes, samples may not be large enough, the range of target behavior may be restricted in a sample, and many other less-than-desirable factors may impinge. As research continues, these ambiguities likely will be clarified.

### Concluding Comments

In the Summary Points below, we have distilled what we regard as the key ideas of this review. In the Future Issues section, we have highlighted some of the more important unresolved issues of today. Whatever the future holds for the science of EI, we believe that the concept has proven a valuable addition to contemporary science and practice. Consideration of EI theory and assessment has proven beneficial to the study of emotions and the study of intelligence, and raised awareness of the importance of emotional components in diverse domains of human abilities and their application in people's lives.

## SUMMARY POINTS

1. Emotional intelligence (EI) is the ability to carry out accurate reasoning focused on emotions and the ability to use emotions and emotional knowledge to enhance thought.
2. Theoretical approaches to EI divide into two categories. Specific-Ability approaches examine relatively discrete mental abilities that process emotional information. Integrative-Model approaches describe overarching frameworks of mental abilities that combine skills from multiple EI areas.
3. Aside from the central Specific Ability and Integrative Model approaches to EI, some psychologists have suggested a third approach to the field: Mixed Model approaches. Such models mix diverse attributes, such as assertiveness, flexibility, and the need for achievement, that are not primarily focused on emotional reasoning or emotional knowledge. These models do not fall within the scope of EI as it is developed here.
4. EI measures based on Specific Ability and Integrative Models exhibit test validity as a group. This conclusion is based on an analysis of (a) the tests' design, including the tests' contents, response processes, and reliabilities, (b) the tests' structures, including their factorial validity, and (c) the tests' convergent and divergent validity, including their relations with criterion variables. One serious concern is that different scales of accurate emotional perception often do not correlate highly with each other. This lack of convergence among measures in the emotion perception domain is not yet understood.
5. Measures of EI based on Mixed Model approaches do not provide valid assessments in the area. This conclusion is based on an analysis that concludes such measures (a) employ response processes that assess self-concept rather than actual ability, (b) draw on attributes, such as flexibility and assertiveness, that are not part of the EI concept as understood here, and (c) empirically exhibit substantial overlap with other commonly studied personality traits.
6. EI is a predictor of significant outcomes across diverse samples in a number of real-world domains. It predicts social relations, workplace performance, and mental and physical well-being.
7. EI often shows incremental validity in predicting social outcomes over other measures of intelligence and socio-emotional traits.
8. The relation between EI and life outcomes suggests that EI may valuably inform practitioners' understandings of, and interventions in, human behavior.

## FUTURE ISSUES

1. *Does EI fit into a comprehensive taxonomy of mental abilities?* Empirically supported taxonomies of cognitive mental abilities already exist (Carroll 1993). Could such taxonomies be enlarged to include emotional and social intelligences? Such taxonomies promote an understanding of mental abilities, define their interrelations, and ensure that the most important among those abilities are assessed. For example, recent

iterations of the Wechsler and Stanford-Binet tests, drawing in part on such taxonomies, added scales to assess previously underemphasized abilities.

2. *What else does EI predict beyond the findings summarized here?* Researchers already have examined the relationships between EI and valued criteria. Are there more possibilities? For example, EI might predict a wider range of outcomes at school and work than studied thus far, such as attrition, attendance, and satisfaction. Research on EI in the home, as well as across different psychiatric groups, and patients' success in psychotherapy is of interest as well. Such research can help psychologists better understand the meaning and utility of the EI concept.
3. *What can meta-analyses clarify about EI?* Reviews of EI outcomes already exist. Future reviews could rely more on more formal techniques such as meta-analyses of effects in the area, focusing in particular on the correlates of measures based on Specific-Ability and Integrative-Model approaches. For example, a number of studies seem to indicate that EI's predictive effects may be stronger for men than women, but is this impression correct? Conducting such analyses will place such findings and claims concerning EI on a firmer footing.
4. *What is the effect of teaching emotional knowledge?* Studies of teaching emotional knowledge and reasoning in the home, school, and workforce already have begun. Are such applications effective and, if so, in what ways? Laboratory analogues, such as the experimental manipulation of emotional management, can help researchers understand EI's effect on outcomes. Field research also has the potential to indicate EI's impact if the effects of emotional teachings are clearly distinguished from other ameliorative practices. The results from experimental and applied research often are valuable guides to theory.

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The views expressed here are those of the authors and do not necessarily reflect the views of their respective institutions, or the views of the researchers with whom they have collaborated at other times, or the views of those who have read and commented on the manuscript.

## DISCLOSURES

John D. Mayer is an author of the Mayer-Salovey-Caruso Emotional Intelligence Test and receives royalties from that test. Richard D. Roberts works at the Center for New Constructs of Educational Testing Service and is developing for that organization, and also for other organizations through contract work, a range of assessments, some of which could be considered alternatives to or competitors with contemporary measures of EI.

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Best-selling trade book that popularized EI; its scientific coverage is a matter of dispute.

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Provides a key reference guide for understanding psychological tests and their validity; endorsed by major stakeholder associations such as American Psychological Association.

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Empirical study that assesses how EI may impact social interactions; extensive and particularly well done.

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Addresses EI theory, its measurement, and future research directions in a collection of writings by diverse experts.

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Introduces the MSCEIT, an integrative ability-based measure of EI.

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Introduces the DANVA, a measure of accurate emotion perception.

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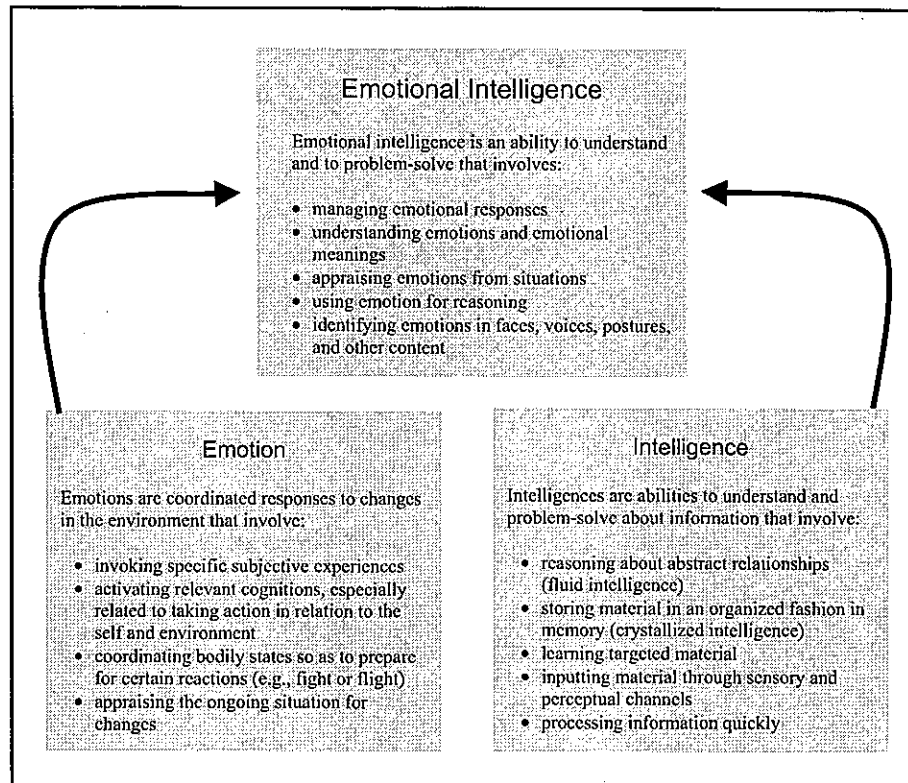
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## The Scope of Emotional Intelligence



### Mixed Models of Emotional Intelligence


Mixed models of emotional intelligence begin with emotional intelligence-related qualities such as the ability to perceive emotions accurately, and mix in with them:

- motives such as *need for achievement*
- social styles such as *gregariousness* and *assertiveness*
- self-related qualities such as *self-esteem*
- control-related qualities such as *flexibility* and *impulse control*

**Figure 1**

Emotional Intelligence (EI; *upper box*) is closely related to two other scientific concepts: intelligence and emotion. Intelligence and emotion have consensual meanings for most psychologists. For example, intelligences (*box to right*) involve abilities to understand information; emotions (*box to left*) are coordinated responses to the environment. EI is the ability to reason about emotions as well as the capacity to use emotions and emotional information to assist reasoning. Specific-Ability approaches to EI (*upper box, bulleted items*) study such matters as how well a person identifies emotions in faces or how well a person understands emotional meanings. Integrative-Model approaches to EI (*upper box, overall*) concern the study of specific abilities together. Mixed-Model approaches (*bottom*) are less related to EI and to the other two approaches. Although they typically study some relevant emotion-specific abilities, they also add in motives, social styles, self-related qualities, and other traits that do not concern a primary focus on emotion or emotional reasoning.

## Two Items of the Sort Found on Emotional Intelligence Scales

1.	2.																				
	<p>Tom felt worried when he thought about all the work he needed to do. He believed he could handle it – if only he had the time. When his supervisor brought him an additional project, he felt _____. (Select the best choice.)</p>																				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Emotion</th> <th style="width: 40%;">Select one:</th> </tr> </thead> <tbody> <tr> <td>a. Happy</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>b. Angry</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>c. Fearful</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>d. Sad</td> <td style="text-align: center;"><input type="radio"/></td> </tr> </tbody> </table>	Emotion	Select one:	a. Happy	<input type="radio"/>	b. Angry	<input type="radio"/>	c. Fearful	<input type="radio"/>	d. Sad	<input type="radio"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Emotion</th> <th style="width: 40%;">Select one:</th> </tr> </thead> <tbody> <tr> <td>a. Frustrated and anxious</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>b. Content and calm</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>c. Ashamed and accepting</td> <td style="text-align: center;"><input type="radio"/></td> </tr> <tr> <td>d. Sad and guilty</td> <td style="text-align: center;"><input type="radio"/></td> </tr> </tbody> </table>	Emotion	Select one:	a. Frustrated and anxious	<input type="radio"/>	b. Content and calm	<input type="radio"/>	c. Ashamed and accepting	<input type="radio"/>	d. Sad and guilty	<input type="radio"/>
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c. Ashamed and accepting	<input type="radio"/>																				
d. Sad and guilty	<input type="radio"/>																				

**Figure 2**

The two test items, 1 and 2, are typical of those that measure emotional intelligence. Item 1 measures emotional accuracy with a face of the sort found on the Diagnostic Analysis of Nonverbal Accuracy Scales-2. The participant's job is to identify the emotion expressed in the face (alternative *b*, angry, is the correct choice in this case). Item 2 represents an emotion understanding item of the sort that appears on the Mayer-Salovey-Caruso Emotional Intelligence Test. The participant's job is to identify the correct feeling that the individual might experience (alternative *a* is most likely, given the information supplied).



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<http://psych.annualreviews.org/errata.shtml>



Appendix F  
Article: On the Criterion and Incremental Validity of  
Trait Emotional Intelligence

## On the criterion and incremental validity of trait emotional intelligence

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*University College London, London, UK*

This paper presents a comprehensive investigation of the criterion and incremental validity of trait emotional intelligence (*trait EI* or *trait emotional self-efficacy*), which is defined as a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides & Furnham, 2001). In Studies 1 and 2 ( $N=166$  and  $354$ , respectively) trait EI is shown to be related to measures of rumination, life satisfaction, depression, dysfunctional attitudes, and coping. Most relationships remained statistically significant even after controlling for Big Five variance. In Study 3 ( $N=212$ ) trait EI is shown to be related to depression and nine distinct personality disorders. Most relationships remained significant, even after controlling for positive and negative affectivity (mood). It is concluded that trait EI has a role to play in personality, clinical, and social psychology, often with effects that are incremental over the basic dimensions of personality and mood.

The construct of trait emotional intelligence (*trait EI* or *trait emotional self-efficacy*) refers to a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides,

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2001; Petrides, Furnham, & Mavroveli, in press-a). Its roots lie in the distinction between two EI constructs, viz., trait EI and ability EI (Petrides & Furnham, 2000, 2001, 2003, 2006; see also Austin, 2004; Day, Therrien, & Carroll, 2005; O'Connor & Little, 2003; Tett, Fox, & Wang, 2005; Warwick & Nettelbeck, 2004). The conceptualisation of EI as a personality trait leads to a construct that lies wholly outside the taxonomy of human cognitive ability (Carroll, 1993).

### Theoretical motivation

The three studies in this paper report results from the trait EI research programme, which seeks to develop a comprehensive operationalisation of emotion-related aspects of personality across the life span. The operationalisation of a new construct, when properly conducted, requires a painstaking validation process along the lines described by Cronbach and Meehl (1955). This paper seeks to make three specific contributions in relation to this process.

The first aim of the paper was to establish the criterion validity of trait EI. With this in mind, we selected 23 dependent variables to cover a broad spectrum of constructs. This was essential both for the systematic development of a nomological network and for the empirical testing of the nature of trait EI. More specifically, the conception of the construct as a constellation of emotion-related self-perceptions and dispositions suggests that it must have statistically significant effects on many different variables in many different contexts. The criteria in this paper span the domains of personality, social, and clinical psychology. All were chosen for their theoretical relevance to trait EI (hypotheses are advanced in the study introductions) and some have also been incorporated in the cross-cultural arm of our programme.

The second aim of the paper was to explore the incremental validity of trait EI. Some researchers (e.g., MacCann, Roberts, Matthews, & Zeidner, 2004; Schulte, Ree, & Carretta, 2004) feel it is essential to demonstrate what, if anything, self-report measures of EI can predict over and above the basic personality dimensions. Studies 1 and 2 were specifically designed to address this question, whereas Study 3 examined incremental validity vis-à-vis the basic dimensions of mood.

The question of incremental validity is not equally relevant to the various EI models that are operationalised through self-report. For models based on questionnaires and theorising about novel, hitherto supposedly undiscovered, abilities, competencies, and skills it would be rather problematic if these questionnaires did not consistently predict substantial amounts of variance over and above the basic personality dimensions. On the other hand, from the perspective of trait EI theory, this question is of little consequence.

Because trait EI is explicitly conceptualised as a lower-order personality construct, it is *expected* to show strong correlations with the higher-order dimensions that define its factor space (Petrides, 2001; Petrides, Pita, & Kokkinaki, in press-b; see also De Raad, 2005). Therefore, trait EI theory predicts that the construct will exhibit incremental predictive validity over the basic personality dimensions only in relation to criteria that are sufficiently affect laden.

The two established trait hierarchies are the Eysenckian (Barrett, Petrides, Eysenck, & Eysenck, 1998; Eysenck, 1990), which posits three basic personality dimensions (Psychoticism, Extraversion, and Neuroticism; Giant Three) and the five-factor (e.g., Costa & McCrae, 1992; John & Srivastava, 1999), which posits five basic personality dimensions (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness; Big Five). Studies 1 and 2 examine the incremental validity of trait EI vis-à-vis the Big Five (see Petrides, Frederickson, & Furnham, 2004, for analyses with the Giant Three).

Demonstrations of discriminant and incremental validity are considerably more difficult in a Big Five than a Giant Three context, because the former is a broader taxonomy (Draycott & Kline, 1995; Petrides & Furnham, 2001). Studies 1 and 2 are among the few in the literature to examine the incremental validity of trait EI over the NEO PI-R operationalisation of the Big Five, which comprises 240 items assessing 30 different personality facets. Saklofske, Austin, and Minski (2003) present an incremental validity study with the NEO FFI, which comprises only 60 items, while Petrides and Furnham (2003) partial out NEO PI-R variance, but focus on a comparison between participants with high versus low residualised trait EI scores. Study 3 investigates the incremental validity of trait EI in relation to mood (dispositional affect), since mood variance has also been seen as a baseline that the construct must exceed in criterion prediction.

The third aim of the paper was to highlight the generality of trait EI theory, which extends far beyond a simple, albeit necessary, offer of an accurate label for EI measured through self-report. Self-report measures of EI have proliferated to an extent that has led to requests for a moratorium (Roberts, Schulze, Zeidner, & Matthews, 2005). Although their authors invariably insist they assess abilities (Zeidner, Shani-Zinovich, Matthews, & Roberts, 2005), we view these questionnaires as measures of trait EI (e.g., Pérez, Petrides, & Furnham, 2005; Petrides & Furnham, 2000). Moreover, we maintain that trait EI theory can provide a scientific context for the meaningful interpretation of data from these measures (Petrides et al., in press-a).

Study 1 utilises a modified version of the EQ-i (Bar-On, 1997), whose author claims that it measures capabilities, competencies, and skills, while Studies 2 and 3 utilise the Trait Emotional Intelligence Questionnaire

(TEIQue; Petrides, 2001; Petrides & Furnham, 2003), which is specifically developed as the measurement vehicle for trait EI. If the tenet of the theory is correct, viz., that all self-report measures of EI (and cognate constructs) are measures of *trait EI*—irrespective of whether they were meant to operationalise abilities or competencies—then the two instruments should yield compatible findings. If the findings are incompatible, then the theory would have to be amended.

To summarise, the paper extends the current literature by presenting one of the largest investigations of the criterion and incremental validity of EI questionnaires, based on data from two different countries, and with specific emphasis on the interpretation of the findings from the perspective of trait EI theory.

## STUDY 1

Study 1 examined the criterion and incremental validity of trait EI, over the Big Five personality dimensions, in relation to the following theoretically relevant criteria:

*Rumination* is defined as “passively and repetitively focusing on one’s symptoms of distress and the circumstances surrounding these symptoms” (Nolen-Hoeksema, McBride, & Larson, 1997, p. 855). Because high trait EI individuals believe they are aware of their feelings and able to regulate them, it was hypothesised that they would be less likely to ruminate (*H1a*).

*Life satisfaction* judgements involve a cognitive evaluation of one’s circumstances against a set of subjective criteria (Diener, Emmons, Larsen, & Griffin, 1985). Because emotional states have a direct impact on this evaluation, particularly in individualist Western societies (Suh, Diener, Oishi, & Triandis, 1998), it was hypothesised that trait EI would be positively correlated to life satisfaction (*H2a*; see also Palmer, Donaldson, & Stough, 2002; Saklofske et al., 2003).

*Coping* is the process by which people try to manage stress. Coping styles can be adaptive or maladaptive, although this depends on contextual factors too (Lazarus, 1991). Like various EI models (e.g., Goleman, 1995) trait EI theory views the construct as central to the development and implementation of successful coping mechanisms. Compared to their low trait EI counterparts, high trait EI individuals should be more likely to employ adaptive coping styles (*H3a*) and less likely to employ maladaptive coping styles (*H4a*) when dealing with stress.

The hypotheses concerning incremental validity are a reformulation of those presented above. Thus, it was hypothesised that *after all of the variance accounted for by the five dimensions of personality has been partialled out*, trait EI would be reliably associated with lower scores on rumination (*H1b*),

higher levels of satisfaction with life (*H2b*), frequent use of adaptive coping styles (*H3b*), and infrequent use of maladaptive coping styles (*H4b*).

## Method

### *Participants*

One hundred sixty-six individuals from a British university participated in the study (54 males and 110 females, two unreported). The mean age for the sample was 22.17 years ( $SD = 4.27$  years). Most participants were single ( $\approx 87\%$ ) and did not have an undergraduate degree ( $\approx 77\%$ ).

### *Measures: Predictors*

*BarOn Emotional Quotient inventory* (EQ-i; Bar-On, 1997). The EQ-i comprises 133 self-report items and has been used in many studies in the literature (e.g., Dawda & Hart, 2000; Hemmati, Mills, & Kroner, 2004; Parker, Taylor, & Bagby, 2001). Its psychometric properties were scrutinised in Petrides and Furnham (2001) and Palmer, Manocha, Gignac, and Stough (2003), who reported factor structure problems that are, however, of limited relevance to the present paper. Similar to most other EI questionnaires, and as briefly explained in the general discussion, the fundamental problem with this instrument lies not so much in its psychometric properties as in the conceptually flawed model that underpins it. As in previous studies, we incorporated an additional 15-item scale ("emotion mastery") in an effort to cover some of the salient aspects of the trait EI domain that the EQ-i does not. The internal consistency of the global score on this sample was .90.

*NEO PI-R* (Costa & McCrae, 1992). This is the most widely used inventory for assessing normal adult personality on the dimensions of the five factor model. It consists of 240 items, measuring six facets for each of the five basic personality dimensions, viz., Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Although we used the long form of the inventory, our statistical analyses, as in the case of trait EI, are based on global scores. There are three advantages in using the long form of an instrument. First, unlike short forms, it guarantees adequate coverage of the intended sampling domain (Smith, McCarthy, & Anderson, 2000). Second, long forms have more desirable internal consistency properties. Third, the use of the long form of the NEO PI-R allows data analyses at the facet level. For reasons of space, we do not report such analyses in this paper, however, we would be happy to release the relevant data to interested researchers upon request. On this sample, the internal consistencies of the five factors were .83, .80, .81, .83, and .81, respectively.

### *Measures: Criteria*

*Emotion Control Questionnaire (ECQ)—Rehearsal Scale* (Roger & Najarian, 1989). The 14-item rehearsal scale from the ECQ was used to measure rumination (e.g., "I remember things that upset me or make me angry for a long time afterwards"). Participants were asked to respond on a 6-point Likert scale. On this sample, the internal consistency was .80.

*Satisfaction with Life Scale* (Diener et al., 1985). This questionnaire consists of five items and measures global life satisfaction (e.g., "In most ways my life is close to my ideal"). Participants were asked to respond on a 7-point Likert scale. On this sample, the internal consistency was .85.

*Coping Styles Questionnaire* (Roger, Jarvis, & Najarian, 1993). This questionnaire comprises 60 items assessing how one typically reacts to stress. It measures four factorially distinct coping strategies, two of which are adaptive, viz., "rational coping" (e.g., "Take action to change things") and "detached coping" (e.g., "Just take nothing personally") and two are maladaptive, viz., "emotional coping" (e.g., "Feel worthless and unimportant") and "avoidance coping" (e.g., "Feel that time will sort things out"). Participants responded on a 4-point Likert scale, ranging from "always" to "never". On this sample, the internal consistencies were .82, .79, .82, and .70 for the "rational", "detached", "emotional", and "avoidance" coping styles, respectively.

### *Procedure*

Participants were given a battery of questionnaires, which they completed in class or in their own time. Instructions were presented directly on the questionnaires and participation was voluntary. The questionnaires took approximately 90 minutes to complete.

### *Results*

Due to the large amount of data, the results will be presented succinctly. All relevant statistical details are given in Table 1. Analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, and adding the Big Five personality dimensions at step 2, to investigate incremental validity. Special attention was paid to potential outliers and all cases with residuals greater than  $|3.5|$  standard deviations away from the mean were removed. This cut-off value is conservative, given the large size of the sample (Stevens, 2001).

Trait EI was a statistically significant negative predictor of "rehearsal" (rumination) at both steps of the regression equation. These results support

TABLE 1  
Study 1: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	<i>Rumination</i>	<i>Satisfaction with life</i>	<i>Rational coping (Adaptive)</i>	<i>Detached coping (Adaptive)</i>	<i>Emotional coping<sup>a</sup> (Maladaptive)</i>	<i>Avoidance coping (Maladaptive)</i>
Step 1	$F(1, 164) = 62.86^{**}$ , $R_{adj}^2 = .273$	$F(1, 164) = 74.50^{**}$ , $R_{adj}^2 = .308$	$F(1, 164) = 78.11^{**}$ , $R_{adj}^2 = .318$	$F(1, 164) = 39.40^{**}$ , $R_{adj}^2 = .189$	$F(1, 164) = 89.55^{**}$ , $R_{adj}^2 = .349$	$F(1, 164) = 21.88^{**}$ , $R_{adj}^2 = .112$
Step 2	$F(6, 159) = 17.98^{**}$ , $R_{adj}^2 = .382$	$F(6, 159) = 13.66^{**}$ , $R_{adj}^2 = .315$	$F(6, 159) = 16.59^{**}$ , $R_{adj}^2 = .362$	$F(6, 159) = 18.54^{**}$ , $R_{adj}^2 = .389$	$F(6, 159) = 24.04^{**}$ , $R_{adj}^2 = .457$	$F(6, 159) = 7.53^{**}$ , $R_{adj}^2 = .192$
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Trait EI (step 1)	-.526	7.93**	.559	8.63**	.568	8.84**
N	.418	4.57**	-.042	0.43	-.159	1.71
E	.123	1.61	.182	2.25*	-.120	1.53
O	.110	1.68	-.017	0.24	.058	0.87
A	-.082	1.29	-.045	0.67	-.180	2.79**
C	.141	1.88	.111	1.41	.053	0.69
Trait EI (step 2)	-.368	3.30**	.388	3.31**	.518	4.57**
					.222	2.00*
					-.242	3.24**
					.096	1.59
					.109	1.77
					.060	0.84
					.476	5.57**
					-.594	9.46**
					.440	6.28**
					-.586	6.44**
					-.057	0.74
					-.003	0.04
					-.218	3.45**
					-.242	3.24**
					.017	0.23
					-.277	2.65**
					-.042	0.33
					-.374	4.36**
					-.343	4.68**

Note: \* $p < .05$ ; \*\* $p < .01$ . <sup>a</sup>One outlier was removed from step 2 of the regression.



hypotheses *H1a* and *H1b*. Similar results were obtained with “satisfaction with life”, thus supporting hypotheses *H2a* and *H2b*. Subsequently, a set of four hierarchical regressions was carried out with each of the coping styles (two adaptive and two maladaptive) as dependent variables. Trait EI was a statistically significant positive predictor of the two adaptive coping styles (“rational” and “detached”) at both steps of the hierarchical regressions. These results support hypotheses *H3a* and *H3b*. It was also a statistically significant negative predictor at step 1 of the two regressions with maladaptive coping styles (“emotional” and “avoidance”). However, at step 2, it reached significance only in the equation with “emotional coping” as the criterion. These results support hypotheses *H4a* and, partially, *H4b*.

## Discussion

Trait EI was a reliable predictor of all criteria in the study, as hypothesised. Moreover, most relationships were incrementally valid over the Big Five personality dimensions. With respect to criterion validity, hypotheses *H1a* to *H4a* were fully supported. Trait EI was positively associated with life satisfaction and the two adaptive coping styles and negatively associated with rumination and the two maladaptive styles.

There is plenty of evidence that trait EI relates meaningfully to other variables (Austin, Saklofske, & Egan, 2005; Schutte et al., 2001; Spence, Oades, & Caputi, 2004; Tett et al., 2005; Wong & Law, 2002), but the more interesting question in this case was whether it does so incrementally over the Big Five. It is clear from the results of this study that it does. Partialling out all five personality dimensions did not nullify the construct’s associations with any criterion, except “avoidance coping”. These results support hypotheses *H1b* to *H4b*. In short, trait EI was incrementally associated with the criteria, as hypothesised.

## STUDY 2

The first aim of this study was to replicate the main findings of Study 1, especially in relation to incremental validity. The second aim was to investigate the validity of a different trait EI measure that has been specifically designed to cover the sampling domain of the construct comprehensively. The third aim was to expand the nomological network of trait EI by exploring its relationship to theoretically relevant, but hitherto unexamined, variables.

For purposes of replication and comparison, we incorporated the four distinct *coping styles* from Study 1. The hypotheses were the same, i.e., trait EI was expected to be a positive predictor of the two adaptive coping styles (“rational” and “detached”; *H1a*) and a negative predictor of the two

maladaptive coping styles (“emotional” and “avoidance”; *H2a*). As in Study 1, it was hypothesised that these relationships would remain statistically significant after partialling out Big Five variance (*H1b* and *H2b*, respectively).

Study 2 also looks at constructs from the clinical, social, and personality domains. *Depression* and *dysfunctional attitudes* are two straightforward criteria to be used in the validation of trait EI. In both cases, we would expect negative associations (*H3a* and *H4a*) because high trait EI individuals believe they can regulate their emotions to stave off depressogenic cognitions that may trigger disorders when combined with stressful life events (Clark & Beck, 1999). It was further hypothesised that the negative associations would persist after partialling out Big Five variance (*H3b* and *H4b*).

The construct of *self-monitoring* was introduced by Snyder (1974) to account for individual differences in self-presentation and expressive behaviour. In this study, we examine the two distinct subcomponents of self-monitoring, viz., “ability to modify self-presentation” and “sensitivity to emotional expression,” as well as the global construct itself (Lennox & Wolfe, 1984). Because high trait EI individuals believe they can observe and control their emotional reactions, we hypothesised a positive relationship with all three self-monitoring criteria (*H5a*, *H6a*, *H7a*; see also Schutte et al., 2001). We further hypothesised that these relationships would persist after controlling for Big Five variance (*H5b*, *H6b*, *H7b*).

The last criterion in the study was *aggression*, as operationalised by Buss and Perry’s (1992) aggression questionnaire, which covers four distinct components. Because high trait EI individuals believe they can regulate emotions and their expression, we hypothesised that they would score lower on all four facets of aggression (“physical” *H8a*; “verbal” *H9a*; “anger” *H10a*; and “hostility” *H11a*). Furthermore, we expected the negative associations with “anger” and “hostility” to remain statistically significant after partialling out Big Five variance (*H10b* and *H11b*, respectively). We did not advance any incremental validity hypotheses for the instrumental components of aggression (“physical” and “verbal”) because they concern purposeful and context-specific behaviour.

## Method

### *Participants*

The study employed two samples examining different criteria. Sample 1 comprised 200 individuals (75 males and 125 females) with a mean age of 22.86 years ( $SD = 6.17$  years). Most participants were single ( $\approx 79\%$ ) and did not have an undergraduate degree ( $\approx 78\%$ ). Sample 2 comprised 154 individuals (30 males and 124 females) with a mean age of 21.99 years ( $SD = 6.03$  years). Most participants were single ( $\approx 84\%$ ) and did not have an undergraduate degree ( $\approx 87\%$ ).

### *Measures: Predictors*

*Trait Emotional Intelligence Questionnaire* (TEIQue v. 1.00)<sup>1</sup>. The TEIQue consists of 144 items and 15 subscales, predicated on trait EI theory and covering the sampling domain of trait EI comprehensively (Petrides, 2001; Petrides & Furnham, 2003). A detailed psychometric analysis of the inventory is presented in Mikolajczak, Luminet, Leroy, and Roy (in press). Participants responded on a 7-point Likert scale, ranging from “*completely disagree*” to “*completely agree*”. The internal consistency of the full scale was .91 and .89 on samples 1 and 2, respectively.

*NEO PI-R* (Costa & McCrae, 1992). As in Study 1, the NEO PI-R was used to assess five-factor personality and we focused exclusively on global scores. The internal consistencies of the five factors on samples 1 and 2, respectively, were: Neuroticism (.83 and .87), Extraversion (.84 and .79), Openness (.80 and .77), Agreeableness (.79 and .64), and Conscientiousness (.87 and .84).

### *Measures: Criteria—sample 1*

*Coping Styles Questionnaire* (Roger *et al.*, 1993). This questionnaire was described in Study 1. On this sample, the internal consistencies were .82 (“rational coping”), .84 (“detached coping”), .83 (“emotional coping”), and .68 (“avoidance coping”).

*Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977)*. This is a well-established, 20-item measure of depressive symptomatology designed specifically for use in non-clinical settings. Participants were asked to indicate how frequently they experienced certain depressive symptoms during the “past week” (e.g., “I was bothered by things that usually don’t bother me”). The CES-D uses a 4-point Likert scale response format, ranging from “*Rarely or none of the time (less than 1 day)*” to “*Most or all of the time (5 to 7 days)*”. The internal consistency of the scale on this sample was .92.

*Dysfunctional Attitudes Scale (DAS; Weissman & Beck, 1978)*. The DAS was developed from a cognitive theory perspective and consists of two 40-item parallel forms, measuring depressogenic attitudes and beliefs. For the purposes of the present study, we selected the 20 odd-numbered items from Form A. The DAS has been found to differentiate depressed patients from nondepressed psychiatric controls and nondepressed normal controls

<sup>1</sup> All TEIQue forms, versions, and translations are available from the first author, free of charge, for research purposes.

(Hamilton & Abramson, 1983; Hollon, Kendal, & Lumry, 1986). The internal consistency of the scale on this sample was .87.

#### *Measures: Criteria—sample 2*

*Revised Self-Monitoring Scale (RSMS; Lennox & Wolfe, 1984).* The RSMS is one of the most widely used measures of self-monitoring. It consists of seven items measuring “ability to modify self-presentation”, and six measuring “sensitivity to emotional expression”. Participants responded on a 6-point Likert scale. On this sample, the internal consistencies were .82, .81, and .85 for “ability to modify self-presentation”, “sensitivity to emotional expression”, and the global scale score, respectively.

*Aggression Questionnaire (AQ; Buss & Perry, 1992).* The AQ comprises 29 items, measuring four distinct aggression subscales, viz., “physical aggression”, “verbal”, “anger”, and “hostility”. It is responded to on a 5-point Likert scale. On this sample, the internal consistencies of the four subscales were .80, .69, .80, and .79, respectively.

#### *Procedure*

Participants at three British universities were given a battery of questionnaires, which they completed either in class or in their own time. Instructions were presented directly on the questionnaires and participation was on a voluntary basis. The questionnaires took approximately 90 minutes to complete.

### **Results**

Due to the large amount of data, the results will be presented succinctly. All analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, and adding the Big Five personality dimensions at step 2, to investigate incremental validity. Outliers were treated as in Study 1.

#### *Sample 1*

All relevant statistical details are given in Table 2. Trait EI was a reliable positive predictor at both steps<sup>2</sup> of the hierarchical regressions with the two adaptive coping styles (“rational” and “detached”), thus supporting hypotheses *H1a* and *H1b*. It was also a reliable negative predictor at both steps of the hierarchical regressions with the maladaptive coping styles

<sup>2</sup> In the regression with “detached coping” as the criterion, the partial coefficient for trait EI at step 2 approached, but did not attain, statistical significance ( $\beta_{TEI} = .181$ ,  $t = 1.69$ ,  $p = .09$ ).

TABLE 2  
Study 2—sample 1: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	Depression	Dysfunctional attitudes <sup>a</sup>	Rational coping (Adaptive)	Detached coping (Adaptive)	Emotional coping (Maladaptive)	Avoidance coping (Maladaptive)
Step 1	$F(1, 195) = 144.39^{**}$ , $R_{adj}^2 = .422$	$F(1, 194) = 58.45^{**}$ , $R_{adj}^2 = .228$	$F(1, 193) = 152.75^{**}$ , $R_{adj}^2 = .439$	$F(1, 193) = 50.59^{**}$ , $R_{adj}^2 = .204$	$F(1, 193) = 119.19^{**}$ , $R_{adj}^2 = .379$	$F(1, 193) = 34.66^{**}$ , $R_{adj}^2 = .148$
Step 2	$F(6, 189) = 27.74^{**}$ , $R_{adj}^2 = .451$	$F(6, 188) = 12.90^{**}$ , $R_{adj}^2 = .269$	$F(6, 188) = 31.83^{**}$ , $R_{adj}^2 = .488$	$F(6, 188) = 21.02^{**}$ , $R_{adj}^2 = .382$	$F(6, 188) = 49.05^{**}$ , $R_{adj}^2 = .598$	$F(6, 188) = 6.81^{**}$ , $R_{adj}^2 = .152$
	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
Trait EI (step 1)	-.652	-.481	.665	.456	-.618	-.390
N	.198	.211	-.181	-.584	.613	.065
E	.010	-.009	-.090	-.199	.039	-.010
O	.097	-.106	.015	.062	.038	-.019
A	-.119	.081	.012	-.032	.052	.076
C	.024	.199	.213	.011	.070	-.173
Trait EI (step 2)	-.559	-.378	.503	.181	-.282	-.260
	$t$	$t$	$t$	$t$	$t$	$t$
Trait EI (step 1)	12.02**	7.65**	12.36**	7.11**	10.92**	5.89**
N	2.49*	2.30*	2.37*	6.96**	9.04**	0.66
E	0.12	0.09	1.21	2.42*	0.58	0.10
O	1.40	1.33	0.23	0.86	0.66	0.23
A	2.16*	1.27	0.23	0.56	0.68	0.76
C	0.38	2.72**	3.54**	0.17	1.31	2.24*
Trait EI (step 2)	5.33**	3.11**	5.17**	1.69 <sup>b</sup>	3.27**	2.07*

Note: \* $p < .05$ ; \*\* $p < .01$ . <sup>a</sup>One outlier was removed from both steps of the regression. <sup>b</sup> $p = .09$ .

("emotional" and "avoidance"), thus supporting hypotheses *H2a* and *H2b*. Similar results were obtained in the hierarchical regressions with "depression" and "dysfunctional attitudes", where trait EI was a reliable negative predictor at both steps, thus supporting hypotheses *H3a*, *H3b*, *H4a*, and *H4b*.

### *Sample 2*

All relevant statistical details are given in Table 3. Trait EI was a statistically significant positive predictor at both steps in the hierarchical regressions with the three self-monitoring variables ("ability to modify self-presentation", "sensitivity to emotional expression", and "global self-monitoring"). These results provide support for hypotheses *H5a* to *H7a* and *H5b* to *H7b*. With respect to aggression, trait EI was a negative predictor of three of the four subscales at step 1 ("physical", "anger", and "hostility", but not "verbal aggression"), thereby supporting *H8a*, *H10a*, and *H11a*, but not *H9a*. At step 2, with the Big Five added in the equations, trait EI was a significant negative predictor of "hostility", but not "anger". These results support hypothesis *H11b*, but not *H10b*. For purposes of completeness, and despite the fact that they were not tied to any hypotheses, we also report in Table 3 the second steps of the hierarchical regressions with "verbal" and "physical" aggression, where trait EI did not reach significance levels.

### Discussion

The findings have three important implications for the construct validity of trait EI. First, they confirm previous research showing that the effects of trait EI span several different basic and applied domains (Petrides & Furnham, 2003; Schutte et al., 2001; Van der Zee, Schakel, & Thijs, 2002; Wong & Law, 2002). Second, they show that extant trait EI measures tend to produce convergent results (cf. coping styles findings in Studies 1 and 2). It could well be the case that some measures have more desirable psychometric properties than others, but we must reiterate that our conceptualisation (Petrides et al., in press-a) does not have to be synonymous with a particular measurement instrument. Third, in line with empirical demonstrations of discriminant validity, involving the identification of a distinct trait EI factor in personality factor space (Petrides & Furnham, 2001; Petrides et al., in press-b), these results strongly support the incremental validity of the construct over higher-order traits (see also Saklofske et al., 2003; Van der Zee & Wabeke, 2004).

Trait EI was related to the clinical variables (depression and dysfunctional attitudes) as well as to the personality and social variables (self-monitoring and aggression), as hypothesised. The only two hypotheses that were not

TABLE 3  
Study 2—sample 2: Hierarchical regressions with trait EI entered at step 1 and the Big Five entered at step 2

	Ability to modify self-presentation	Sensitivity to emotional expression	Physical aggression	Verbal aggression	Anger	Hostility <sup>a</sup>
Step 1	$F(1, 148) = 37.27^{**}$ , $R_{adj}^2 = .196$	$F(1, 148) = 5.67^*$ , $R_{adj}^2 = .030$	$F(1, 149) = 12.59^{**}$ , $R_{adj}^2 = .072$	$F(1, 149) = 1.06$ , $R_{adj}^2 = .000$	$F(1, 149) = 25.27^{**}$ , $R_{adj}^2 = .139$	$F(1, 148) = 84.69^{**}$ , $R_{adj}^2 = .360$
Step 2	$F(6, 141) = 6.61^{**}$ , $R_{adj}^2 = .186$	$F(6, 141) = 5.80^{**}$ , $R_{adj}^2 = .164$	$F(6, 142) = 7.54^{**}$ , $R_{adj}^2 = .210$	$F(6, 142) = 10.93^{**}$ , $R_{adj}^2 = .287$	$F(6, 142) = 16.58^{**}$ , $R_{adj}^2 = .387$	$F(6, 141) = 26.04^{**}$ , $R_{adj}^2 = .505$
Trait EI (step 1)	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
N	.449	.192	-.279	-.084	-.381	-.603
E	.070	.320	.228	-.062	.449	.473
O	.104	-.132	-.004	.003	-.014	-.042
A	-.097	.230	-.048	.109	.113	-.074
C	-.123	-.150	-.370	-.533	-.309	-.216
Trait EI (step 2)	$t$	$t$	$t$	$t$	$t$	$t$
N	6.11**	2.38*	-2.79	3.55**	5.03**	9.20**
E	0.63	2.84**	.228	2.08*	.449	5.40**
O	1.05	1.32	-.004	0.04	0.17	0.54
A	1.15	2.69**	-.048	0.57	1.55	1.14
C	1.56	1.88	-.370	4.78**	4.51**	3.51**
Trait EI (step 2)	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$	$\beta$
N	.473	.394	.062	-.206	-.119	.150
E	3.58**	2.94**	-.109	2.53*	0.63	2.20*
O				.081	0.55	2.05*

Note: \* $p < .05$ ; \*\* $p < .01$ . <sup>a</sup>One outlier was removed from both steps of the regression.

borne out by the data concerned step 1 of “verbal” aggression (*H11a*) and step 2 of “anger” (*H10b*). The lack of association between trait EI and the “verbal” AQ factor is likely due to the fact that the latter is conceptually confounded with assertiveness, which characterises high trait EI individuals. “Anger” was negatively related to trait EI, as expected, although the relationship was not significant after partialling out Big Five variance. Neuroticism and Agreeableness were the only significant predictors in the second step of this regression (positive and negative, respectively). The results on depression and dysfunctional attitudes suggest that very low trait EI may have psychopathological implications, a proposition we investigate in the last study of this paper.

### STUDY 3

The aim of this study was to examine the criterion and incremental validity of trait EI in relation to both new variables and a new baseline, substituting the Big Five with the two basic dimensions of mood (positive and negative affectivity). Incremental validity studies have focused primarily on whether trait EI explains criterion variance over and above personality, probably because the conceptual correspondences between them have been repeatedly highlighted (Davies, Stankov, & Roberts, 1998; Matthews, Zeidner, & Roberts, 2002; McCrae, 2000; Petrides & Furnham, 2000). Given the links between personality and mood (Canli, Amin, Haas, Omura, & Constable, 2004; Watson, 2000), it is meaningful to ask how, and to what extent, the latter is related to trait EI. Studies exploring this question have revealed significant relationships (Ciarrochi, Chan, & Bajgar, 2001; Davies et al., 1998; Schutte, Malouff, Simunek, McKenley, & Hollander, 2002), which may have adaptive as well as maladaptive implications (Petrides & Furnham, 2003). The question, therefore, arises as to whether trait EI has incremental predictive validity over the basic dimensions of mood.

The criteria in this study exclusively comprise variables of clinical relevance. Although most research has focused on social and personality variables, we believe that trait EI is at least as likely to play an important role in clinical contexts (Petrides, 2001). One example is the strong negative relationship with *depression* (e.g., Ghorbani, Bing, Watson, Davison, & Mack, 2002; Saklofske et al., 2003; see also Study 2), which we sought to replicate while controlling for positive and negative affectivity. Therefore, we hypothesised that trait EI would be a reliable negative predictor of depression (*H1a*) and that it would remain such in the presence of the two dimensions of affectivity (*H1b*).

The fact that many mental disorders represent quantitative, rather than qualitative, abnormalities on personality dimensions (Bienvenu, Nestadt,



Samuels, Costa, Howard, & Eaton, 2001; Eysenck, 1970; Widiger, 1992) suggests that very low trait EI may have psychopathological consequences. Study 3 examines this possibility with reference to the *personality disorders* (PDs) incorporated in the Tenth Revision of the International Classification of Diseases (ICD-10; World Health Organization, 1992). Although high trait EI scores are not always adaptive or functional (Petrides et al., in press-a), they do indicate an overall healthy mental state in normal adults. Consequently, we hypothesised that trait EI would be negatively related to the ICD-10 PDs, including “paranoid” (*H2a*), “schizoid” (*H3a*), “schizotypal” (*H4a*), “histrionic” (*H5a*), “antisocial” (*H6a*) “borderline” (*H7a*), “obsessive-compulsive” (*H8a*), “dependent” (*H9a*), and “avoidant” (*H10a*). We further hypothesised that trait EI would remain a statistically significant predictor after controlling for positive and negative affectivity (*H2b* to *H10b*).

## Method

### *Participants*

Two hundred twelve individuals participated in the study (37 males and 175 females). The average age was 23.07 years ( $SD = 3.33$  years). Participants were students in three Spanish universities.

### *Measures*

*Trait Emotional Intelligence Questionnaire* (TEIQue v. 1.00). We used the Spanish adaptation of the TEIQue (see Study 2). The questionnaire was adapted into Spanish under the direction of the second author (see Pérez, 2003) in line with current test adaptation guidelines (Hambleton, 2001). Items were translated into Spanish, then back-translated into English and compared. Fifteen experts (university lecturers in education or psychology) were asked to rate each of the inventory's 15 subscales for content validity, i.e., the degree to which they believed the subscales are relevant to the construct. Most subscales (12) were rated as either “relevant” or “essential” to the construct. Subsequently, the experts were asked to use a 5-point Likert scale to rate each of the inventory's 144 items for “clarity and comprehensibility”. Most items (133) were rated “very clear”, with median ratings of 5. Unclear items were reviewed and translated again. Finally, three bilingual individuals (1 philologist and 2 educationists) evaluated and confirmed the linguistic equivalence of the English and Spanish versions. On this sample, the internal consistency of the global score was .90.

*Positive and Negative Affect Schedule* (PANAS). The Spanish version (Sandin, Chorot, Lostao, Joiner, Santed, & Valiente, 1999) of the 20-item PANAS (Watson, Clark, & Tellegen, 1989) was used to measure individual

differences in positive and negative affectivity. Participants were asked to indicate, on a 5-point Likert scale, how they feel “usually”. On this sample, the internal consistencies of positive and negative affectivity were .89 and .85, respectively.

*Beck Depression Inventory* (2nd ed.; BDI-II). The Spanish version (Sanz, Navarro, & Vázquez, 2001) of the second edition of the BDI (Beck, Steer, & Brown, 1996) was used to measure depression. The BDI-II consists of 21 items that are responded to on a 4-point scale. The internal consistency of the scale on this sample was .87.

*International Personality Disorder Examination* (IPDE). The IPDE is a semi-structured interview schedule, designed to produce diagnoses consistent with the ICD-10 and DSM-IV classifications (Loranger, Janca, & Sartorius, 1997). We employed the Spanish version (Pérez & Rubio, 1996) of the IPDE questionnaire, which is typically used as a screening instrument. It comprises 77 dichotomous (true/false) items and yields dimensional scores on 10 distinct PDs. The internal consistencies of the scales, along with a brief description of each, are given in Table 4. It is worth noting that the alphas were uniformly low on this sample, which reduces the likelihood of obtaining statistically significant effects. Due to its particularly low alpha, “narcissistic” was excluded from further analysis.

### *Procedure*

Participants from three Spanish universities completed a battery of questionnaires in class. Instructions were shown on the questionnaires and participation was voluntary. The materials took approximately 90 minutes to complete.

### *Results*

Due to the large amount of data, the results will be presented succinctly. Analyses involved two-step hierarchical regressions, entering trait EI on its own at step 1, to investigate criterion validity, followed by the two mood dimensions (positive and negative affectivity) at step 2, to investigate incremental validity. Outliers were treated as in the previous studies.

All relevant statistical details are presented in Tables 5 and 6. The results for “depression” were consistent with those of the British sample, thus supporting hypotheses *H1a* and *H1b*. With respect to the personality disorders, trait EI was a statistically significant negative predictor at step 1 in all nine hierarchical regressions, thus supporting hypotheses *H2a* to *H10a*. At step 2, statistically significant results were obtained with the following criteria: “paranoid”, “schizoid”, “schizotypal”, “borderline”, “dependent”,

TABLE 4  
Factor pattern matrix and descriptive information for the IPDE ICD-10 scales

<i>IPDE scales</i>	<i>Factor 1</i>	<i>Factor 2</i>	<i>Alpha</i>	<i>Symptomatology</i>
Paranoid (7)	<b>.642</b>	.145	.53	Excessive preoccupations, recurrent suspicions, tendency to bear grudges persistently, suspiciousness of others.
Schizoid (7)	<b>.573</b>	<b>-.361</b>	.32	Indifference to praise or criticism, consistent choice of solitary activities, preoccupation with introspection.
Schizotypal (9)	<b>.868</b>	<b>-.113</b>	.60	Unusual perceptual experiences, odd behaviour, inappropriate affect, quasi-psychotic episodes.
Histrionic (8)	-	<b>.541</b>	.44	Self-dramatisation, exaggerated expression of emotions, shallow and labile affectivity, inappropriate seductiveness.
Antisocial (7)	<b>.446</b>	-	.42	Unconcern for the feelings of others, disregard for social norms, incapacity to maintain enduring relationships.
Borderline (9)	<b>.572</b>	<b>.374</b>	.63	Excessive efforts to avoid abandonment, threats or acts of self-harm, disturbances in and uncertainty about self-image.
Obsessive-compulsive (8)	<b>.375</b>	.114	.34	Feelings of excessive doubt and caution, rigidity and stubbornness, perfectionism, excessive pedantry.
Dependent (8)	.230	<b>.580</b>	.58	Fear of being left to care for oneself, inability to take decisions on one's own, undue compliance with others' wishes.
Avoidant (8)	<b>.570</b>	.125	.67	Persistent feelings of tension and apprehension, inferiority complex, avoidance of activities due to fear of criticism.

*Note:* Numbers in parentheses indicate the number of items in each scale. Loadings greater than |.30| are in bold. Loadings less than |.10| are suppressed.

and “avoidant”. In addition, the partial regression coefficients for trait EI in the equations with “antisocial” and “obsessive-compulsive” approached, but did not attain, significance ( $\beta_{TEI} = -.186$ ,  $t = 1.73$ ,  $p = .08$  and  $\beta_{TEI} = -.198$ ,  $t = 1.91$ ,  $p = .06$ , respectively). Taken together, these results provide full support for hypotheses *H2b*, *H3b*, *H4b*, *H7b*, *H9b*, and *H10b*, partial support for hypotheses *H6b* and *H8b*, but no support for hypothesis *H5b* (“histrionic”).

Due to the low alphas of many IPDE scales, we performed a principal axis factor analysis of the nine PDs to determine whether they can be grouped into a small number of more reliable factors. The scree plot and Kaiser eigenvalue criterion converged on a two-factor solution, accounting for 53.40% of the variance. The oblimin-rotated factor pattern matrix for this solution is given in Table 4, where it can be seen that the first factor mainly concerns psychoses (“psychosis”), whereas the second, smaller, factor mainly concerns neuroses (“neurosis”). The internal consistencies of the two factors were .75 and .57, respectively. We subsequently regressed the two factors on trait EI and the affectivity dimensions using two-step hierarchical regressions as above. Trait EI was a statistically significant negative predictor of both, at step 1, “Psychosis”:  $R^2_{adj} = .409$ ,  $F(1, 210) = 147.01$ ,  $p < .01$ ;  $\beta_{TEI} = -.642$ ,  $t = 12.12$ ,  $p < .01$ ; “Neurosis”:  $R^2_{adj} = .164$ ,  $F(1, 210) = 42.50$ ,  $p < .01$ ;  $\beta_{TEI} = -.410$ ,  $t = 6.51$ ,  $p < .01$ , as well as at step 2, “Psychosis”:  $R^2_{adj} = .471$ ,  $F(3, 207) = 63.44$ ,  $p < .01$ ;  $\beta_{TEI} = -.453$ ,  $t = 5.68$ ,  $p < .01$ ; “Neurosis”:  $R^2_{adj} = .195$ ,  $F(3, 207) = 17.90$ ,  $p < .01$ ;  $\beta_{TEI} = -.269$ ,  $t = 2.73$ ,  $p < .01$ .

## Discussion

The findings suggest that trait EI may have an important diagnostic role to play in relation to virtually all PDs included in the two major classification systems (ICD-10 and DSM-IV; see also Leible & Snell, 2004, for relevant results with other trait EI measures). As hypothesised, trait EI scores were negatively related to all PDs in the IPDE. More important, the negative associations held up after partialling out individual differences in dispositional mood, which are known to underlie psychopathology (Watson, 2000). It bears repeating that these results were obtained in spite of the low internal consistencies of the IPDE scales and were replicated when PDs were grouped into two factors with improved Cronbach alphas.

Low trait EI can be seen as a global susceptibility factor, predisposing individuals to a range of mental abnormalities. Its effects are not only stronger than those of affectivity, but also broader, contributing to the aetiology of mental disorders that are only partially related to emotional malfunctioning (e.g., antisocial personality). This should be expected because the construct extends beyond core emotional self-perceptions to

TABLE 5  
Study 3—part I: Hierarchical regressions with trait EI entered at step 1 and the PANAS affectivity dimensions entered at step 2

	Depression <sup>a</sup>	IPDE paranoid	IPDE schizoid <sup>b</sup>	IPDE schizotypal <sup>a</sup>	IPDE histrionic <sup>b</sup>
Step 1	$F(1, 209) = 105.43^{**}$ , $R_{adj}^2 = .332$	$F(1, 210) = 47.81^{**}$ , $R_{adj}^2 = .182$	$F(1, 209) = 16.94^{**}$ , $R_{adj}^2 = .071$	$F(1, 209) = 66.82^{**}$ , $R_{adj}^2 = .239$	$F(1, 209) = 8.18^{**}$ , $R_{adj}^2 = .033$
Step 2	$F(3, 206) = 50.88^{**}$ , $R_{adj}^2 = .417$	$F(3, 207) = 20.51^{**}$ , $R_{adj}^2 = .218$	$F(3, 206) = 5.96^{**}$ , $R_{adj}^2 = .066$	$F(3, 207) = 35.63^{**}$ , $R_{adj}^2 = .331$	$F(3, 206) = 3.80^{*}$ , $R_{adj}^2 = .039$
	$\beta$ $t$	$\beta$ $t$	$\beta$ $t$	$\beta$ $t$	$\beta$ $t$
Trait EI (step 1)	-.579 .394	-.431 .250	-.274 .041	-.492 .288	-.194 .133
PAN-N	10.27** 6.06**	6.92** 3.30**	4.12** 0.49	8.17** 4.10**	2.86** 1.58
PAN-P	2.85** 2.42*	1.37 2.14*	0.42 2.64**	0.38 4.28**	.040 1.36
Trait EI (step 2)	-.201	-.208	-.281	-.384	-.147

Note: \* $p < .05$ ; \*\* $p < .01$ . <sup>a</sup>One outlier was removed from step 1 of the regression. <sup>b</sup>One outlier was removed from both steps of the regression. PAN-N = PANAS negative affectivity. PAN-P = PANAS positive affectivity.

TABLE 6

	IPDE antisocial <sup>a</sup>		IPDE borderline <sup>b</sup>		IPDE OCD		IPDE dependent		IPDE avoidant	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Step 1										
	$F(1, 207) = 4.11^*$ , $R_{\text{adj}}^2 = .015$		$F(1, 209) = 114.40^{**}$ , $R_{\text{adj}}^2 = .350$		$F(1, 210) = 16.50^{**}$ , $R_{\text{adj}}^2 = .068$		$F(1, 210) = 55.69^{**}$ , $R_{\text{adj}}^2 = .206$		$F(1, 210) = 105.57^{**}$ , $R_{\text{adj}}^2 = .331$	
Step 2										
	$F(3, 204) = 4.31^{**}$ , $R_{\text{adj}}^2 = .046$		$F(3, 206) = 44.78^{**}$ , $R_{\text{adj}}^2 = .386$		$F(3, 207) = 9.11^{**}$ , $R_{\text{adj}}^2 = .104$		$F(3, 207) = 23.72^{**}$ , $R_{\text{adj}}^2 = .245$		$F(3, 207) = 35.91^{**}$ , $R_{\text{adj}}^2 = .333$	
Trait EI (step 1)	-.139	2.03*	-.594	10.69**	-.270	4.06**	-.458	7.46**	-.578	10.28**
PAN-N	.146	1.74	.228	3.36**	.230	2.84**	.244	3.27**	.102	1.45
PAN-P	.190	2.06*	-.117	1.60	.090	1.01	.080	0.98	-.051	0.66
Trait EI (step 2)	-.186	1.73 <sup>c</sup>	-.386	4.44**	-.198	1.91 <sup>c</sup>	-.370	3.88**	-.485	5.41**

Note: \* $p < .05$ ; \*\* $p < .01$ . <sup>a</sup>Three outliers were removed from both steps of the regression. <sup>b</sup>One outlier was removed from both steps of the regression. <sup>c</sup> $p = .06$ . PAN-N = PANAS negative affectivity. PAN-P = PANAS positive affectivity.

encompass a number of outcome self-evaluations, such as self-esteem (Petrides & Furnham, 2001).

Global susceptibility factors are clinically useful, not least because they can account for the co-occurrence (comorbidity) of PDs and thus contribute to the identification of common aetiologies. The downside is that such factors are insufficient to explain the wide range of disorder-specific symptomatology, which limits their applicability in treatment contexts (Matthews et al., 2002; Zinbarg & Barlow, 1996). While this issue has broader implications for trait EI, the findings of this study highlight the scope for research in clinical settings.

## GENERAL DISCUSSION

As far as criterion validity is concerned, the data bore out 20 out of 21 hypotheses involving variables from the domains of personality, social, and clinical psychology. There can be little doubt that the constellation of emotion-related self-perceptions and dispositions that trait EI encompasses is implicated in numerous areas and will, therefore, be of interest to researchers and practitioners in many different fields.

In contrast to criterion validity, the investigation of the incremental validity of self-report measures of EI has led to considerable debate in the literature. A persistent criticism is that these measures add little, if any, predictive value over and above the basic personality dimensions (e.g., Matthews et al., 2002; Schulte et al., 2004). While we generally second these reservations, we do not believe they should be directed at self-report measures in general, but at the various models underpinning them. The tendency to lump self-report measures together and criticise them irrespective of their theoretical basis is problematic because it fails to differentiate between theories and measurement vehicles (Jensen, 1998).

Setting aside its psychometric advantages, the TEIQue is predicated on a theory that uniquely operationalises EI in a manner that resolves major criticisms about construct validity (Petrides et al., *in press-a*). In contrast, models operationalised through self-report questionnaires and theorising about abilities, competencies, or hitherto allegedly unknown dimensions of individual differences, are flawed in ways that have been discussed exhaustively in the scientific literature. Therefore, in what follows, we address incremental validity issues specifically from the perspective of trait EI theory.

The emphasis on questions of discriminant and incremental validity may be due to the fact that certain trait EI facets are already included in the established trait taxonomies (e.g., “assertiveness”, “adaptability”, “empathy”). As far as simple prediction is concerned, it would be interesting to

establish whether trait EI can account for statistically significant portions of criterion variance, once the variance of the facets that it shares with the basic personality dimensions has been removed. Alas, there is no generally accepted method of quantifying and removing overlapping variance due to *duplication* of facets. Overlapping variance can be removed in its entirety through statistical procedures, such as those employed in this paper. However, this drastic approach is problematic because it also removes variance due to valid associations between conceptually distinct constructs. For example, the correlation between “emotion expression” and Neuroticism is the result of a meaningful relationship between those two variables, rather than an artefact of facet duplication.

Removing overlapping variance stemming from meaningful associations, in addition to the spuriously overlapping variance stemming from duplication or common method assessment, strips trait EI of much, but not all—as this paper demonstrates—of its predictive power. Few personality and social psychology variables would retain much predictive validity following the removal of all of the variance they have in common with the Giant Three or the Big Five. Indeed, most constructs can be expressed as mixtures of the basic personality dimensions (Paunonen, 1998). However, such reconceptualisations fail to capture the essence of these constructs (Funder, 2001). It should come as no surprise that some weighted linear combination of the Giant Three or the Big Five personality factors accounts for a large amount of variance in most personality constructs (see O'Connor, 2002); it is precisely why these factors are deemed fundamental. The question critics must address is, what do we stand to gain by attempting to reconceptualise every construct at the lower levels of personality hierarchies as a mixture of the higher-order traits?

Another issue to consider is that incremental validity analyses in this and much other personality research are skewed. The crux lies in recognising that “personality” is not a unitary construct. When we ask whether trait EI, or any other variable, predicts “over and above personality” we are posing an inherently biased question. While trait EI carries only one degree of freedom, “personality” carries three (or five) and, consequently, it is far more likely to produce statistically significant associations with external criteria. Direct comparisons pitching a single trait EI variable against three (or five) personality variables are inevitably inequitable.

Bearing the foregoing in mind, we note that from a total of 17 hypotheses concerning incremental validity over the Big Five, 15 were borne out by the data. In addition, 9 out of 10 hypotheses concerning incremental validity over mood were also borne out by the data. These results were obtained with two different trait EI measures and data collected in two different countries. They complement results based on self-report (e.g., Saklofske et al., 2003), “real-life” (e.g., Petrides et al., 2004), and experimental (Petrides &



Furnham, 2003) criteria. As expected, given that a distinct trait EI factor can be isolated in Giant Three and Big Five factor space (Petrides et al., in press-b), trait EI predicts criterion variance over and above the basic dimensions of personality and mood.

In the context of so many statistically significant associations with such a broad range of criteria, questions may arise in relation to the construct's boundaries and discriminant validity. Note that, in this sense, the notion of discriminant validity concerns what the construct is *not* expected to predict, rather than whether it can be discriminated from the major personality dimensions (a question we address in Petrides et al., in press-b). As pointed out elsewhere (Petrides, Niven, & Mouskounti, 2006), and as this series of studies shows, the influence of emotions on most aspects of everyday life means that trait EI will be related to many different variables in many different contexts.

At the same time, obviously not all variables are affect-laden. We can, therefore, hypothesise that correlation strength will vary as a function of the affective load of a criterion, such that higher absolute values will be obtained with criteria that are more affectively relevant. We should witness near-zero correlations with IQ and heavily cognitive variables, like academic performance, at one end (see Petrides et al., 2004) and strong correlations with heavily affective variables, like depression and stress, at the other end (see Study 2 and Mikolajczak, Luminet, & Menil, 2006).

The paper's findings support a basic premise of trait EI theory, viz., that self-report questionnaires of EI and cognate variables operationalise a construct that is unrelated to capabilities, competencies, and skills. Rather, as we have argued elsewhere (Petrides & Furnham, 2001; Pérez et al., 2005), these questionnaires provide coverage, of variable quality and adequacy, of a constellation of emotion-related self-perceptions and dispositions that is located at the lower levels of personality hierarchies. The similarity of the results obtained through the modified EQ-i (Study 1) and the TEIQue (Studies 2 and 3) corroborates the generality of trait EI theory, which provides a platform for the interpretation of data from any EI questionnaire (see Saklofske et al., 2003, for comparable findings based on another scale). However, we must emphasise that EI-related questionnaires are measures of trait EI *only in so far as their results are interpreted through the lens of trait EI theory*. Consequently, we urge researchers and practitioners to abandon the mushrooming number of models emanating from commercial test user manuals, in clear favour of trait EI theory.

So what does this paper tell us about the "importance" of trait EI as an individual differences variable? The evidence shows that trait EI is potentially important, inasmuch as it is implicated in many different domains, with findings that are consistent across different measures, languages, and countries. Much trait EI research has been based on global

scores, as opposed to factor or subscale scores. The emphasis on global scores has been beneficial for two reasons. First, it has helped retain research focus on the development of the nomological network of the construct, instead of on introspective debates about factor structure. Second, because global scores are much less sensitive than factor scores to sampling domain variability across instruments, their use has helped develop and sustain a common research database that goes beyond specific models.

Global scores are not without drawbacks, foremost among which is a relative loss in explanatory power. This limitation can be overcome through the identification of robust and homogeneous clusters of trait EI facets. However, little is currently known about the factor structure of trait EI. Although relevant factor analytic data exist in the literature (e.g., Austin, Saklofske, Huang, & McKenney, 2004; Ciarrochi, Deane, & Anderson, 2002; Petrides & Furnham, 2000), they preceded the content analysis that gave rise to the sampling domain of trait EI (Petrides & Furnham, 2001) and hence are tied to early specific models. We expect that ongoing research with the TEIQue (Studies 2 and 3) will soon lead to substantial progress in this direction.

Trait EI theory is general and enables the meaningful interpretation of results from all EI questionnaires, which tend to be based on flawed conceptions, especially the notion that abilities can somehow be measured via self-report. As a multifactorial instrument, specifically designed to provide a measurement vehicle for trait EI theory, the TEIQue can be used for detailed analyses at the factor and subscale levels to address the aforementioned limitations of global scores. Such analyses would also go some way towards balancing the inherently biased comparisons in incremental validity studies that pitch a single degree of freedom for trait EI against multiple degrees of freedom for personality.

Much progress has been achieved in trait EI research, with the initial stage of construct operationalisation virtually complete and questions concerning measurement and validity conclusively addressed (Petrides et al., in press-a). New research questions should now be formulated such that they force a shift of emphasis from applied predictive utility to theoretical explanatory power. Ultimately, it is the latter of the two that will determine the importance of trait EI as an individual differences variable.

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## Appendix G

Abstract: Social Information Processing and  
Emotional Understanding in Children with LD

#2 (3)

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#### CITATION

Database: PsycINFO  
(Journal Article)  
Social Information Processing and Emotional Understanding in Children with LD.  
Bauminger, Nirit; Edelsztein, Hany Schorr; Morash, Janice  
Journal of Learning Disabilities. 2005 Jan-Feb Vol 38(1) 45-60

#### ABSTRACT

The present study aimed to comprehensively examine social cognition processes in children with and without learning disabilities (LD), focusing on social information processing (SIP) and complex emotional understanding capabilities such as understanding complex, mixed, and hidden emotions. Participants were 50 children with LD (age range 9.4-12.7; 35 boys, 15 girls) and 50 children without LD matched on grade, age, and gender. Children analyzed 4 social vignettes using Dodge's SIP model and completed 2 emotional recognition tasks (pictures and stories) and 4 emotional knowledge tasks, such as providing definitions and examples for 5 emotions (e.g., loneliness, pride, embarrassment). Study results demonstrated that children with LD had major difficulties in SIP processes and consistent difficulties with the different tasks in the understanding of complex emotions and in higher emotional understanding capabilities, such as understanding that 2 conflicting emotions (love and hate) can be simultaneously experienced. We discuss the implications of such difficulties for the understanding of social competence in children with LD as well as their implications for social skills intervention. (PsycINFO Database Record (c) 2007 APA, all rights reserved)

#### FULL RECORD DISPLAY

Unique Identifier  
2005-01315-004  
Title  
Social Information Processing and Emotional Understanding in Children with LD.  
Publication Year  
2005  
Language  
English  
Author  
Bauminger, Nirit; Edelsztein, Hany Schorr; Morash, Janice  
Email  
Bauminger, Nirit; bauminn@mail.biu.ac.il  
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Edelsztein, Hany Schorr Department of Special Education, Bar-Ilan University, Ramat-Gan, Israel  
Morash, Janice Department of Special Education, Bar-Ilan University, Ramat-Gan, Israel  
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Keywords  
cognition processes; social information processing; emotional children; learning disabilities; emotional understanding capabilities  
Index Terms  
\*Child Attitudes; \*Emotions; \*Learning Disabilities; \*Psychosocial Development; \*Social Cognition; \*Comprehension  
Classification Codes  
3253 Learning Disorders  
Population Group  
Human; Male; Female  
Age Group  
Childhood (birth-12 yrs); School Age (6-12 yrs)  
Location  
Israel  
Methodology

http://psycnet.apa.org/index.cfm?fa=search.displayRecord&id=50E90F1D-B4D6-D260-5F... 7/23/2008

Appendix H  
Abstract: Human Abilities: Emotional  
Intelligence

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#### CITATION

Database: PsycINFO  
(Journal Article)  
Human abilities: Emotional Intelligence.  
Mayer, John D.; Roberts, Richard D.; Barsade, Sigal G.  
Annual Review of Psychology, 2008 Vol 59 507-536

#### ABSTRACT

Emotional intelligence (EI) involves the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought. We discuss the origins of the EI concept, define EI, and describe the scope of the field today. We review three approaches taken to date from both a theoretical and methodological perspective. We find that Specific-Ability and Integrative-Model approaches adequately conceptualize and measure EI. Pivotal in this review are those studies that address the relation between EI measures and meaningful criteria including social outcomes, performance, and psychological and physical well-being. The Discussion section is followed by a list of summary points and recommended issues for future research. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

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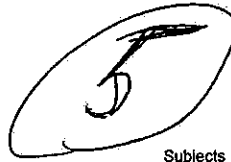
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2008-00192-019  
Title  
Human abilities: Emotional Intelligence.  
Publication Year  
2008  
Language  
English  
Author  
Mayer, John D.; Roberts, Richard D.; Barsade, Sigal G.  
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Barsade, Sigal G. Wharton School, University of Pennsylvania, Philadelphia, PA, US  
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Keywords  
human abilities; emotional intelligence; emotions; reasoning; thought  
Index Terms  
Ability; Emotional Intelligence; Emotions; Reasoning; Well Being  
Classification Codes  
3120 Personality Traits & Processes  
Population Group  
Human  
Methodology  
0800 Literature Review  
Release Date  
20080204

#### LINKS

<http://psycnet.apa.org/index.cfm?fa=search.displayRecord&id=51258E22-F17C-7835-920...> 7/23/2008

## Appendix I

Abstract: Showing and Telling About Emotions:  
Interrelations Between Facets of Emotional  
Competence and Associations with Classroom  
Adjustment in Head Start Preschools



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**CITATION**

Database: PsycINFO  
[Journal Article]  
Showing and telling about emotions: Interrelations between facets of emotional competence and associations with classroom adjustment in Head Start preschoolers.  
Miller, Alison L.; Fine, Sarah E.; Gouley, Kathleen Kely; Seifer, Ronald; Dickstein, Susan; Shields, Ann  
Cognition & Emotion. 2006 Dec Vol 20(8) 1170-1192

**ABSTRACT**

In this study of low income preschoolers (N = 60), we examined relations between three facets of emotional competence: emotion knowledge, level of negative emotion expression, and emotion regulation; and their associations with indicators of classroom adjustment. Emotion knowledge was positively related to positive emotion regulation but was not related to negative emotion expression or negative dysregulation. Negative emotion expression related to emotion regulation variables in expected directions. Negative emotion expression was associated with aggression and social skills after covarying verbal ability, age, and emotion knowledge. Negative dysregulation was related in expected directions to aggression, anxiety, and social skills after covarying verbal ability, age, emotion knowledge, and negative emotion expression. Positive emotion regulation was related negatively to anxiety and positively to social skills after covarying all other variables in the model. Results are discussed with regard to using the emotional competence domain to understand how emotion processing relates to early childhood adjustment. (PsycINFO Database Record (c) 2007 APA, all rights reserved)

*early & not  
comp.  
related 2  
early childhood  
adjustment*

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Unique Identifier  
2006-22236-007  
Title  
Showing and telling about emotions: Interrelations between facets of emotional competence and associations with classroom adjustment in Head Start preschoolers.  
Publication Year  
2006  
Language  
English  
Author  
Miller, Alison L.; Fine, Sarah E.; Gouley, Kathleen Kely; Seifer, Ronald; Dickstein, Susan; Shields, Ann  
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Seifer, Ronald Brown University School of Medicine, Bradley Hospital, East Providence, RI, US  
Dickstein, Susan Brown University School of Medicine, Bradley Hospital, East Providence, RI, US  
Shields, Ann University of Michigan, Ann Arbor, MI, US  
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10.1080/02699930500405691  
Keywords  
emotional competence; emotion knowledge; emotion expression; emotion regulation; preschoolers; classroom adjustment; Head Start  
Index Terms  
\*Classroom Behavior; \*Emotional Control; \*Emotional Development; \*Preschool Students; \*School Adjustment; Emotional Responses; Project Head Start

Appendix J  
Abstract: On the Criterion and Incremental  
Validity of Trait Emotional Intelligence

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#### CITATION

Database: PsycINFO  
[Journal Article]  
On the criterion and incremental validity of trait emotional intelligence.  
Petrides, K. V.; Pérez-González, Juan Carlos; Furnham, Adrian  
Cognition & Emotion. 2007 Jan Vol 21(1) 28-55

#### ABSTRACT

This paper presents a comprehensive investigation of the criterion and incremental validity of trait emotional intelligence (trait EI or trait emotional self-efficacy), which is defined as a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies (Petrides & Furnham, 2001). In Studies 1 and 2 (N = 166 and 354, respectively) trait EI is shown to be related to measures of rumination, life satisfaction, depression, dysfunctional attitudes, and coping. Most relationships remained statistically significant even after controlling for Big Five variance. In Study 3 (N = 212) trait EI is shown to be related to depression and nine distinct personality disorders. Most relationships remained significant, even after controlling for positive and negative affectivity (mood). It is concluded that trait EI has a role to play in personality, clinical, and social psychology, often with effects that are incremental over the basic dimensions of personality and mood.  
(PsycINFO Database Record (c) 2007 APA, all rights reserved)

#### FULL RECORD DISPLAY

Unique Identifier  
2006-23214-003  
Title  
On the criterion and incremental validity of trait emotional intelligence.  
Publication Year  
2007  
Language  
English  
Author  
Petrides, K. V.; Pérez-González, Juan Carlos; Furnham, Adrian  
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Keywords  
criterion validity; incremental validity; trait emotional intelligence; affectivity; emotional self-efficacy  
Index Terms  
\*Affect; \*Emotional Intelligence; \*Emotions; \*Self Efficacy; \*Statistical Validity  
Classification Codes  
3120 Personality Traits & Processes  
Population Group  
Human; Male; Female  
Age Group  
Adulthood (18 yrs & older)  
Location  
United Kingdom  
Methodology



## Appendix K

Abstract: Socioemotional and Academic  
Adjustment Among Children with Learning  
Disorders: The Mediational Role of Attachment-  
Based Factors



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#### CITATION

Database: PsycINFO  
[Journal Article]  
Socioemotional and academic adjustment among children with learning disorders: The mediational role of attachment-based factors.  
Al-Yagon, Michal; Mikulincer, Mario  
The Journal of Special Education. 2004 Sum Vol 38(2) 111-123

#### ABSTRACT

This study examined the role of attachment-based factors (children's attachment style, children's appraisal of teacher as a secure base, and teacher's feelings of closeness to child) in explaining differences in Israeli children's socioemotional adjustment (self-rated sense of coherence, loneliness) and academic functioning (teacher-rated). The sample comprised 98 children with learning disorders from general education classes in four public elementary schools and 107 typically developing children from the same classes. Significant intergroup differences emerged in socioemotional and academic adjustment as well as attachment-based factors. Moreover, attachment-based factors were significantly correlated with adjustment measures and significantly mediated the association between learning disorders and socioemotional adjustment. The findings are discussed in terms of the theoretical and practical implications rendered by children's experiences in close relationships on socioemotional adjustment among school-age children with learning disorders. (PsycINFO Database Record (c) 2007 APA, all rights reserved)

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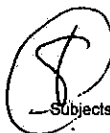
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Socioemotional and academic adjustment among children with learning disorders: The mediational role of attachment-based factors.  
Publication Year  
2004  
Language  
English  
Author  
Al-Yagon, Michal; Mikulincer, Mario  
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Affiliation  
Al-Yagon, Michal Tel Aviv University, Ramat-Aviv, Israel  
Mikulincer, Mario Bar-Ilan University, Ramat Gan, Israel  
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socioemotional adjustment; academic adjustment; learning disorders; attachment based factors; teacher student relationships  
Index Terms  
\*Academic Achievement; \*Attachment Behavior; \*Emotional Adjustment; \*Learning Disabilities; \*Teacher-Student Interaction; Loneliness  
Classification Codes  
3570 Special & Remedial Education  
Population Group  
Human; Male; Female  
Age Group  
Childhood (birth-12 yrs); School Age (8-12 yrs)  
Location  
Israel  
Methodology

Appendix L  
Abstract: On the Interdependence of Cognition  
and Emotion

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#### CITATION

Database: PsycINFO  
[Journal Article]  
On the interdependence of cognition and emotion.  
Storbeck, Justin; Clore, Gerald L.  
Cognition & Emotion, 2007 Sep Vol 21(6) 1212-1237

#### ABSTRACT

Affect and cognition have long been treated as independent entities, but in the current review we suggest that affect and cognition are in fact highly interdependent. We open the article by discussing three classic views for the independence of affect. These are (i) the affective independence hypothesis, that emotion is processed independently from cognition, (ii) the affective primary hypothesis, that evaluative processing precedes semantic processing, and (iii) the affective automaticity hypothesis, that affectively potent stimuli commandeer attention and evaluation is automatic. We argue that affect is not independent from cognition, that affect is not primary to cognition, nor is affect automatically elicited. The second half of the paper discusses several instances of how affect influences cognition. We review experiments showing affective involvement in perception, semantic activation, and attitude activation. We conclude that one function of affect is to regulate cognitive processing. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

#### FULL RECORD DISPLAY

Unique Identifier  
2007-13228-004  
Title  
On the interdependence of cognition and emotion.  
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2007  
Language  
English  
Author  
Storbeck, Justin; Clore, Gerald L.  
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Clore, Gerald L. University of Virginia, Charlottesville, VA, US  
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10.1080/02699930701438020  
Keywords  
interdependence; cognition; emotion; cognitive processing; semantic processing  
Index Terms  
Cognition; Cognitive Processes; Emotions; Semantics; Attention; Evaluation  
Classification Codes  
2340 Cognitive Processes  
Population Group  
Human  
Grant Sponsorship  
Support for this research is acknowledged from National Institute of Mental Health Grant MH 50074 to GLC.  
Release Date  
20080121

*Emotion & Cognition are highly interdependent*

*1 function of Affect is 2 regulate Cognitive Processing*

#### LINKS

<http://psycnet.apa.org/index.cfm?fa=search.displayRecord&id=45D446D8-BCBE-3A6D-...> 7/21/2008

## Appendix M

Abstract: How Distinctive is Affective Processing?  
On the Implications of Using Cognitive Paradigms to  
Study Affect and Emotion

Mary Kasper Logout

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Subjects

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**CITATION**

Database: PsycINFO  
[Journal Article]  
How distinctive is affective processing? On the implications of using cognitive paradigms to study affect and emotion.  
Eder, Andreas B.; Hommel, Bernhard; De Houwer, Jan  
Cognition & Emotion, 2007 Sep Vol 21(8) 1137-1154

**ABSTRACT**

Influential theories on affect and emotion propose a fundamental differentiation between emotion and cognition, and research paradigms designed to test them focus on differences rather than similarities between affective and cognitive processes. This research orientation is increasingly challenged by the widespread and successful use of cognitive research paradigms in the study of affect and emotion—a challenge with far-reaching implications. Where and on what basis should theorists draw the line between cognition and emotion, and when is it useful to do so? Should researchers build more global, integrative models of cognition and emotion, or should they rely on local, content-specific models that draw attention to a differentiation between affective and cognitive processes? This special issue compiles different viewpoints on fundamental issues in the relationship between affect and cognition. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

**FULL RECORD DISPLAY**

Unique Identifier  
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Title  
How distinctive is affective processing? On the implications of using cognitive paradigms to study affect and emotion.  
Publication Year  
2007  
Language  
English  
Author  
Eder, Andreas B.; Hommel, Bernhard; De Houwer, Jan  
Email  
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De Houwer, Jan Ghent University, Ghent, Belgium  
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10.1080/02699930701437396  
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affective processing; implications; cognitive paradigms; emotion; cognition; cognitive processes  
Index Terms  
\*Cognitions; \*Cognitive Processes; \*Emotions; Attention  
Classification Codes  
2340 Cognitive Processes  
Population Group  
Human  
Release Date  
20080121

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emotion & cognition related

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## Appendix N

Abstract: Affect is a Form of Cognition: A  
Neurobiological Analysis

Mary Kasper Logout

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#### CITATION

Database: PsycINFO  
[Journal Article]  
Affect is a form of cognition: A neurobiological analysis.  
Duncan, Seth; Barrett, Lisa Feldman  
Cognition & Emotion. 2007 Sep Vol 21(6) 1184-1211

#### ABSTRACT

In this paper, we suggest that affect meets the traditional definition of "cognition" such that the affect-cognition distinction is phenomenological rather than ontological. We review how the affect-cognition distinction is not respected in the human brain, and discuss the neural mechanisms by which affect influences sensory processing. As a result of this sensory modulation, affect performs several basic "cognitive" functions. Affect appears to be necessary for normal conscious experience, language fluency, and memory. Finally, we suggest that understanding the differences between affect and cognition will require systematic study of how the phenomenological distinction characterising the two comes about, and why such a distinction is functional. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

#### FULL RECORD DISPLAY

Unique Identifier  
2007-13228-003  
Title  
Affect is a form of cognition: A neurobiological analysis.  
Publication Year  
2007  
Language  
English  
Author  
Duncan, Seth; Barrett, Lisa Feldman  
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Barrett, Lisa Feldman: barrett@bc.edu  
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Lisa Feldman Barrett, Department of Psychology, Boston College, Chestnut Hill, MA, US, 02467, barrett@bc.edu  
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Duncan, Seth Boston College, Chestnut Hill, MA, US  
Barrett, Lisa Feldman Department of Psychology, Boston College, Chestnut Hill, MA, US  
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affect; cognition; neurobiological analysis; human brain; sensory processing; neural mechanisms  
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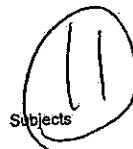
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## Appendix O

Abstract: The Discrimination of Angry and Fearful  
Facial Expressions in 7-Month Old Infants: An  
Event-Related Potential Study

Mary Kasper Logout



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**CITATION**

Database: PsycINFO  
[Journal Article]  
The discrimination of angry and fearful facial expressions in 7-month-old infants: An event-related potential study.  
Kobiella, Andrea; Grossmann, Tobias; Reid, Vincent M.; Striano, Tricia  
Cognition & Emotion. 2008 Jan Vol 22(1) 134-146

**ABSTRACT**

The important ability to discriminate facial expressions of emotion develops early in human ontogeny. In the present study, 7-month-old infants' event-related potentials (ERPs) in response to angry and fearful emotional expressions were measured. The angry face evoked a larger negative component (Nc) at fronto-central leads between 300 and 600 ms after stimulus onset when compared to the amplitude of the Nc to the fearful face. Furthermore, over posterior channels, the angry expression elicited a N290 that was larger in amplitude and a P400 that was smaller in amplitude than for the fearful expression. This is the first study that shows that the ability of infants to discriminate angry and fearful facial expressions can be measured at the electrophysiological level. These data suggest that 7-month olds allocated more attentional resources to the angry face as indexed by the Nc. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

**FULL RECORD DISPLAY**

Unique Identifier  
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Title  
The discrimination of angry and fearful facial expressions in 7-month-old infants: An event-related potential study.

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2008

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English

Author  
Kobiella, Andrea ; Grossmann, Tobias ; Reid, Vincent M. ; Striano, Tricia

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Reid, Vincent M. Durham University, Durham, United Kingdom  
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Classification Codes  
2800 Developmental Psychology

Population Group  
Human; Male; Female

Age Group  
Childhood (birth-12 yrs); Infancy (2-23 mo)

Methodology

↓  
infants as  
early as 7  
mo. do  
respond to  
+ doc. bhan  
Negative emotions

## Appendix P

Abstract: The Role of Maltreatment in Children's  
Understanding of the Antecedents of Emotion

Mary Kasper Logout

12

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CITATION

Database: PsycINFO  
[Journal Article]  
The role of maltreatment experience in children's understanding of the antecedents of emotion.  
Perlmutter, Susan B.; Kalish, Charles W.; Pollak, Seth D.  
Cognition & Emotion. 2008 Jun Vol 22(4) 651-670

*Early Maltreatment*

ABSTRACT

The ability to understand the causes and likely triggers of emotions has important consequences for children's adaptation to their social environment. Yet, little is currently known about the processes that contribute to the development of emotion understanding. To assess how well children understood the antecedents of emotional reactions in others, we presented children with a variety of emotional situations that varied in outcome and equivocality. Children were told the emotional outcome and asked to rate whether a situation was a likely cause of such an outcome. We tested the effects of maltreatment experience on children's ability to map emotions to their eliciting events and their understanding of emotion-situation pairings. The present data suggest that typically developing children are able to distinguish between common elicitors of negative and positive events. In contrast, children who develop within maltreating contexts, where emotions are extreme and inconsistent, interpret positive, equivocal, and negative events as being equally plausible causes of sadness and anger. This difference in maltreated children's reasoning about emotions suggests a critical role of experience in aiding children's mastery of the structure of interpersonal discourse. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

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Unique Identifier  
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Author  
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Pollak, Seth D. University of Wisconsin at Madison, Madison, WI, US  
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Childhood (birth-12 yrs); Preschool Age (2-5 yrs); School Age (6-12 yrs)  
Location

http://psycnet.apa.org/index.cfm?fa=search.displayRecord&id=45D446D8-BCBE-3A6D-... 7/21/2008

Appendix Q  
Abstract: Gray Matter: Redefining Mental  
Retardation in Capital Murder

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#### CITATION

Database: PsycINFO  
[Journal Article]  
Gray matter: Redefining mental retardation in capital murder.  
Gross, Bruce  
The Forensic Examiner, 2007 Fall Vol 16(3) 57-60

#### ABSTRACT

Jorge Junior Vidal born in Delano, California, on October 23, 1969 was charged with murder. Across various administrations, Vidal consistently scored in the mentally retarded range in terms of his Verbal Intelligence Quotient (VIQ), while his Performance Intelligence Quotient (PIQ) ranged from average to high average, Vidal's Full Scale Intelligence Quotient (FSIQ) ranged from borderline mental retardation to average intelligence. In mid-March 2004, the Superior Court judge ruled that Vidal met his burden of proof. The judge reasoned that Vidal's VIQ (combined with clear deficits in adaptive functioning) was sufficient to establish a severe lack of verbal ability that went to the issues of "premeditation, deliberation, appreciation of concepts of wrongful conduct, ability to think and weigh reasons for and not for doing things and logic (and) foresight," as proscribed by Atkins. A finding that Vidal was, in fact, mentally retarded was issued, thereby blocking the prosecution from seeking the death penalty. To ensure that neither proceedings nor the punishment of a capital crime of those with mental retardation is cruel, unusual, or excessive, the trier of fact must be given more information than is necessary for making a clinical diagnosis. A thorough forensic evaluation of intellectual and adaptive functioning must address each and every aspect of intelligence as provided in the legal definition of mental retardation. (PsycINFO Database Record (c) 2008 APA, all rights reserved)

#### FULL RECORD DISPLAY

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Title  
Gray matter: Redefining mental retardation in capital murder.  
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Population Group  
Human  
Release Date  
20080114

#### INDEX TERMS

[Adjudication](#)  
[Capital Punishment](#)  
[Forensic Evaluation](#)

Appendix R  
Preliminary Report from Dr. Janice Stevenson



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Mark Gruber Esq.

This letter will contain the conclusions and recommendations resulting from the clinical interviews and evaluation of Richard Henyard. Mr. Henyard participated in over 6 hours of interviews on July 24, 2008.

In the course of the interviews, this examiner completed a trauma assessment and a timeline from the perspective of Mr. Henyard. In this report, this examiner will present the conclusions of the interviews and record review, the recommendations, and developmental progression of those dynamics that contributed directly to his crime which resulted in his incarceration during his adolescence.

You have a copy of my resume, which is attached to this communication. That resume indicates that I have over thirty years of experience assessing and treating traumatized children, adolescents, and families in community mental health setting and facilities, including social service programs and juvenile justice programs, and over twelve years experience working with adolescent, young adult and adult capital offender defendants in pre-trial and post conviction circumstances. I have been qualified as an expert in the field of psychology and child trauma in multiple state and federal courts. I have worked with attorneys in public defender offices California, Arizona, Florida, Maryland, Illinois, and Washington, D.C. I currently manage two clinical programs and consult in 3 others. My specialty is working with traumatized children, adolescents, and families.

#### **CONCLUSIONS:**

Mr. Henyard demonstrated and confirmed presence of behaviors consistent with persons diagnosed with:

- Axis I: Post Traumatic Stress Disorder, chronic and severe, undiagnosed and untreated
- Axis II: Dependent Personality Disorder with Dissociative features
- Axis III: Skin Rashes
- Axis IV: Legal, Primary Support, Housing
- Axis V: 35

This diagnostic profile and the accompanying traumatizing sexual abuse events had a direct and diagnostic impact upon the crime for which Mr. Henyard was convicted. Mr. Henyard unconsciously re-enacted the concrete elements of his physical and sexual abuse as a very young child in the elements of his crime, the revelation of which resulted in an emotional catharsis by Mr. Henyard. Mr. Henyard passively followed the directions of a



younger 'friend' so that he would not lose the friendship of someone who did not tease, fight, or torment him, like peers had since elementary school. That revelation allowed Mr. Henyard to recognize that this person, his co-defendant was not a friend because "friends would not do that (lead one into a crime) to a friend." The sexual assaults of the victim were emotional and physical re-enactments of the prostitution exposure for the little boy as Mr. Henyard sat on the trunk of the car watching as his co-defendant raped the victim.

Mr. Henyard has evolved a passive, reactive belief system in a child's effort to make sense of repeated episodes of neglect, physical abuse, abandonment, and sexual abuse from his early childhood through adolescence by his primary caregivers. His relationships and decision making ability since his early latency and adolescent years have been defined and compromised by the trauma of the abuse by his stepmother and the dominance (or submission) and power (or powerlessness) inherent in that abusive relationship. The impact of the multiple neglect and abandonment events was further compromised by dissociation and detachment (as coping mechanisms) in the years preceding the commission of the crime, and was negatively affected by adolescent drug addiction.

As happens frequently in incidents of multiple and complex exposure to traumas, Mr. Henyard has experienced an arrested or blocked development of his emotional and cognitive functioning, with his emotional growth stopping at about five years of age. The role of treatment is to resolve the experience of overwhelm generated by the traumatic events, and allow the victim to sort out and give meaning to the unthinkable events that occurred in a safe and trusting environment. This statement means that his behavior is consistent with the behavior of five year old children in that:

- he follows direction from others,
- he has a black /white understanding of life with little gray in his thinking and minimal ability for abstract thinking,
- he is still developing a fully functional conscience,
- when he feels emotions, they tend to fill the room up as if comfort was impossible,
- And he relies on others to indicate risk of harm or danger as well to interpret the world around him.

Over the course of his life, Mr. Henyard has masked a Passive Personality Disorder with a false bravado. He has evolved a collection of defense mechanisms that have merged into a dependency on younger persons so that he can perceive himself as safe and attempt to believe his social value as a friend.

**TRAUMA ASSESSMENT:** In an assessment to identify important life experiences that can affect a person's emotional well-being or later quality of life. The events are far more common than most of us realize. Mr. Henyard indicated that he had experienced:

1. The sudden and unexpected death of a close friend or loved one due to murder to which he experienced intense fear, helplessness and horror when it happened.

2. Being robbed and being present during a robbery in which the robber used or displayed a weapon.
3. Being hit and beaten up and badly hurt by a stranger or someone he didn't know very well more than five times and in which he was seriously injured.
4. Seeing a stranger or someone he didn't know very well attack and beat up someone and seriously injure or kill him or her three times.
5. While growing up, he was physically punished in a way that resulted in bruises, burns, cuts, or broken bones more than five times to which he experienced intense fear, helplessness, and horror when it happened.
6. Before his thirteenth birthday someone who was at least five years older than he touched and fondled his body without his consent and against his will in a sexual way and make him touch and fondle his body in a sexual way at least twice. The person was a friend or acquaintance. He experienced intense fear, helplessness, and horror when it happened.
7. When he was sixteen years old, his intimate partner had an abortion without his consent and against his will to which he experienced intense fear, helplessness, and horror when he learned about it.
8. He has experienced and seen events that were life threatening, caused serious injury, and were highly disturbing and distressing (his case) to which he experienced intense fear, horror, and helplessness when it happened.

The sum total of his life experiences meets five out of the six criteria for Post Traumatic Stress Disorder, Severe, and Chronic. In addition, he reported and documentation confirms that he experienced years of repeated abandonment and neglect by each of his parents and his secondary significant caregiver.

Research in the domain of Trauma Assessment and Treatment strongly documents the crucial role of family as “a secure base” (Blaustein, M.E. & Kinniburgh, K.M. 2005) when intervening with complex and multiple trauma events in the life of a child and adolescent:

*“Early childhood experiences play a crucial role in long-term outcomes. In normative development, the attachment system provides the safe container that allows children to cope with and filter the vast amount of new experiences they are exposed to on a daily basis. Within the safety of that attachment system, children are able to explore their worlds, and develop a range of skills, including the ability to regulate their body and emotions, build an early understanding of self and others, and over time, develop an array of increasingly sophisticated developmental competencies.*

*The attachment system may also act as a key resiliency factor for children who are exposed to distressing experiences. A secure attachment can act as a buffer to mitigate the impact of overwhelming stressors, and to support recovery and healing.*

*When attachment systems are compromised or distressed, children develop adaptations that help keep them safe. However, a consequence of these adaptations is often a failure to adequately develop key competencies, including notable the ability to regulate emotions and experiences. This lack of age appropriate coping and continued reliance on*

*more rudimentary skills often leads to significant difficulties as children progress through childhood. Many of the problem behaviors which emerge in the elementary school years and persist over time – and which lead to service system referral – may be traced back to early disruptions in care giving.*

*The role of exposure to traumatic stress in childhood has been well documented. Children who have experienced traumatic events have an array of difficulties which include, but are not limited to posttraumatic stress disorder (PTSD). Beyond PTSD, these children may demonstrate behavioral difficulties, trouble with relationships, increased rates of academic failure, and high risk behaviors such as substance abuse and sexual risk taking.*

*Experiencing multiple childhood adversities carries incremental and potentially widespread risk. The symptom picture for a child who has experienced chronic and/or multiple traumas is qualitatively distinct from one who has experience an acute traumatic event. The role of the attachment system may be crucial in understanding this differential impact. For these children, not only is the care giving system unable to buffer experiences, the care giving system itself becomes the source of distress. The significance of the overlay of maltreatment and impaired attachment has led to attempts to better understand this dual impact, and to classify those types of trauma which occur within the care giving system as distinct from un-interpersonal or adult-onset traumatic events.” (Blaustein, Kinniburgh, 2005)*

*“The DSM--IV Field Trial found that victims of prolonged interpersonal trauma, particularly trauma early in the life cycle, had a high incidence of problems with (A) regulation of affect and impulses, (B) memory and attention, (C) self-perception, (D) interpersonal relations, (E) somatization, and (F) systems of meanings.” (Van der Kolk, et. al, 2005)*

## **RECOMMENDATIONS:**

1. Psychotherapeutic and psychiatric treatment for complex trauma disorders
2. Change sentence to life without parole to allow opportunity for psychiatric treatment. Research is defining the value of commuting sentences from death to life and the risk of future dangerousness and violence with lifers. For example, research by Mark D. Cunningham Ph.D. and Thomas J. Reidy Ph.D noted forensic researchers, scholars, and psychologists informs us that:
  - a. When the disciplinary records of 39 Indiana death row inmates who were transferred to the general prison population following medication of their sentences from death to capital life between 1972 and 1999, the majority of these former death row inmates were not a significant management problem in the general prison population. (Reidy et.al, 2001);
  - b. Younger age and shorter sentences were associated with increased violent misconduct. Older age, drug conviction, and higher education attainment were associated with reduced violent misconduct when an assessment of prison violence was undertaken with retroactive disciplinary records for

inmates in the Florida Department of Correction in 2002. (Cunningham, M.D. & Sorensen, J.R. 2006);

- c. In comparing the disciplinary behavior of 1897 inmates sentenced to LWOP in the Florida Department of Corrections to that of 7, 147 inmates servicing sentences of 10-30 or more years, the data showed that the likelihood and pattern of disciplinary infractions and potentially violent rule infractions among LWOP inmates during 1998 to 2003 is broadly similar to that of other long-term inmates, supporting a conclusion that LWOP inmates act as a stabilizing rather than disruptive force in the prison environment. (Cunningham, M.D. & Sorensen, J.R., 2006)

**PSYCHO-SOCIAL ASSESSMENT:** Please refer to the numerous documents from his childhood records and his DOC records for a complete description of his life to date with documentation. In this document, I will present his description of his life predominately in his own words.

Mr. Henyard was born and raised in Eustis, Florida. His mother and father were not together, married or living together. He did not know his father until he was eleven years old. Mr. Henyard was raised back and forth by his mother, who was a drug addict and a prostitute, and his godmother, who was living a much more mainstream life. As he describes, *“from the time I knew how to walk to and unlock doors, I would go by myself to my Godmother’s house and back. I made up my mind to go to my godmother’s house and would go.”* He is apparently describing a walk of a mile to a mile and a half between the two homes. As early as three or four years old, this little boy would unlock the door when the power was out, his mother was high, or his mother was not paying attention in other ways, and walk that distance in day and night, rain or shine to the home of the godmother. He described his mother as not even missing him for days or weeks at a time, after which she would call the godmother to ask about her son. He would hear the call and unlock the door of the godmother’s home and walk back home.

When asked if neighbors and passersby would stop him or check on him, Mr. Henyard seemed surprised by the question, stating: *“Most people know me, would speak to me and I keep going.”* He stated that *“most of the time I would just go back on my own. I was a Momma’s Boy. At my Mom’s home, I had no rules. I could stay out all night. I could hang out in the bad parts of town. When I was eleven years old, I would go into the night clubs.”* When asked how, since he was a kid, Mr. Henyard replied: *“I would just walk in. They knew me, we were ‘Ba-Ba’ kids, and my Mom was turning tricks.”*

In tears, Mr. Henyard described sitting on the end of his mother’s bed watching the only television they had when the power was on and his mother was turning tricks behind him on the bed. He would turn the TV volume up higher. *“I don’t like to talk about this stuff. I only told one or two other people.”* He described going to school later in his childhood and adolescence where he would be teased by and wind up fighting other boys who had been with his mother the night before. They knew he knew they were there. They saw each other. The teasing just made sure everybody knew. He had to fight to defend his

embarrassment. He never told his mother why he was fighting. After all, she was the reason for the problem. He did not want to worry her more.

Mr. Henyard also described his mother having female lovers. He described kids beating him up because he had *“two mommies”*. Mr. Henyard stated: *“I should have done what my sister did and run away. I went to my Godmother’s house. I thought it (the beatings) was because of her that it happened. Therefore, why go tell her?”*

Even though Mr. Henyard went to his Godmother’s home for comfort, he always went back to his Mom’s. His Mom had two rules. The first rule was if you use drugs, use them at home. So, he started using marijuana at about nine years old and was drinking before nine years old. *“When we had power, I went to the refrigerator and got a beer.”* Mr. Henyard did not know that his family (Mother, sister, and himself) were not like everyone else. *“The only other family I saw was my Godmother’s family. So, I thought everyone was like us – even though my Mom messed and even though my Godmother was different (had hot meals and did not do beatings), I thought families was like this.”*

*“It is in my file that I was sexually abused by a babysitter who was a friend of my Mom’s. The Mom of the babysitter was a friend of my Mom. He was not a drug addict. He was an older dude from the neighborhood. He had us fondle each other two or three times. No one did anything about it.”*

When Mr. Henyard was eleven years old, his Godmother’s older son saw him at an adult club one night and told the Godmother, who called Mr. Henyard’s biological father. She called him on a Wednesday. On Friday, he arrived to collect his son. It was the first time Mr. Henyard met his father. He left to go with the father who was a truck driver and away from the home he shared with his wife, Mr. Henyard’s stepmother. The stepmother met them half way and collected Mr. Henyard so the father could continue his route. She immediately informed Mr. Henyard that she did not like him or want him in her home. *“I don’t love you. I don’t want you in my house.”* That relationship continued to go downhill from there. *“I think he didn’t tell her I was coming.”* Three days later, when Dad returned, Mr. Henyard was requesting to go home to Eustis, having called his Godmother. A week later, the Dad returned with an apology by the stepmother and a request that the son rejoin the father. Mr. Henyard said: *“That was one of the mistakes I made in my life, going back to her (the stepmother’s) home.”*

*“I miss my mother a lot. I love her (tears). She was more of a good friend, not like a Mom. She was someone you could confide in and party with. I didn’t tell her about my stepmother. I didn’t want her to feel bad. The second rule my mother had was a man is not a man if he doesn’t keep his word. I promised Ms. Lewis (the victim) that nothing would happen to her or her kids. I intended to keep that promise. What does that make me? It makes me dirt! After I raped her, I realized I couldn’t keep my word. She”*

*“Being with my Dad was weird. I accepted it. It was weird him just showing up like that. It was weird: why did it take him so long to get me? That woman was mean. She*

*wasn't on drugs or nothing. She blamed everything her child did; she blamed on me and would whoop me. If it was clear he did do it, she got smart and would whoop us both. So either way, I was gonna get whooped. In the mornings, I would wake up, do my chores, and get on the bus for school. If I missed the bus, I had to walk 2 ½ miles to school. After school, I did the dishes and then was forbidden to come into the house even for shade on the porch or to get a sandwich. I had to go under the trailer for shade. I would be accused of theft if I got a sandwich. Things would be different when my Dad was home. I called my Godmother and told her but nobody came and got me. My Godmother came one time to visit and my stepmother called her a drug addict and I cussed my stepmother out. My Godmother was no addict. That was the worse whipping I ever had.*

*I used to go to school with welts all over my body. The Guidance Counselor knew and did nothing about it. The Guidance Counselor took pictures in school and did nothing. I flunked P.E. because I was too ashamed to wear shorts.*

*Her son cut his hair and blamed it on me. That whipping was bad (tears). I asked to move next door to live with the mother of my stepmother who was raising her other two children. She (the mother of the stepmother) was telling my stepmother that she was wrong (how she was treating me). My Dad said no, I could not move into her house."*

*"When I was about thirteen years old, she lost her rent money. She pulled me out of class beating me as she dragged me. She beat me every half hour all day until she found the money in her purse. She called her sister and they laughed about it. She never apologized or even said she was wrong. I waited until she went to sleep that night and got a gun and stood over her bed to shoot her with the gun pointed at her head. I don't know what stopped me. But I stopped caring about anybody and anything after that point. I feel ashamed of that to let her get me to that point. That was the lowest I have ever been. No one cared enough to step in and help me. So why should I care about them or me. No one cared about me. She did not have to do what she did-- in class, in front of everyone, and keep doing it. She didn't have to do that.*

*I do not know if I have started caring again. Wait, my nephew made me care when I came back to Eustis. He came at me with unconditional love and smiles, running into my arms calling "Uncle Rick, Uncle Rick". (smiling) That was one of the happiest moments of my life. My Godmother told me last night that he is in prison. I am upset. I tried to talk with him. I wanted him to be the first one in our family to do something with his life, to get an education. Colleges had talked to him about a basketball scholarship, but he didn't graduate from high school.*

*I started stealing money for ice cream from her and from the house after that. She would give her son money and not me.*

*"My father did not believe me even when this stuff came up in court. I have not seen him since right before court in 1993."*

*When I was fifteen years old, I finally ran away on Halloween Day night. I was sitting across the street from the house with her son and friends planning trick or treating. I asked if I could go with them. She said no, but she let her son go. She said I was too old and so couldn't even walk around with them. I left and went to live in the abandoned house down the street. I stayed there a month or more. She and my father knew where I was, but did not talk to me or help me out or check on me. I got locked up for stealing food and begged the judge to put me near Eustis to be near my Godmother. He did. I was placed at a Halfway House near Orlando. After 6-8 months there, I returned to my Godmother's to live. But I was different. I had stopped caring about myself and about others. She was the same person but I was different. Things did not work out. I was in and out of trouble.*

*When I was sixteen, my girlfriend got an abortion without telling me. My cousin told me about the pregnancy and the abortion. I was mad. She didn't even give me a chance. I would have wanted to keep it—my child! We had been together off and on since I was fifteen years old. We had known each other since I was about five years old. We broke up because her parents told her they would get her a car if she broke up with me. She did. I thought it was a joke (tearful) and we would get back together afterwards. She was serious. I guess I didn't mean that much to her. Maybe if she had had the child, it would have been nice. I could have focused on something. I would have been a better Dad than mine. I think I would have been a pretty good Dad. I took good care of my nephews.”*

*When I was eighteen years and eight months, I was arrested for this crime. We had planned to hotwire a car. My first instinct had been to not respond when he (co-defendant) called me over after he had approached Ms. Lewis. He already had the gun out. I didn't walk away. I considered him a friend. I didn't have friends. If I did, they were usually younger than me. Younger guys were more comfortable to hang with. They did not pick on me. I was always awkward with females. I hung out at his house and did things with him. If I had left, I would have lost a friendship. I was still seeking a place to belong, since middle school. It never occurred to me before today (7/2/08) that friendship made me get into that care. A real friend would not have put me in that situation. That is my life.”*

*“My sister ran away sometime between when I was eleven and sixteen years old, while I was with my Dad. She was a drug addict. She was five older than me. She had a child by one of my Godmother's sons. She ran away to go live with her Dad. I met her dad one time. It was a similar situation—neither one of us knew our dads till later. She died one year before or after my Mom died of Aides. She and my Mom had reconnected. She died of unknown causes. We were never close. We never turned to each other. For example, she did not go with me to my Godmother's house. She was with my Mom running the streets. We had no rules and no regulations. She did not take care of me like a big sister or in any way.”*

*“I let my godmother down. I really disappointed her. She was the one person in my life that I never wanted to let down.*

*I had memory lapses before the day of the crime. People said I was someplace else all the time. I don't remember names and things, but nothing important. The stuff in the crime was important. Memory lets me know what I became. Loss of memory makes me doubt what I was told. All the things I did, the families I helped destroy the hurt I caused. No caring, decent person would do. I guess I proved my stepmother right. She was right. She said I would never amount to anything. Talking today was useful. I realized things I didn't before. Among other things, I remembered the miscarriages my Mom had. Maybe we were the lucky or unlucky ones."*

Documentation for the above events in the life and development of Richard Henyard are available via comprehensive review of existing records and via direct interview with remaining significant persons in his life. This review and information will be provided in an update of this report as soon as possible.

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