

HANDOUTS

Without Conscience *Understanding and Treating Psychopaths*

presented by

Dr. Robert D. Hare

AGENDA

Thursday

8:15a.m. Registration (continental breakfast)

9:00 *Description of Psychopathy*

- Historical overview
- Clinical descriptions
- Case examples

10:20 Break (coffee & tea)

10:35 *Etiology*

- Nature/nurture
- Behavioral genetics
- Clues from cognitive/affective neuroscience

Noon Lunch (on your own)

1:30 *Assessment*

- The PCL-R, PCL-SV, and PCL-YV
- Nonclinical instruments
- The P-Scan & B-Scan 360
- Self-report inventories

2:45 Break (snack, soda, coffee, & tea)

3:00 *Psychopathy and Crime*

- Predatory behavior and violence
- Role in assessment of risk for crime and violence

4:30 Adjournment (pick up one day certificates)

Friday

8:15a.m. Registration (continental breakfast)

9:00 *Cognitive/Affective Models of Psychopathy*

- Attention, information processing, response modulation
- Brain imaging, psychophysiology

10:20 Break (coffee & tea)

10:35 *Treatment/Management*

- General issues
- Legal Issues
- Research findings

Noon Lunch (on your own)

1:15 *Guidelines for Psychopathy Treatment Programs*

2:30 Break (snack, soda, coffee, & tea)

2:45 *Psychopathy in Society*

- Prevalence and manifestations
- The corporate world

4:15 Adjournment (pick up certificates)

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Without Conscience Understanding and Treating Psychopaths

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Lancaster, Pennsylvania

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(lots of material, links, and a down-loadable reference list)

This file and the slides it contains are for the use of workshop participants only. The values in the charts are only approximate, and the original papers should be consulted.

Royalties are received from the sale of the PCL-R and its derivatives

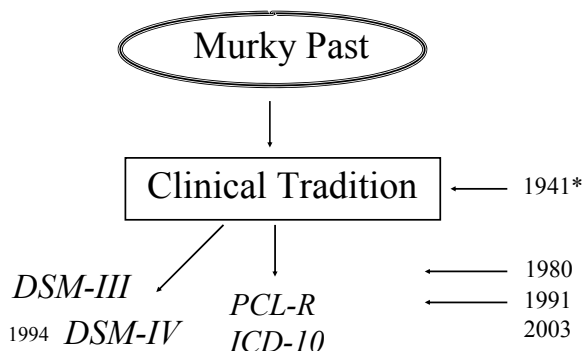
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I. Descriptions of Psychopathy

Psychopathy

- A specific personality disorder?
- An adaptive reproductive strategy?
- A clinical construct traditionally defined by a cluster of personality traits and behaviors
 - European and North American clinical tradition
 - Schneider
 - Cleckley: The Mask of Sanity
 - ICD-10: Dyssocial personality disorder
 - DSM-IV: Antisocial personality disorder

An Historical Flow Chart



Kurt Schneider's Psychopathic Personalities

- Influential in many countries, e.g., German-speaking countries, Scandinavia, England, Japan
- Based on idea of "prototypes" of personality disorders:
 - . theoretical standards identified by clusters of dominant personality characteristics
- His "psychopathic personalities" are similar to North America's "personality disorders"
- His "*affectionless psychopath*" is similar to the "Cleckley" psychopath

Schneider's Affectionless Psychopath

An individual who is "lacking or almost lacking in compassion, shame, honor, remorse, and conscience. (As a result)...the personality is often sinister, cold, and surly, and the conduct brutal and unbridled...(In) addition to those who form the criminal group in our society, this type may also be found in society at large. They are callous, cold people who can be utterly ruthless on occasion and in whom intelligence, far from being lacking, is often remarkably high."

Cleckley: *(The Mask of Sanity, Cleckley, 1976)*

- Absence of delusions/irrational thinking
- Superficial charm and good intelligence
- Absence of nervousness/neurotic manifestations
- Unreliability
- Untruthfulness and insincerity
- Lack of remorse or shame for antisocial behavior
- Poor judgement/failure to learn from experience
- Specific loss of insight
- Pathological egocentricity and incapacity to love
- General poverty in major affective reactions
- Unresponsiveness in general interpersonal relations
- Fantastic and uninviting behavior with drink and sometimes without
- Suicide threats rarely carried out
- Failure to follow any life plan
- Sex life interpersonal, trivial, and poorly integrated

ICD-10

Dyssocial Personality Disorder

- Marked proneness to rationalize & blame others for behavior that conflicts with society
- Incapacity to maintain enduring relationships
- Callous unconcern for feelings of others & lack of empathy
- Persistent irritability
- Incapacity to experience guilt & to profit from experience, particularly punishment
- Gross & persistent irresponsibility, disregard for social norms, rules, obligations
- Very low tolerance for frustration & low threshold for aggression

DSM: Antisocial Personality Disorder

- Evolved from literature on sociopathy
- DSM (1952): Sociopathic personality disturbance: Antisocial reaction
 - This term refers to chronically antisocial individuals who are always in trouble, profiting neither from experience nor punishment, and maintaining no real loyalties to any person, group, or code. They are frequently callous and hedonistic, showing marked emotional immaturity, with lack of responsibility, lack of judgment, and an ability to rationalize their behavior so that it appears warranted, reasonable, and justified (p. 38).

DSM-III-R: Antisocial Personality Disorder

- Conduct disorder beginning before age 15
- Adult antisocial behavior since 15 (4 symptoms):
 - Inconsistent work behavior
 - Failure to accept social norms (criminality)
 - Irritable / aggressive
 - Defaults debts
 - Lack of planning / impulsive
 - Repeated lying / conning
 - Drunk driving / speeding
 - Irresponsible as a parent
 - No 1-year monogamous relationship
 - Lacks remorse

DSM-IV APD Field Trial

(see Widiger, Cadoret, Hare, et al., 1996)

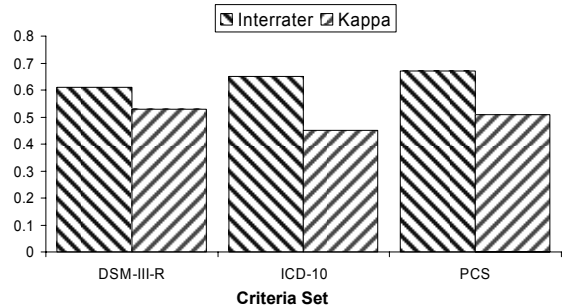
- Aims
 - To simplify diagnostic criteria
 - To improve agreement between DSM and ICD
 - To give more emphasis to personality features
- Data
 - 5 sites, 506 participants
 - ASPD, Dissocial and Psychopathy criteria
 - Inpatients, outpatients, prison settings

DSM-IV Trial: Psychopathy Criteria Set (PCS)

- Lacks remorse
- Lacks empathy
- Deceitful and manipulative
- Glib and superficial
- Inflated & arrogant self-appraisal
- Early behavior problems
- Adult antisocial problems
- Poor behavioral controls
- Impulsive
- Irresponsible

DSM-IV Trial: Median Reliabilities

Pearson r between total scores
 DSM-ICD = .68
 DSM-PCS = .73
 PCS-ICD = .79



DSM-IV Adult Criteria For APD

- A. Pervasive pattern of disregard for & violation of rights of others since age 15, as indicated by 3 (or more) of:
1. Failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest
 2. Deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure
 3. Impulsivity or failure to plan ahead
 4. Irritability & aggressiveness, as indicated by repeated physical fights or assaults
 5. Reckless disregard for safety of self or others
 6. Consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations
 7. Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another

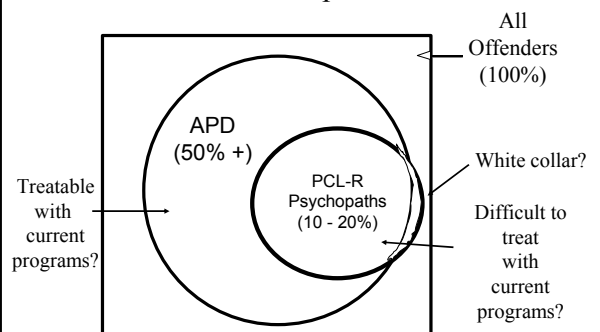
DSM-IV Text for APD

- Text includes references to:
 - Deceitful, Manipulative, No Concern for Others, Conning, Little Remorse, Superficial Rationalization
- Says APD "Also known as psychopathy"
- Associated Features section includes items and wording from PCL-R Manual and PPD criteria in the Field Trial
 - "Lack of empathy, inflated and arrogant self-appraisal, and glib and superficial charm are features that have been commonly included in traditional conceptions of psychopathy and may be **particularly distinguishing of APD in prison or forensic settings where criminal, delinquent, or aggressive acts are likely to be nonspecific**" (p. 647).

DSM-IV Trial: Comments

- Items based on the PCL-R were as reliable as the DSM-III-R items
- Inclusion of the psychopathy items would improve content validity of the DSM-IV category APD without a decrease in reliability
- *DSM-IV-TR*, (2000) notes that inclusion of psychopathy items would also have facilitated the "prediction of recidivism in prison or forensic settings" (p. 703).
- The adult criteria were not tested in the Field Trial
- There now is a discrepancy between the DSM-IV **Criteria** and the DSM-IV **text**

Psychopathy and APD in Offender Populations



Some Traditional Features of Psychopathy

Interpersonal

Superficial, charming
Grandiose, inflated self worth
Egocentric
Manipulative, deceptive
Dominant, intimidating
Callous, cold-hearted

Affective

Shallow, labile emotions
Lack of empathy
Lack of guilt or remorse
Little subjective distress
Weak emotional ties to people,
goals, or principles

Lifestyle/Behavioral

Impulsive	Early onset
Irresponsible	Poor behavioral controls
Sensation-seeking	Parasitic
Lack of realistic, long-term goals	Aggressive
Ready violation of social norms	Varied antisocial behavior

Psychopathy

- No loyalty to any person, group, code, organization, or philosophy; self-interest
- A generally unstable, antisocial, or asocial lifestyle — not necessarily criminal — in which others are used or victimized
- Not psychotic (but comorbidity possible)
- Not synonymous with criminality, sociopath, or antisocial personality disorder

2. Etiology

Developmental Correlates

- Etiology remains largely unknown
- Strong link between family dysfunction & delinquency/violence
- No decisive link between family history & presence of psychopathy in adults
- “I do not believe obvious mistreatment or any simple egregious parental errors can justifiably be held as the regular cause of a child’s developing this complex disorder” Cleckley (1976)
- Traits and behaviors begin to emerge in early life
- Early callous/unemotional traits and behaviors predictive of later problems

Some Developmental Perspectives

- Moffitt
 - Childhood & adolescent onset conduct disorder
 - Adolescent-limited, Lifetime-persistent antisocial behavior
- Lynam
 - Conduct disorder and ADHD
 - Childhood Psychopathy Scale (CPS)
- Frick
 - Callous-unemotional traits
 - Antisocial Process Screening Device (APSD)

Blonigen, Carlson, Krueger, & Patrick, *Personality and Individual Differences*, 2003, 35-179-197

- Minnesota Twin Study
 - 165 MZ, 106 DZ twin pairs
 - Psychopathic Personality Inventory (PPI; Lillienfeld)
 - Multidimensional Personality Questionnaire (MPQ; Tellegen, in press)
- “Substantial evidence of genetic contributions to variance in the personality construct of psychopathy.”

Blonigen, Hicks, Krueger, Patrick, & Iacono,
Psychological Medicine, 2005, 35, 1-12

- Minnesota Twin Study
 - 188 MZ, 101 DZ male twin pairs
 - 223 MZ, 114 DZ female twin pairs
 - Multidimensional Personality Questionnaire (MPQ; Tellegen)
- MPQ used to estimate PPI scores on
 - Fearless dominance (cf., PCL-R Factor 1)
 - Impulsive antisociality (cf., PCL-R Factor 2)

Blonigen et al.(2005)

- Results:
 - “The interpersonal-affective (Fearless Dominance) and antisocial (Impulsive Antisociality) traits of psychopathy, as measured by the MPQ... are equally and substantially heritable with each accounting for roughly half of the total variance in both men and women.”
 - The two psychopathy dimensions “were genetically uncorrelated...suggesting that they may derive from separate etiological processes that are substantially genetic in nature.”

Larsson, Andershed, & Lichtenstein
Journal of Abnormal Psychology, in press

- 1090 Swedish MZ and DZ twin pairs, aged 16-17 years
- Youth Psychopathic traits Inventory (YPI)
- “A genetic factor explains most of the variation in the psychopathic personality”

Viding, Blair, Moffitt, & Plomin (2005).

- UK Twin study of 3687 7-year old twin pairs
- Rated by teachers and parents on items similar to those on the Antisocial Process Screening Device (Frick & Hare, 2001)
- Assessed heritability:
 - of antisocial behaviors; callous-emotional traits
- Concluded that genes account for 70% of the individual differences in callous-unemotional traits
 - “The core symptoms of psychopathy are strongly genetically determined”
 - Genetic contribution was highest when callous-unemotional traits were combined with antisocial behaviors

Evolutionary Psychology
(Harris & Rice, in press)

- Psychopathy is less a biopsychological defect than a heritable adaptive life strategy
- In this view, the early emergence of antisocial behavior, including aggressive sexuality, is central to psychopathy

Psychopathy and Family Background
(Forth & Burke, 2005)

- 106 incarcerated male adolescent offenders
- PCL:YV completed by interview & file information
- 16 family background variables coded

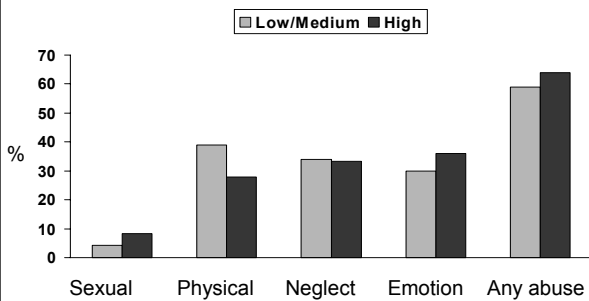
Family Background Factors

Parental Antipathy Factor 1	Parental Deviance Factor 2	Marital Discord Factor 3	Neglect/ Sexual abuse Factor 4
Childhood physical abuse	Parent criminality	Verbal discord	Childhood neglect
Childhood emotional abuse	Parent drug abuse	Physical discord	Childhood sexual abuse
Physical punishment	Inconsistent discipline	Parent alcohol abuse	
Lack of supervision	Childhood separation		

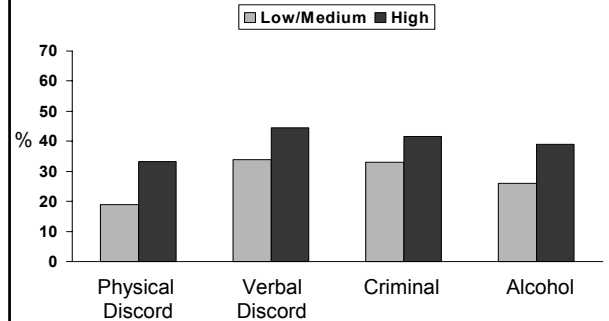
PCL:YV and Family Background

Family factor	<i>r</i>
Parental antipathy	.10
Parental deviance	.25*
Marital discord	.16
Neglect/Sexual abuse	.05
Global measure	.24*

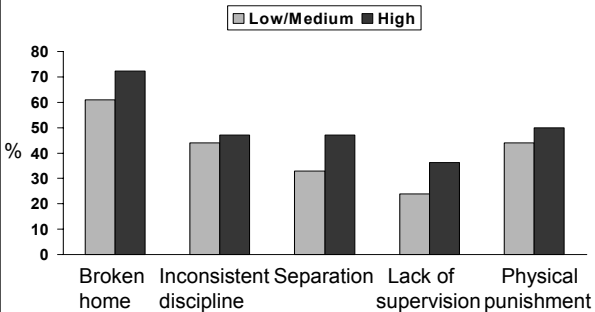
Childhood Maltreatment



Parental Characteristics



Childhood Environment



Psychopaths: Why are They?

- We don't know
- But not sole result of poor parenting, negative social forces
- No obvious "holes in the head"
- Some psychobiological models
 - Brain damage, structural anomalies
 - Biochemical, e.g., serotonin, dopamine
 - Information processing
 - Cognitive-emotional integration
- Problems, explanations, not specific to any one brain structure or process
- Most models explain only selected features of psychopathy

A Clue (Followed Up Later)

- “They know the words but not the music”
- They know only the dictionary meaning of words
- “They can learn to use ordinary words...and to reproduce the appearance of feeling...but the feeling itself does not come to pass”

The Lexical Decision Task

- Words have both denotative (explicit, literal) and connotative (implicit, implied) meanings
- The impact of the affective connotations of words can be evaluated by recording:
 - Lexical decision times
 - Brain activity associated with the decisions

The Lexical Decision Task

Neutral & emotional words, and pronounceable nonwords, briefly presented in random order on a computer screen

RAPE

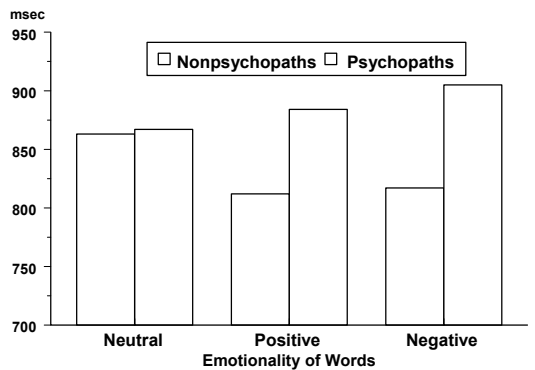
EPRA

TREE

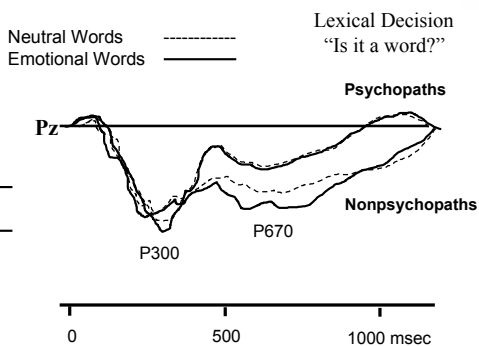
ETER

“Was what you saw a word?”

Reaction Time and Word Type



Williamson, Harpur, & Hare (1991)



Williamson, Harper, and Hare (1991)

3. Assessment

Assessment Tools

- The Hare Psychopathy Checklists
 - *Psychopathy Checklist-Revised* (PCL-R)
 - *Psychopathy Checklist: Screening Version* (PCL:SV)
 - *Psychopathy Checklist: Youth Version* (PCL:YV)
- *Antisocial Process Screening Device* (APSD; Frick & Hare, 2001)
- *B-Scan* (Babiak & Hare, 2005)
 - Non-clinical 360° tool for use in business
- *P-Scan* (Hare & Herve, 1999)
 - a nonclinical tool for use by corrections law enforcement, probation, parole, etc.
- *Child Psychopathy Scale* (CPS); Lynam

Self-Report Inventories

- Omnibus psychopathology and personality inventories are more useful for general personality evaluations and for research than for clinical/forensic assessment of psychopathy
 - MMPI, MMCI, PAI
 - *Multidimensional Personality Questionnaire* (MPQ; Tellegen)
 - *Five Factor Model of Personality* (FFM; Costa & McCrae)

Self-Report Psychopathy Scales

- *Psychopathic Personality Inventory* (PPI; Lilienfeld)
- Levenson Self-report Psychopathy Scale (LSRP)
- *Self-Report Psychopathy Scale-III* (SRP-III; Paulhus, Hemphill, & Hare)
- *Youth Psychopathy Inventory* (YPI; Andershed)

Clinical Applications

- Diagnosis
 - possibility of comorbid disorders
 - possibility of malingering
- Treatment planning
 - suitability for treatment
 - after-care

Law Enforcement Applications

- Evaluations of dangerousness
- Crime scene analysis, Profiling
- Interview techniques
- Hostage negotiations

Forensic Applications

- Pretrial assessments
 - juvenile waiver, diversion, bail
- Competency issues
 - fitness to stand trial, NGRI, malingering
 - Sentencing recommendations
 - capital murder, special sentences, Dangerous Offender, alternative sanctions, release condition
- Conditional release conditions, duty to warn
- Post-sentence detention
 - civil commitment, sexually violent predator (SVP),
- Risk assessment

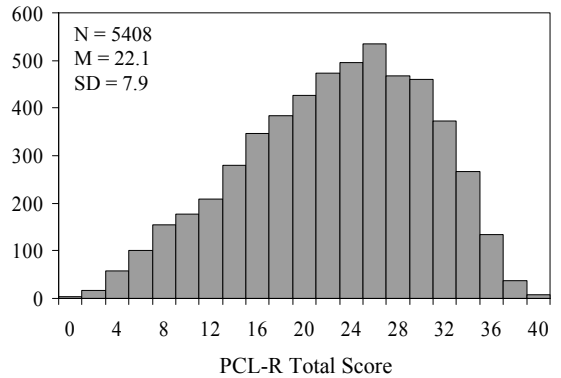
THE PCL-R (1991, 2003)

- Published by Multi-Health Systems (MHS), as are its derivatives, the PCL:SV, The APSD, and the P-Scan
- 20 items scored from interview & file data
- Each item scored on a 3-point scale
- Total score 0-40; extent to which an individual matches prototypical psychopath
- PCL-R developed for forensic use, but now used in variety of contexts
- PCL-R developed for adults, but new scales established for adolescents (PCL:YV)
- Factor structure
 - Original (1991): 2 factors
 - Current (2003): 2 factors, 4 facets
- Research discussed is based on PCL-R or its derivatives

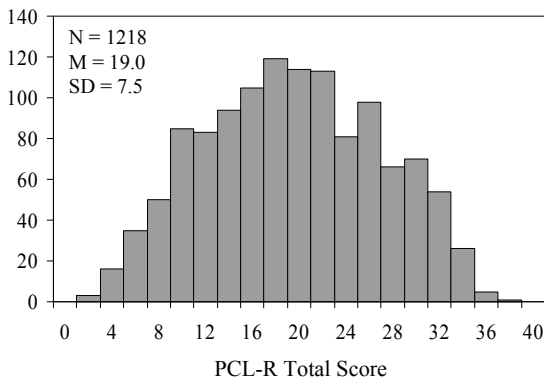
PCL-R Items

- Glibness/superficial charm
- Grandiose
- Pathological lying
- Conning/manipulative
- Lack of remorse/guilt
- Shallow affect
- Callous/lack of empathy
- Failure to accept responsibility
- Promiscuous
- Many marital relationships
- Need for stimulation
- Parasitic lifestyle
- Poor behavioral controls
- Early behavioral problems
- Lack of long-term plans
- Impulsivity
- Irresponsibility
- Juvenile delinquency
- Violation of conditional release
- Criminal versatility

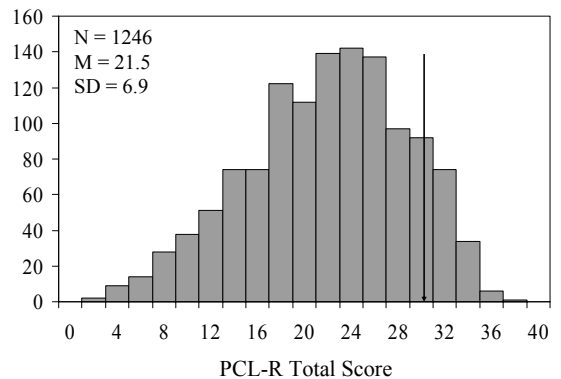
NA Male Offenders, Standard



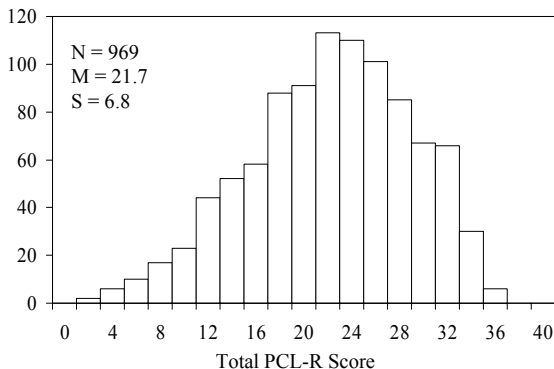
Female Offenders, Standard



Male Forensic Patients, Standard



Distribution of PCL-R Total Scores for Atascadero Pooled Samples 19 & 20 in Hare (2003)



One Descriptive Scheme (PCL-R 2nd Edition)

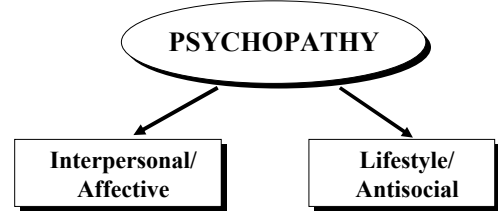
PCL-R Score	Level	Descriptor
31-40	5	Very High
26-30	4	High
21-25	3	Moderate
11-20	2	Low
0-10	1	Very Low

Reliability of PCL-R (2003)

Pooled for male offenders, female offenders, male forensic psychiatric patients

- Alpha coefficient = .84
- Intraclass correlation (ICC_1) = .87
- Intraclass correlation (ICC_2) = .93
- Standard error of measurement (SEM)
 - Based on ICC_1 or alpha = 3.00
 - Based in ICC_2 = 2.00

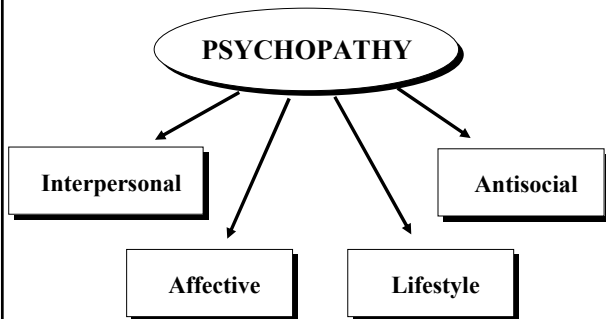
Original EFA 2-Factor Structure of PCL-R 17 Items



Hare, 1991

4-Factor Structure of PCL-R 18 Items

Hare & Neumann, 2005



PCL-R Factors

- | | |
|---|--|
| <p>Interpersonal</p> <ul style="list-style-type: none"> • Glibness/superficial charm • Grandiose • Pathological lying • Conning/manipulative <p>Affective</p> <ul style="list-style-type: none"> • Lack of remorse • Shallow affect • Callous/lack of empathy • Doesn't accept responsibility | <p>Lifestyle</p> <ul style="list-style-type: none"> • Stimulation seeking • Impulsivity • Lacks goals • Irresponsibility • Parasitic <p>Antisocial</p> <ul style="list-style-type: none"> • Early behavior problems • Poor behavior controls • Juvenile delinquency • Violations of conditional release • Criminal versatility |
|---|--|

Ethnic Differences in Psychopathy & the PCL-R?

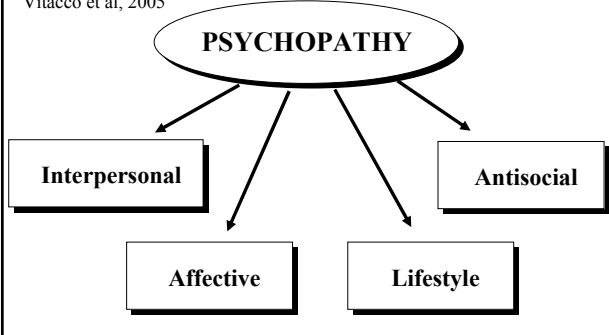
- Skeem et al, (2004)
 - Meta-analysis of PCL-R and Race
 - 21 studies involving White and Black offenders, psychiatric patients, substance abuse patients
 - N = 8,890
 - PCL-R difference of less than 1 point
- Cooke, Kosson, & Michie (2001)
 - IRT and CFA indicated no race differences in psychopathy, as assessed by the PCL-R
 - i.e., PCL-R was not biased in favor of one group or the other

Psychopathy Checklist: Screening Version (PCL:SV)

- Developed for use in MacArthur Risk Study
- 12 items scored from interview & file data
- Each item scored on a 3-point scale (0, 1, 2)
- Total score 0-24
 - extent to which an individual matches the prototypical psychopath
- Distribution depends on population
- Strongly associated with the PCL-R, conceptually and empirically (Cooke, Michie, Hart, & Hare, 1999)

4-Factor Structure of PCL: SV 12 Items

Hare & Neumann, 2005
Vitacco et al, 2005



The PCL: SV (Hart, Hare, & Cox, 1995)

Interpersonal

Superficial relations
♦ Grandiose
♦ Manipulative

Lifestyle

Impulsive
♦ Lacks goals
♦ Irresponsible

Affective

♦ Lacks empathy
♦ Lacks remorse
♦ Doesn't accept responsibility

Antisocial

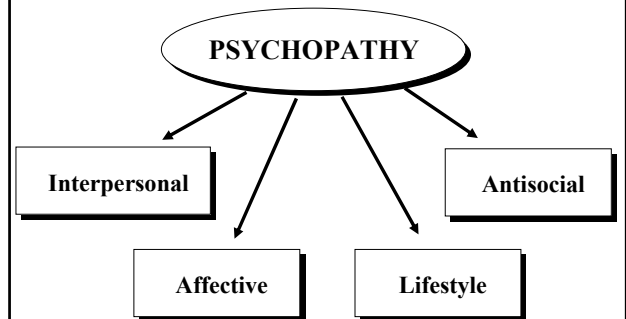
♦ Poor behavioral controls
♦ Early antisocial behavior
♦ Adult antisocial behavior

Psychopathy Checklist: Youth Version (PCL:YV)

- Forth, Kosson, & Hare, 2003
- Data on over 2500 adolescent offenders
- 4-factor structure
- Distribution of scores and correlates with criminal behaviors are much the same as for adult offenders

4-Factor Structure of PCL: YV 18 Items

Forth et al., 2003



PCL: YV Factors

Interpersonal

- Impression management
- Grandiose sense of self-worth
- Pathological lying
- Manipulation for personal gain

Affective

- Lack of remorse
- Shallow affect
- Callous/lack of empathy
- Failure to accept responsibility

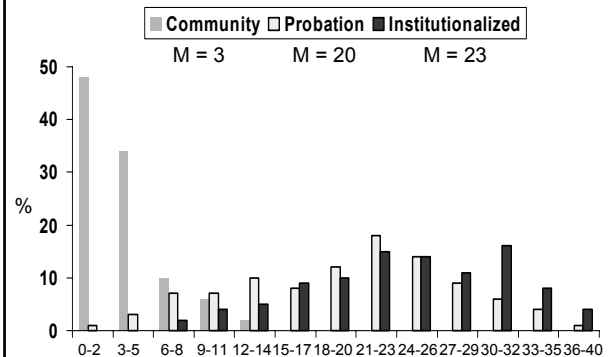
Lifestyle

- Stimulation seeking
- Impulsivity
- Lacks goals
- Irresponsibility
- Parasitic orientation

Antisocial

- Early behavior problems
- Poor anger control
- Serious criminal behavior
- Serious violations of release
- Criminal versatility

PCL:YV Scores: Distributions



PCL:YV Reliabilities

	Offender	Probation	Community
ICC - single	.93	.90	.92
ICC - average	.96	.95	.96
Alpha	.85	.87	.94
Mean inter-item <i>r</i>	.23	.25	.43

Antisocial Process Screening Device (APSD)

- A 20-item teacher and parent rating scale
- Uses with ages 6-13
- Not a diagnostic test
- Designed to assess early traits and behaviors that may lead to later problems
- Three domains:
 - Callous-Unemotional
e.g., Does not feel bad or guilty
 - Narcissistic
e.g., Brags excessively
 - Impulsivity
e.g., Acts without thinking

Childhood Psychopathy Scale (CPS) Don Lynam

- Downward extension of PCL-R; 41 items
 - parent/teacher ratings
- Views psychopathy as:
 - **Behavioral**: impulsive, risk-taker involved in a variety of criminal activities.
 - **Interpersonal**: grandiose, egocentric, manipulative, forceful, and cold-hearted.
 - **Affective**: displays shallow emotions, is unable to maintain close-relationships, and lacks empathy, anxiety and remorse
- Used in research on stability, development of psychopathy

CPS Short Form

"Factor 1" Scales & Items

- Glibness:** Exaggerates
- Untruthfulness:** Lying or cheating / Cannot trust what he says
- Manipulation:** Manipulates people
- Lack of Guilt:** Doesn't feel guilty after misbehaving
- Poverty of Affect:** Sudden changes in moods or feelings
- Callousness:** Cruelty, bullying, or meanness to others / Teases a lot
- Fail to Accept Respons.** When confronted about his behavior, he is a "fast" or "smooth" talker / Blames others excessively

"Factor 2" Scales & Items

- Parasitic Lifestyle:** Takes credit for what another person has accomplished
- Behavioral Dyscontrol:** Behaves explosively and unpredictably / Demands must be met immediately (easily frustrated)
- Lack of Planning:** Never or rarely saves money
- Impulsiveness:** Impulsive, acts without thinking / Wants to have things right away
- Unreliability:** Behaves irresponsibly / Borrows money, does not pay back

Correlation with full scale equal 0.90

P-SCAN (Hare & Hervé, 1999)

- Purpose: A non-clinical tool providing a hypothesis or best guess about an individual's psychopathy level
- Designed for law enforcement, investigators, parole officers, prison guards, etc.
- Scored from collateral information and/or interview/interactions
- Experimental Form:
 - 120 items, 3-point scale,

The P-Scan Scoring & Use

- Items computer-scored
- Provide some indication of how the suspect, offender, or client rates on four facets fundamental to psychopathy
 1. Interpersonal
 2. Emotional/Feelings
 3. Lifestyle
 4. Antisocial
- Report provided
- Scores on facets plotted on graph
- Possible strategies suggested

Some P-Scan Items (0, 1, 2)

- Tries to control interactions with others
- Very opinionated
- Easily changes stories when challenged
- Looks for buttons to press
- Discusses emotions in concrete terms
- Has gift of gab
- Presence makes you feel uncomfortable
- Displays of emotion seem like play-acting
- Does things on the spur of the moment
- Plays head games

SRP-III Scale

(Paulhus, Hemphill, & Hare, 2005)

- Self-report measure of *subclinical psychopathy*
- Conceptually related to PCL-R, SRP- and SRP-II scales
- 40 items, 4 factors of 10 items each
 - Interpersonal Manipulation (IPM)
 - e.g., “I find it easy to manipulate people” (T)
 - Antisocial Behavior (ASB)
 - e.g., “I have stolen a motor vehicle” (T)
 - Erratic Lifestyle (ELS)
 - e.g., “I enjoy drinking and doing wild things” (T)
 - Callous Affect (CA)
 - e.g., “Not hurting others’ feelings is important to me (R)
- Good reliability; Encouraging evidence of validity

Psychopathic Personality Inventory (PPI) Lilienfeld & Andrews (1996)

- Short form contains 56 items tapping 8 dimensions
- Good reliability; Encouraging evidence of validity
- Machiavellian Egocentricity
 - “I often tell people only the part of the truth they want to hear” (T)
- Social Potency
 - “I am a good conversationalist” (T)
- Coldheartedness
 - “I often become deeply attached to people I like” (F)
- Fearlessness
 - “Making a parachute jump would really frighten me” (T)

PPI (cont’d)

- Impulsive Nonconformity
 - “I’ve always considered myself to be something of a rebel” (T)
- Blame Externalization
 - “Some people seem to have gone out of their way to make life difficult for me” (T)
- Carefree Nonplanfulness
 - “I weigh the pros and cons of major decisions carefully before making them” (F)]
- Stress Immunity
 - “I can remain calm in situations that would make many other people panic” (T)]

4. Psychopathy and Crime

Psychopathy & Risk For Crime

- Psychopathy is a robust correlate of crime
- A stable complex of traits and predispositions, even in face of diverse social and cultural factors
- Psychopathy should be considered in all forensic risk assessments
- The presence of psychopathy suggests a conclusion of high risk
- The absence of psychopathy does not compel a conclusion of low risk; e.g., pedophiles
- Psychopathy should be assessed by qualified and trained personnel using appropriate procedures
- Psychopathy is strongly associated with predatory behavior and violence

Survey of Experts: Lally, S.J. *Professional Psychology: Research and Practice*, 2003, 34, 491-498

- Designed to find what forensic assessment instruments experts consider acceptable to use
- Suggest that the information is useful for the courts as one of the criteria for determining admissibility of testimony

Survey of Experts (Lally, 2003)

- Survey of psychologists who are Diplomates of the American Board of Forensic Psychology (ABFP)
 - Stringent qualifications for Diplomat status
 - 187 Diplomates in November 2000
 - 64 returned questionnaire about instruments used in 6 areas of forensic practice
 - Mental state at time of offence
 - Risk for violence
 - Risk for sexual violence
 - Competency to stand trial
 - Competency to waive Miranda rights
 - Malingering

Survey of Experts (Lally, 2003)
Risk for Violence Evaluations

Recommended	PCL-R (63%)
Acceptable	PCL-R (88%), MMPI-2 (88%), PCL:SV (73%), VRAG (73%), WAIS-III (67%), PAI (61%)
Equivocal-unacceptable	MCMI (II and III), Stanford-Binet-Revised
Equivocal-no opinion	HCR-20, WASI, KBIT, Luria-Nebraska, Halstead-Reitan
Unacceptable	Projective Drawings (90%), TAT (82%), sentence completion (71%), Rorschach (53%), 16PF (53%)
No opinion	LSI (80%)

Survey of Experts (Lally, 2003)
Risk for Sexual Violence Evaluations

Recommended	PCL-R (62%)
Acceptable	PCL-R (91%), MMPI-2 (81%), PCL:SV (71%), WAIS-III (71%), VRAG (67%), SORAG (62%), penile plethysmograph (60%), SVR-20 (57%), PAI (55%)
Equivocal-unacceptable	MCMI-III, Stanford-Binet-Revised
Equivocal-no opinion	Abel Screen, WASI, KBIT, Halstead-Reitan, Luria-Nebraska,
Unacceptable	Projective drawings (95%), sentence completion (76%), TAT (76%), 16PF (60%), Rorschach (52%), MCMI-II (50%)

Psychopathy is Only One Factor in Violence

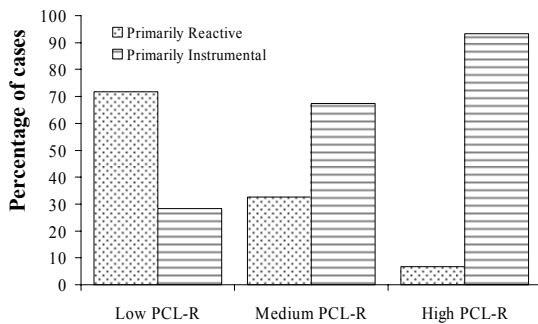
- **Biological:** hormonal abnormality; neurotransmitter dysfunction; neurological insult
- **Psychological:** psychosis; personality disorder (including psychopathy); cognitive impairment; stress
- **Social:** attitudes supporting violence; violent role models; situational factors; stress
- **Context:** provocation; defense; reaction
- Psychopathic aggression and violence may owe more to the nature of the individual than to the social and environmental forces that permit and drive most other forms of violence
- Most dramatic cases involve serial rapists & killers

Psychopathy and Nature of Crime

- Psychopathy is strongly associated with predatory behavior and violence (e.g., Cornell et al., 1996; Hare et al., 1999; Porter et al., 2001)
- The violence of psychopathic offenders is more likely to be instrumental, "cold-blooded," than is the violence of other offenders
- Study of 125 Canadian murderers
 - Woodworth & Porter, 2002 (*Journal of Abnormal Psychology*)
- Murder classified as
 - primarily reactive (e.g., crime of passion, extreme provocation, self-defense)
 - primarily instrumental (e.g., cold-blooded, premeditated, settle a score)

Primary Nature of Canadian Homicides (N=125) as a Function of PCL-R Scores

Porter & Woodworth, 2001



PCL-R / PCL:SV as Predictors

- Instruments designed to measure the construct of psychopathy
- Not designed to predict recidivism or violence
- Logically, they should not do as well as instruments specifically designed to predict something
- However, good empirical evidence that they are good general predictors, particularly of violence, in various contexts
- Sometimes used on their own, but better to use as part of a risk assessment battery, e.g.,
 - Historical, Clinical, Risk - 20 (HCR-20)
 - Sexual Violence Risk - 20 (SVR-20)
 - Violence Risk Appraisal Guide (VRAG)
- Comparisons between PCL-R and purpose-built risk tools are interesting but irrelevant to its construct validity or to the role of psychopathy in a wider context (beyond risk assessment)

Some Examples of Psychopathy and Risk

- Large number of studies on the PCL-R, PCL:SV, and the PCL:YV as risk factors for crime and recidivism
- Only a selection of studies that illustrates relevant issues is presented here
- More details in 2nd Edition of the PCL-R and in the PCL:YV Manual

Meta-analyses of PCL-R & Recidivism

- The ability of the PCL-R to predict violence “is unprecedented in the literature on dangerousness”

Salekin et al., (1996)
- “Relative risk statistics at one year indicated that psychopaths were approximately three times more likely to recidivate — or four times more likely to violently recidivate — than were non-psychopaths”

Hemphill, et al., (1998)
- “The PCL-R “appears to be a key predictor of violent recidivism in a variety of contexts.”

Dolan & Doyle, 2000
- The PCL-R and its derivatives are good predictors of recidivism and violence in a variety of contexts
 - But, they are not necessarily the best predictors in a given context
 - Their value is more as a measure of a construct whose relevance to, and predictive power in, a particular context needs to be established

Institutional Infractions

- Scores on the PCL-R and its derivatives are significantly associated with the postdiction and prediction of institutional infractions.

e.g., Belfrage et al., 2000; Brandt et al., 1997; Dolan & Doyle, 2000; Dolan, Doyle, & McGovern, 2002; Hare et al., 2000; Heilbrun et al., 1998; Hill et al., 1996; Kroner & Mills, 2001; Salekin et al., 1996; Loucks & Zamble, 2000; Rogers et al., 1997; Ross, Douglas, & Ogloff, 2004; Wong, 1984; Walters, 2003
- Recent meta-analysis by Walters (2003)
 - 15 studies: Mean effect size (r_{pb}) = .27
- Cunningham, Sorensen, & Reidy (2005): state PCL-R does not predict institutional violence; left out several studies

Institutional Violence

Dolan, Doyle, & McGovern, 2002

- Predictive validity of violence 12-weeks after admission to a UK maximum-secure unit for mentally-disordered offenders (N = 87)
- PCL:SV; Violence Risk Appraisal Guide (VRAG); H-10 (HCR-20)
- Correlations with frequency of violence:
 - PCL:SV = .52; VRAG = .37; H-10 = .31
- AUC for PCL:SV and:
 - Any violence: Total = .76; Factor 1 = .76; Factor 2 = .72
 - Level 1 violence: Total = .74; Factor 1 = .68; Factor 2 = .76
- AUCs were considerably smaller for VRAG and H-10
- “The PCL:SV is the most robust predictor of in-patient violence.”
- “The PCL:SV appears to be a valid predictor of in-patient violence within 12 weeks of admission to an English MSU, and predictive validity is similar to that reported in North American studies.”

Institutional Violence

Ross, Douglas, & Ogloff

American Psychology-Law Society, Scottsdale, Arizona, 2004

- 279 Canadian hospitalized civil psychiatric patients; 40% female; 79% Caucasian; Axis I and II diagnoses at admission and discharge
- PCL:SV; Personality Disorders (Any, Cluster B, Borderline, Antisocial)
- Correlations with inpatient violence small; however, logistical regression analyses indicated PCL:SV better than, or added incremental validity to, other predictors.
- Only PCL:SV entered into regression models for any violence (multiple $R = .22$), nonphysical violence ($R = .27$), and physical violence ($R = .28$)

Institutional Violence

Hare, Clark, Grann, & Thornton, 2000

- 652 male offenders in English prison system
- PCL-R significantly correlated with total number of reports for:
 - prison misconduct ($r = .31$)
 - assaults on staff ($r = .24$)
 - assaults on inmates ($r = .15$)
 - property damage ($r = .18$)

Guy, Edens, Anthony, J Buffington-Vollum, & Douglas

American Psychology-Law Society, Scottsdale, Arizona, 2004

- 35 studies
 - 13 (37.9%) Unpublished
- PCL, PCL-R, PCL:SV
Total $N = 5,021$
- Heterogeneous in terms of nationality, institution type, gender
- Any Institutional Misconduct ($k = 35$)
- Any Aggressive Behavior ($k = 27$)
- Verbal Aggression/Property Destruction ($k = 14$)
- Physically Violent Acts ($k = 18$)

Weighted Mean Effect Sizes (r_w) of PCL-R Scores as Predictors of Institutional Misconduct

	Total	Factor 1	Factor 2
Any Misconduct	.31	.23	.29
Any Aggression	.23	.15	.19
Verbal/ Property	.27	.19	.25
Physical Violence	.18	.16	.15

Note: Effects are smaller for American institutions

From Guy et al, 2004

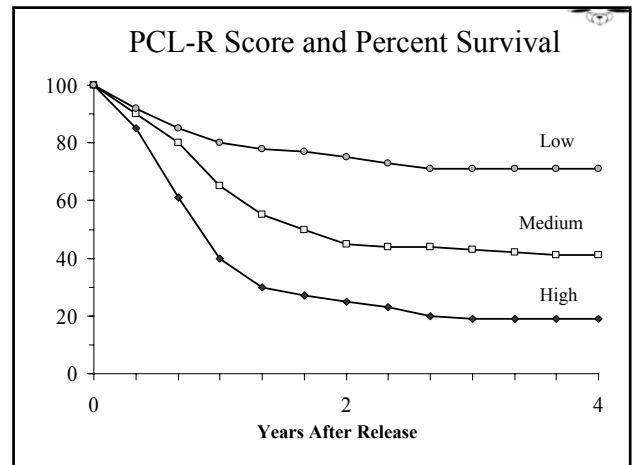
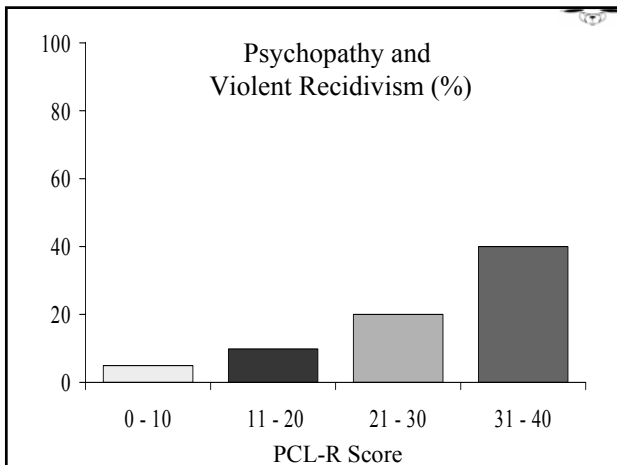
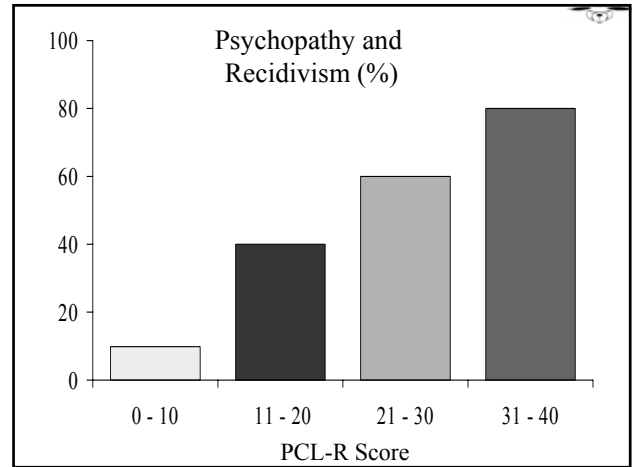
Guy et al 2004

- Also noted that effect sizes were smaller for American than for other studies
- Reasons?
 - Less systematic research than in other jurisdictions?
 - More crowded, less precise records?
 - More control by gangs?
 - More (or less) institutional infractions and violence? Less variance in these behaviors?

Psychopathy and Approximate Recidivism Rates

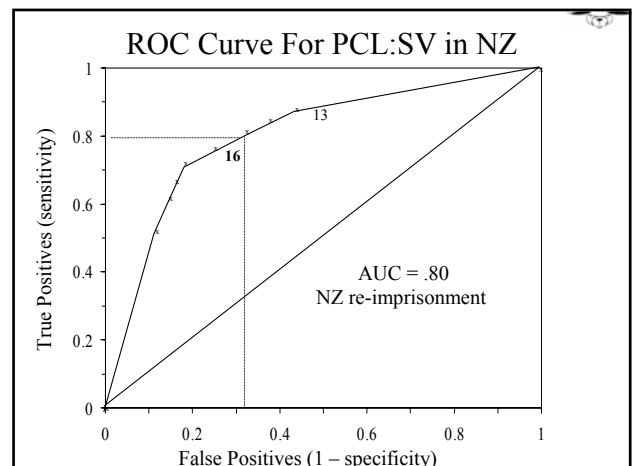
Recidivism

- PCL-R, PCL:SV, PCL:YV
- Mean effect size (r_{pb}) about
 - .27-.32 for general recidivism
 - .25-.30 for violent recidivism
 - .20-.25 for sexual recidivism
- Combination of high PCL-R score and sexual deviance
 - .25-.35 for sexual recidivism and general recidivism
- Some selected examples follow:



Receiver Operating Characteristic Analyses (ROC)

- Plot of false positives against true positives
 - $TPR = TP / (TP + FN)$
 - $FPR = FP / (FP + TP)$
- The area under the curve (AUC) is then calculated
- $AUC = .75$ means there is a 75% chance that a randomly selected violent person would have a higher risk score than would a randomly selected nonviolent person



Comparison of HCR-20 and VRAG in Predicting Violence in Violent Patients With Schizophrenia

- Tengström 2001
- 1106 forensic psychiatric patients
 - Conviction for violent offence
 - Schizophrenia
- HCR-20 Historical (H) scale (10 items)
 - PCL-R Item H7
- VRAG (12 items)
 - PCL-R Item V1
- ROC analyses for mean of 86 months follow-up

Tengström, 2001

AUC For Violence

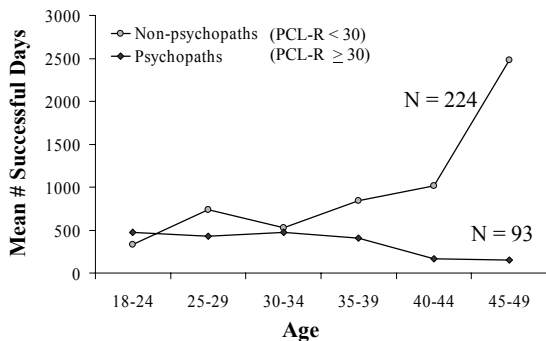
HCR-20 (H)	.76
VRAG	.68
PCL-R	.79

Correlation of PCL-R With Violence*

As part of HCR-20	.42
As part of VRAG	.46

* PCL-R single largest correlation with violence

Days Free on Conditional Release as a Function of PCL-R & Age

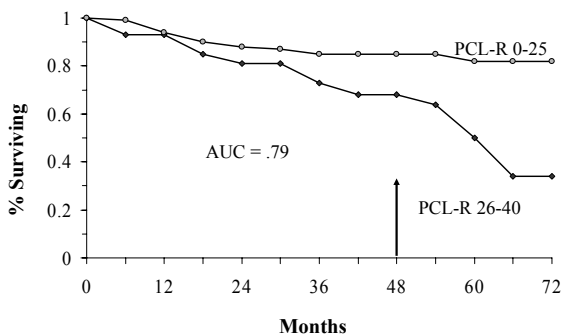


Porter et al., Law & Human Behavior, 2001

Psychopathy & Recidivism in Forensic Psychiatric Populations

- PCL-R scores predict recidivism and violence in offenders and in patients
 - Rice & Harris, (1992)
 - Heilbrun et al., (1998)
 - Tengström et al., (2000)
- Generally, the higher the PCL-R score the greater the risk of recidivism & violence

PCL-R as a Predictor of Violent Recidivism in Schizophrenic Offenders

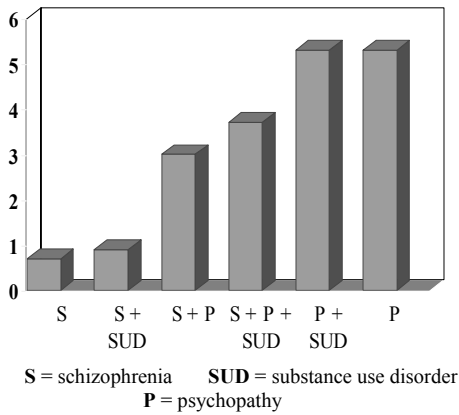


Tengstrom et al., 2000

Schizophrenia, Psychopathy, Substance Use, & Crime

- Tengström, Hodgins, Grann, Långström, & Kullgren (2004)
- Criminal history of patients with various combinations of schizophrenia, substance use, and psychopathy
- Swedish male patients who received pretrial assessments between 1988 and 1993, and were found guilty of violent offences
 - 202 schizophrenics, & 78 offenders who met PCL-R criteria for psychopathy
- Lifetime convictions since age 15, per year at risk (free)

Number of Convictions Per Year at Risk



Schizophrenia, Psychopathy, Substance Use, & Crime

- Among patients with schizophrenia, correlation between PCL-R and number of convictions per year at risk:
 - General = .62
 - Violent = .38
- “High ratings of psychopathy are associated with earlier ages of first conviction for a criminal offense and more convictions among the men with schizophrenia, just as among men with no mental illness” (p. 385).
- “These findings suggest that among offenders with psychopathic traits, the traits, not substance abuse, are associated with criminal offending” (p. 367).

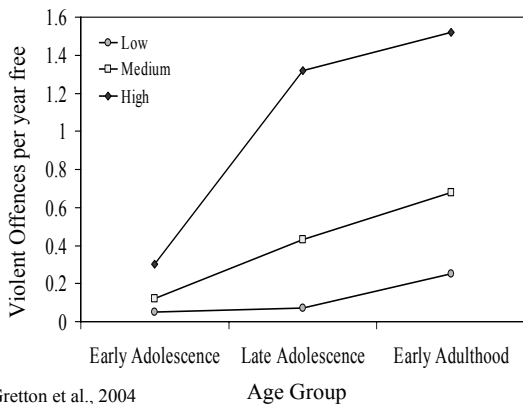
Gretton, Hare, & Catchpole (2004)

- 157 male adolescents
- Referred to Youth Forensic Psychiatric Services in 1986 for psychological/psychiatric assessment
- PCL:YV scored from file reviews
 - Mean score = 22.8 (SD = 7.0)
 - Cut scores for high and low 30 and 180, respectively
- Followed up for 10 years
 - RCMP FPS files
 - BC Corrections files
 - Scored for nonviolent, violent, and sexual offences

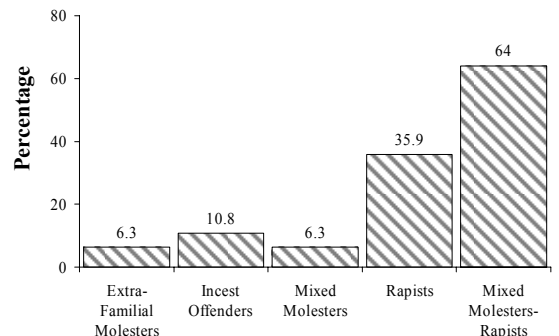
Gretton et al. (2004)

- 96% of sample committed at least 1 offence in follow-up
 - 95% for nonviolent
 - 68% for violent
 - 11% for sexual
- Correlation of PCL:YV with violent recidivism = .32
- Correlation of PCL:YV with time to 1st offence:
 - Nonviolent = -.22
 - Violent = -.40
- Base rate for general and nonviolent recidivism so high that no predictor could be significant
 - However, PCL:YV predicted time to first offence

Number of Violent Offences per Year Free



Percentage of Sex Offenders with PCL-R Score of 30+ (Porter et al., 2000)



Predictors of Sexual Recidivism: An Updated Meta-analysis

- K. Hanson & K. Morton-Bourgon, 2004
 - Public Works & Government Services Canada, PS3-1/2004-2E
- 95 studies involving more than 31,000 sex offenders
- Psychopathy among best predictors
 - Correlations and Cohen's *d* similar to those in PCL-R 2nd Edition
- Actuarial better than unguided clinical opinion
- Actuarial instruments were strong predictors of general recidivism in sex offenders

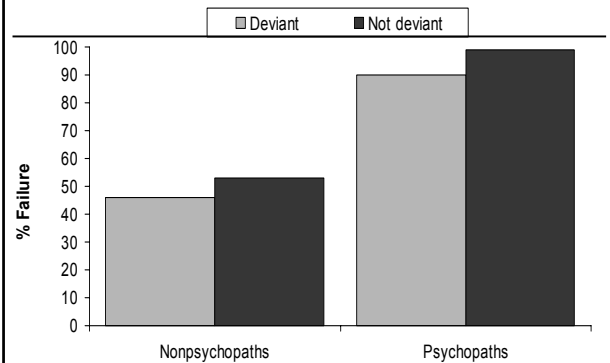
PCL-R and Recidivism Hanson & Morton-Bourgon, 2004

Recidivism	Correlation	Cohen's <i>d</i>	
		<i>M</i>	<i>Mdn</i>
General	.32	.67	.71
Violent	.28	.58	.67
Violent non-sexual	.27	.57	.56
Sexual	.14	.29	.25

Violent Recidivism in Adult Sex Offenders (Rice & Harris, 1997)

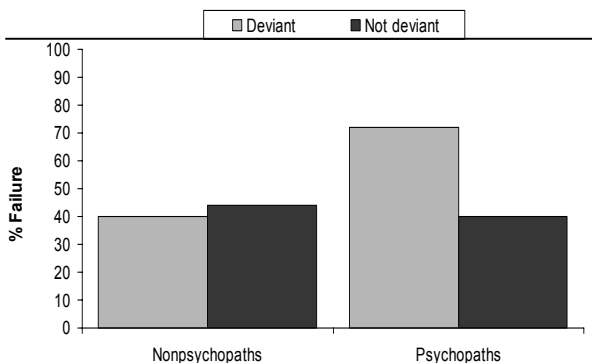
- 340 sex offenders (child molesters and rapists)
- Psychopath (PCL-R >25) and Nonpsychopaths (PCL-R ≤ 25)
- Deviant sexual (penile) arousal measured to slides and audiotapes
 - Slides: Adult, pubescent, children of each sex; heterosexual activity; landscapes
 - Audio: Scenarios of a male describing interactions with a female; consenting & nonconsenting heterosexual; nonsexual violence; sexually neutral
- Outcome: Sexual offences; Violent offences (including sexual)

Violent Offences: PCL-R x Deviance



Rice, Harris & Cormier, 1992

Sexual Offences: PCL-R x Deviance

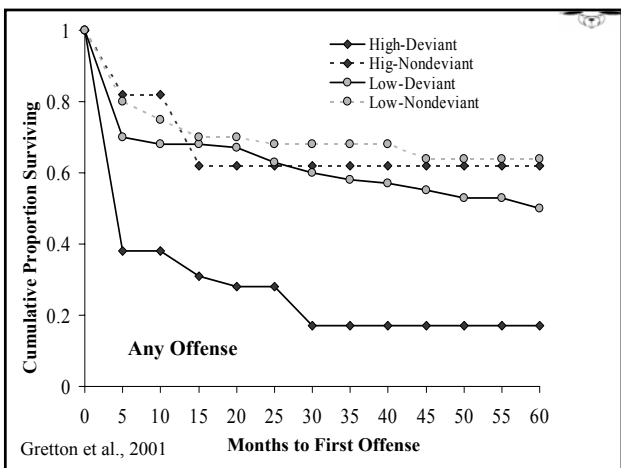
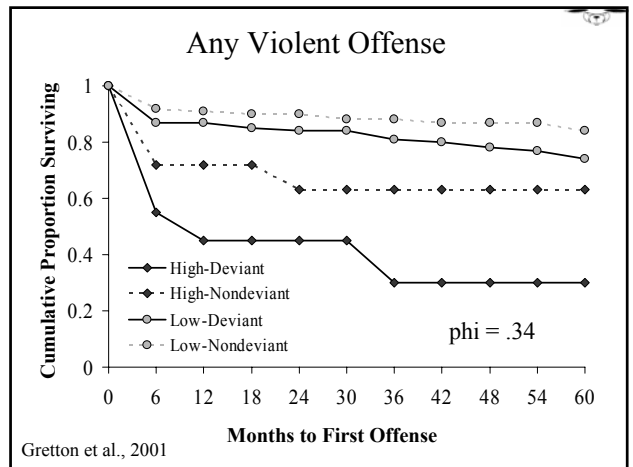
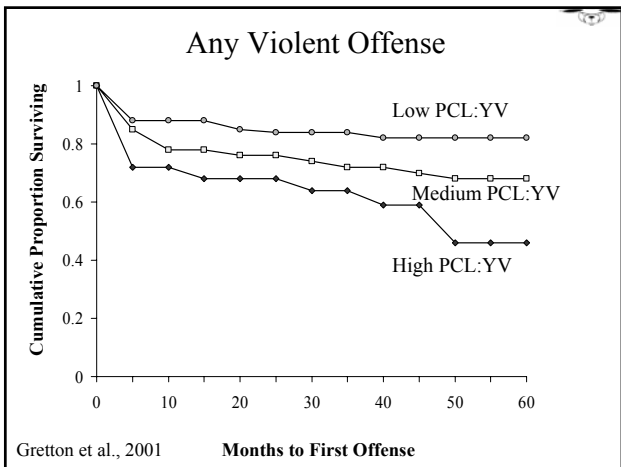
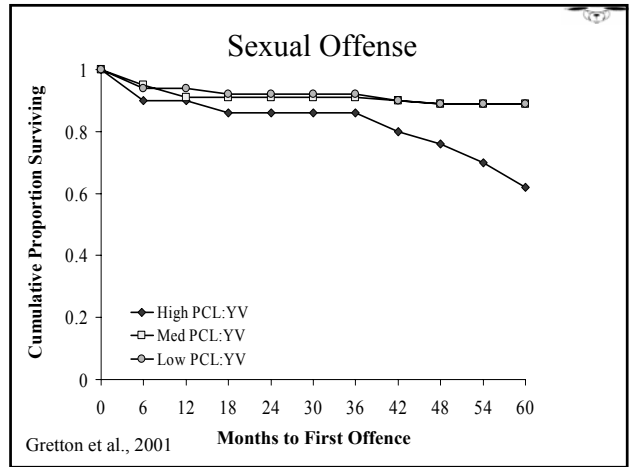
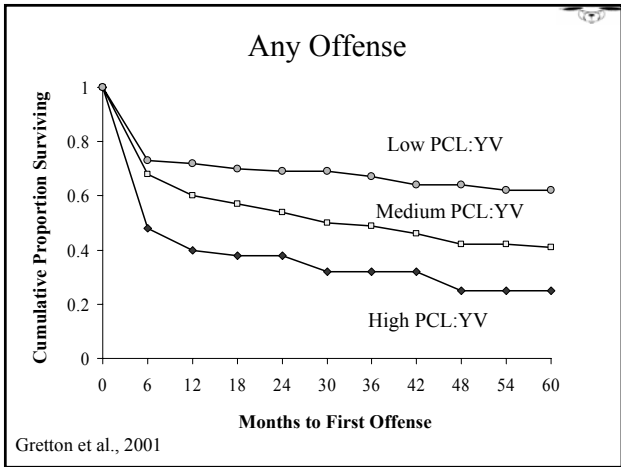


Rice, Harris & Cormier, 1992

Recidivism in Adolescent Sex Offenders Gretton et al., 2001

Criminal Justice & Behavior

- N = 220 admissions to Sex Offender Treatment Program, Youth Court Services, Burnaby, B.C., 1985-1993
- Age at Intake: 14.7 (SD = 1.6)
- White: 66.1%; Native: 21.3%; Other: 12.6%
- Mean PCL:YV score = 21.7 (SD = 7.0)
- PPG measures of deviant sexual arousal
- Five-year follow-up



Generalizability of the Predictive Power of Psychopathy & the PCL-R

- Predictive power is much the same in at least 3 different populations
- Offenders
- Forensic psychiatric patients
- Civil psychiatric patients

Ross, Douglas, & Ogloff (AP-LS March 2004)

- 279 Civil psychiatric patients
- Prediction of community violence
 - Any Personality Disorder; Antisocial PD; Borderline PD; PCL:SV
- Any PD and PCL:SV significant predictors of any, nonphysical, and physical violence
- Both entered regression model
 - any violence (R = .37); nonphysical violence (R = .34); physical violence (R = .32)
- Concluded that “psychopathy adds incrementally over other PDs, although PD generally is important for community violence.”

MacArthur Risk Study

- Steadman et al. (2000). *Law and Human Behavior*, 24, 83-100.
- 134 potential predictors of violence, including PCL:SV
- 939 civil psychiatric patients
- Primary diagnosis:
 - 41.9% depression; 17.3% schizophrenia; 14.1% bipolar; 21.8% alcohol or drug abuse disorder
- Evaluated at 20 weeks following discharge from hospital
- 35.7% of patients committed violent act
- PCL:SV best single predictor
- Classification tree model developed

5. Cognitive/affective Models

Cognitive/affective Models

- Attentional processes
- Response modulation
 - Newman
- Cognitive/affective integration
- Brain imaging
- Psychophysiology

Note: Most of the presentation will involve colored images that do not produce well in B & W

6. Treatment/Management

Treatment of Criminal Psychopaths?

- Difficult, at best
- Much of the literature is hampered by:
 - poor diagnostic procedures
 - poor specification of treatment
 - impoverished outcome measures
 - poor methodological / statistical controls
- Recent studies indicate that traditional prison treatment programs do little good for psychopaths, and may even make them worse, with respect to recidivism
 - One treatment does not fit all offenders
 - Need programs designed specifically for psychopaths
 - One such program: Wong & Hare (2005)

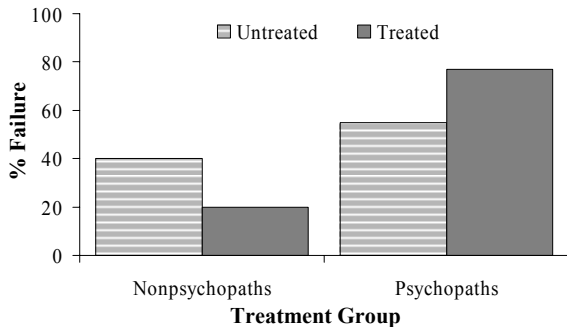
Some Legal Issues in Treatment of Psychopathic Offenders

- Should we bother to treat them? Is it legal or practical to deny?
- What diagnostic criteria or PCL-R cut score might be used for inclusion/exclusion?
- Can we deny treatment to offenders whose only hope of release depends on participation in treatment programs?
 - Catch 22 for them?
 - Is research evidence of untreatability strong enough?
- Where and when do we treat/manage/intervene?
 - Prison? Specialized units and programs? Following civil commitment (SVP)? Community?

Psychopathy and Recidivism Following Treatment *(Rice, Harris, & Cormier, 1992)*

- Releasees from a program for personality disordered offenders
- "Maxwell Jones" Therapeutic Community
- Intensive group/individual therapy; 80 hrs/wk
- Minimum 2 yrs in program
- Mean follow-up after release = 8 yrs, 4 months
- Psychopaths defined by PCL-R score of 27
- PCL-R coded from files only ($r = .96$)
- 176 treated patients; 146 untreated patients
- Mean time to failure = 47 months
- Results basis for belief that treatment makes psychopaths worse

Failure (%) Following Treatment: Violent Offences



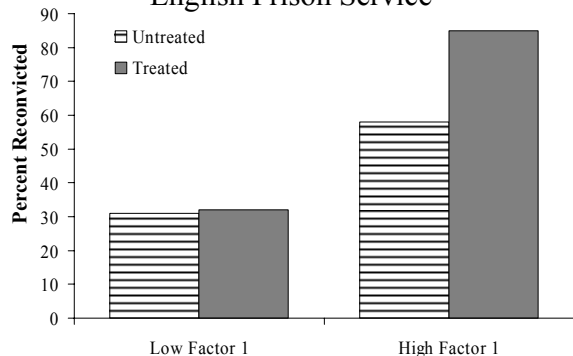
Rice, Harris & Cormier, 1992

Some Recent Data on Psychopathy, Treatment, and Reconvictions in HMP Service

Hare, Clark, Grann, & Thornton
Behavioral Sciences and the Law (2000)

- Treatment was short-term anger-management, social skills
- 24-month reconviction rate
- PCL-R Factor 1 (Interpersonal/affective) was strong predictor of post-release recidivism, as a function of treatment
- Results generally replicated Rice et al. findings
- Does not mean that **all** treatments will "make them worse."
- Points up need for specialized treatment programs

2-Year Post-release Reconviction Rates in the English Prison Service



Hare, Clark, Grann, & Thornton (2000)

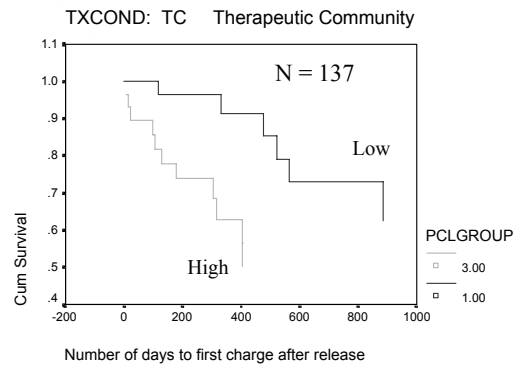
Recidivism Following Treatment of Female Substance Abusers in Prison

- Richards, H. J., Casey, J. O., & Lucente, S. W. (2003). Psychopathy and treatment response in incarcerated female substance abusers. *Criminal Justice and Behavior*.
- N = 404 female substance abusers in maximum security prison; 60% African-American
- Enrolled in 1-year substance abuse program
- Those with PCL-R of 30 or more excluded
- Treatment programs:
 - Therapeutic community
 - Heuristic program

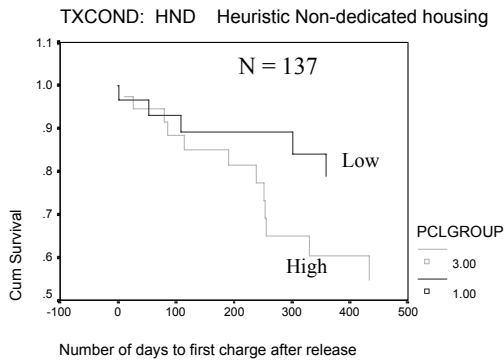
Female Substance Abusers in Prison

- Therapeutic Community
 - highly structured, one treatment fits all
 - Positive peer milieu, responsible for own behavior
 - Cognitive/behavioral techniques
 - Heuristic
 - Tailored to individual
 - Comprehensive assessment
 - Uses best elements of good substance abuse programs
- Upper (Group 3) and lower (Group 1) thirds of PCL-R scores
- PCL-R scores significantly associated with:
 - Poor treatment response
 - Removal for poor compliance
 - Violent and disruptive rule violations
 - Avoidance of urinalysis testing
 - New charges in the community after release

Survival Function at mean of covariates



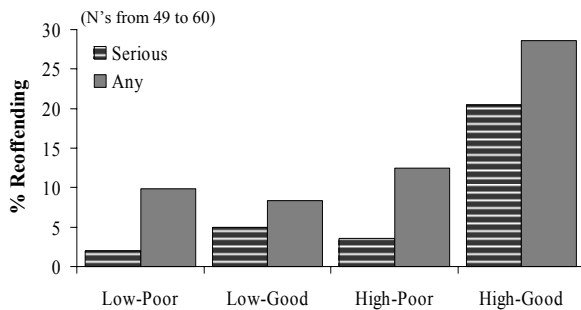
Survival Function at mean of covariates



Reoffense Rates of Sex Offenders After Treatment

- M.C. Seto & H.E. Barbaree. (1999). *Journal of Interpersonal Violence*
- 216 sex offenders
- High PCL-R and Low PCL-R groups (cut score 15)
- Divided into Poor and Good Treatment groups, based on therapist ratings of treatment change in:
 - Victim empathy
 - Understanding of offense cycle
 - Quality of relapse prevention plan
- Offenders with High PCL-R scores and positive ratings had the highest re-offence rates!
 - High PCL-R score + “made good progress” = BAD

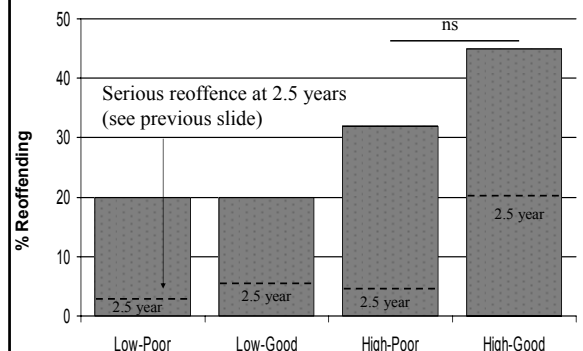
Reoffense Rates (%) of Sex Offenders Following Treatment

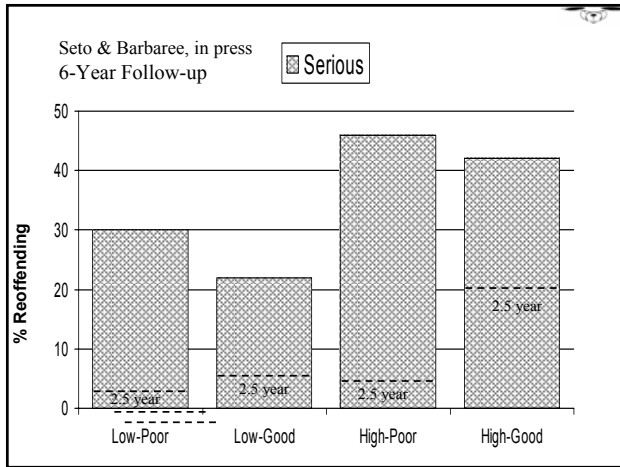


Seto & Barbaree, 1999

Seto & Barbaree, in press

5-Year Follow-up

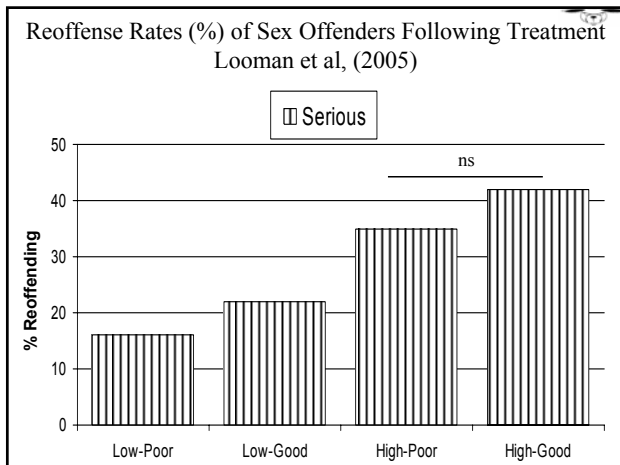




Reoffense Rates of Sex Offenders After Treatment

Looman, Abracen, Marquis, & Serin (2005), *Journal of Interpersonal Violence*

- 129 sex offenders in treatment program
- High PCL-R and Low PCL-R groups: Cut score = 25
- Divided into Poor and Good Treatment groups, based on therapist ratings of treatment change in:
 - Victim empathy, awareness
 - Understanding of offense cycle, relapse prevention plans
 - Global rating of amount of risk reduction



Hanson's Analysis of Treatment Effects for Sex Offenders

- *Canadian Journal of Behavioral Science, 2004*
- Unique opportunity
 - About 10 years ago CSC made treatment of sex offenders mandatory
 - Was able to compare reoffense rates of sex offenders released prior to, and after, treatment regimes introduced
- Treatment had virtually no effect on reoffense rates

7. Guidelines for a Psychopathy Treatment Program

Guidelines For a Psychopathy Treatment Program (2005)

S. Wong
Regional Psychiatric Centre &
University of Saskatchewan
&
R. D. Hare
University of British Columbia
Darkstone Research Group

MHS

Program Objectives

Longer term objectives

- To decrease the intensity and frequency of violent recidivism
- To decrease the intensity and frequency of institutional rule violations

Intermediate objectives

- Focus on changing the thoughts, attitudes and behaviors that are linked to violence in the psychopath rather than personality characteristics
- Factor 2 decreases with age, but Factor 1 does not
- Psychopaths are incarcerated for their antisocial behaviours not their personality features

Where do we start?

- Use the risk, need, responsivity principles (Andrew & Bonta, 1994) as the overall guideline
- Build on best practices in effective correctional treatment, especially for violent offenders
- Literature on the treatment of psychopath is not very informative, partly because of problems with the assessment of psychopathy
- Literature tells us more about what not to do than what to do
- Risk principle: treat high not low risk clients
- Need principle: treatment targets criminogenic needs
- Responsivity principle: tailor treatment to match the abilities and limitations of offender
- Psychopathy is a major responsivity factor

Responsivity

- Therapy disruptive behaviors: manipulations, conning, etc
- Predatory behaviors
- Learning style: use positive reinforcement
- Use more challenging and interesting teaching methods in addition to didactic approaches, consult adult educators
- Material relevant to the background & experience of offender
- Appeal to the psychopaths incessant need to promote his own interest: socialized hedonism (Ellis, 1979). *..one should strive for one's own satisfaction... keeping in mind that one will achieve one's best interest...by giving up immediate gratification...and by being courteous and considerate to others so that they will not sabotage one's own ends.*
- Best way to look after “#1”, to get what you want, is to be “nice” to others. **Do we then teach them to manipulate?**

Best practices in correctional programming

- Structured cognitive-behaviour approach
- Use relapse-prevention framework
- Prescriptive in nature: treat what is needed
- Risk assessment using dynamic factors
- Re-assess risk over time to reflect change
- Staff: well trained, firm and fair
- Maintain program integrity: what is said to be delivered is delivered, close program monitoring is essential

Use of Appropriate Treatment

- Close supervision and monitoring
- Offenders cannot run the program
- Objective of the PTP is to increase the repertoire of pro-social behaviors of the psychopath
- At worse, psychopaths should remain unchanged
- However, knowing others are watching, he may try to conceal negative behavior better
- Great care must be taken to observe the behaviour of the psychopath
- Can't take his word for it

The Program

- Identification of problem areas using VRS.
- Treatment & information modules developed for:
 - disclosure, crime cycles and behavioral cycles
 - social interpersonal skills training
 - self-control training; attitude examination
 - cognitive restructuring; emotional control
 - acquiring positive community support/dissociation from negative peers
 - work skill/work program
 - relapse prevention
 - substance abuse
 - forming positive relationships

Continues...

- Offenders take whatever treatment module that is necessary depending on assessment of dynamic risk factors
- “just in time delivery”
- Trained to criteria
- Everyone take crime cycle and relapse prevention groups.
- Behavior cycle work will be used extensively

Crime/behaviour Cycles & Relapse Prevention

- Used extensively with sex offenders
- Very useful for repeat violent offender; cycles are usually very clear
- Crime cycle analyses determine the antecedent conditions (thoughts, attitudes, & behaviors) linked to violence; allow offenders to personalize their criminal activities and to learn to take responsibility for their actions
- Construct crime cycles and later, detailed and extensive relapse prevention plans
- Also construct & use behavioral cycles to learn from day-to-day problem situations

Managing Professional Boundaries & Therapeutic Effectiveness

- Psychopaths are experts in splitting others into factions and at exploiting disorganized, vulnerable and divisive situations
- The resulting problems may lead to in-fighting and bickering that will create an unhealthy therapeutic environment
- Staff first have to look after themselves before they can look after the client

Staff Reactions to Psychopathic Behaviors

- Feel fearful, angry and resentful in response to abusive and belligerent behaviors
- Feel helplessness and hopelessness because of many broken promises; useless to try
- Feel victimized by conning, manipulation, lies
- Feel elated/bewildered at what appears to be miraculous short-term changes
- Feel attracted to or having sexual feelings towards the client
- Becomes a mouthpiece for the client
- Engages in a battle of wills
- Makes exceptions for the client because afraid he might otherwise become extremely angry or violent?

Managing Therapeutically Interfering Reactions

- Understand the psychopathic personality
- Reframe the negative behaviors as reasons the client is in treatment, not reasons for discharge
- Debrief oneself with colleague or team
- Discuss behavior & share information with team, maintain close team contact and support
- Isolated staff are vulnerable staff
- Mutual monitoring of counterproductive therapeutic behaviors
- Staff drawn into boundary violations by predatory behaviors of the psychopath
 - plays the control game/show off
 - for sexual relations
 - to acquire or transport contraband
 - to get a good report, etc

Signs of vulnerable staff

- Female staff who became involved with clients often did so to “rescue” them from their psychopathology by healing them with love
- Middle-age man: isolated, needed nurturing, felt generally devalued by the organization
- Staff experiencing life problems & disclosed problems to their clients, expects sympathy and treat clients as personal friends
- Staff who are inadequately trained and inexperienced in dealing with psychopaths

Interventions

- Read, understand & follow institutional policies & professional code of conduct
- Make boundary violation an ongoing topic of discussion in staff meetings
- Enlist trusted colleagues to mutually monitor signs of early boundary violation
- Always clarify one's professional role when difficult, delicate or sensitive issues that may be related to boundary violation occur, and consult with colleagues and supervisor

Continues...

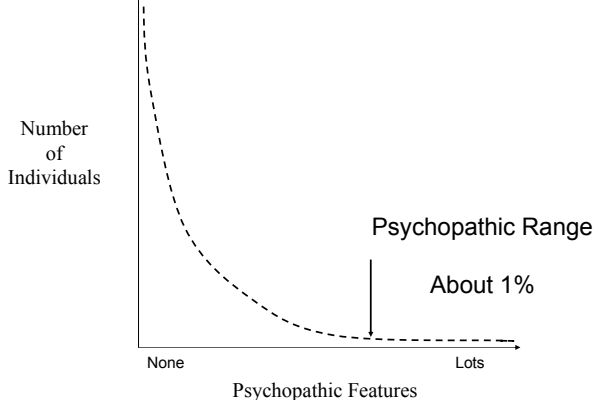
- Resist flattery and flirtation.
- Explore, with the assistance of colleagues, the reasons clients attempt to gain more intimacy.
- Be aware of personal limitations, significant ongoing life problems and one's usual approach to treatment; explore any significant deviation from one's usual practice.
 - Separate therapeutic from personal goals; do not confuse personal agenda with therapeutic agenda.
 - Offer understanding, support and assistance to colleagues who may be experiencing boundary violations.
 - Offer Critical Incidence Stress Debriefing to staff after a serious incidence.

8. Psychopathy in Society

Psychopaths: Where are They

- Everywhere
- All temporal periods
- All races, ethnic groups, cultures
- Males and females
- Not all in prison

Psychopathy in the General Population



Subcriminal or “White Collar” Psychopaths

- Not criminal in strict sense of the term “criminal”
- Many work without ending up in jail
 - But behavior may be shady, unethical, socially damaging
- Emphasis on criminals may give a distorted picture of the problem
- Idea that psychopaths are found only in prison ignores those with the wits, personal traits, social background that allow them to function in ways that are not technically illegal, or to avoid serious criminal consequences
- Babiak & Hare, *“Snakes in Suits: When psychopaths go to work.”*
Book in preparation

Some “Heavy Dose” Examples

- Con artists, swindlers, fraudsters
- Telemarketeers, boiler room operators
- “Pump and dump” stock salesmen
- Imposters, cult leaders, evangelists
- Shady lawyers and car salesmen
- Crooked home repairmen
- Persistent spouse assaulters, bullies
- Unethical doctors, therapists, counselors
- Corrupt politicians & law enforcement personnel
- Morally challenged businessmen, managers, CEOs, etc.

The B-Scan Babiak & Hare, 2005

- Designed to assist in selection, evaluation, executive development
- 107 descriptive items
- Organized into four categories
 - 16 subcategories
- 360° tool, completed by several individuals familiar with the person of interest

B-Scan Categories

Personal Style

- Insincere
- Arrogant
- Untrustworthy
- Manipulative

Organizational Maturity

- Impatient
- Unreliable
- Unfocused
- Erratic

Emotional Maturity

- Insensitive
- Remorseless
- Shallow
- Blaming

Antisocial Tendencies

- Dramatic
- Unethical
- Parasitic
- Bullying

B-Scan

- Examples of items
 - Appears to be play-acting
 - Makes a slick presentation
 - Blames others for problems
 - Is callous in dealing with people
 - Takes credit for work of others
 - Fails to complete projects after initial enthusiasm
 - Demands special “perks” beyond level of responsibility
 - Appears charismatic to some
 - Violates company rules

Some Case Examples of
Psychopathy in the Corporate
World
will be Presented

Structural Models of Psychopathy

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Psychopathy traditionally is defined by a cluster of inferred personality traits and socially deviant behaviors. The accepted standard for the reliable and valid assessment of psychopathy is the Psychopathy Checklist-Revised (PCL-R). Because of its importance in basic and applied research, and in the mental health and criminal justice systems, the PCL-R has been subjected to intense scrutiny by researchers and clinicians. In this article we discuss issues surrounding its structural properties and those of its derivatives. Using factor analysis, item response theory, and multidimensional scaling, we propose that the PCL-R and its derivatives are underpinned by at least four correlated factors: Interpersonal, Affective, Lifestyle, and Anti-social. We argue that attempts to characterize antisocial behaviors as merely “downstream” manifestations of more central traits are inconsistent with the structural properties of the PCL-R and with evidence that the development of traits and actions are interactive and reciprocal. We also report new evidence that psychopathy and its factors are dimensional in nature, perhaps extreme variants of normal personality traits and behaviors.

Introduction

“Psychopathy was the first personality disorder to be recognized in psychiatry. The concept has a long historical and clinical tradition, and in the last decade a growing body of research has supported its validity, from both a psychodynamic and neurobiological point of view” [1]. This clinical tradition has been marked by debates about conceptual, definitional, and etiologic issues, shifting labels and boundaries, and occasional questions concerning its utility as a scientific and clinical construct [2–4]. Nonetheless, the mid-20th century saw the emergence of psychopathy as a particular combination of inferred personality traits and socially deviant behaviors, well-described in the influential writings of Cleckley [5], and operationalized in the Psychopathy Checklist-Revised (PCL-R) and its derivatives, the 12-item Psychopathy Checklist: Screening Version (PCL:SV) [6] and the 20-item

Psychopathy Checklist: Youth Version (PCL:YV) [7], collectively referred to as the PCL Scales. From this perspective, psychopaths are described as egocentric, grandiose, arrogant, deceitful, manipulative, shallow, callous, impulsive, and sensation-seeking individuals who readily violate social norms and obligations without any sense of shame, guilt, or remorse.

The widespread adoption of the PCL Scales as a common metric for psychopathy has led to a dramatic increase in theoretical and empirical work, including hundreds of research articles, scores of reviews, chapters, and books during the past decade. The literature is accumulating at such a rapid rate that it is becoming increasingly difficult to keep abreast of current developments. In this article, we discuss some of the recent theory and research on the measurement and structure of psychopathy, as assessed by the PCL Scales.

The Psychopathy Checklist-Revised

Recent reviews of the development of the PCL-R and its psychometric and structural properties are available elsewhere, and provide the basis for much of the discussion in this article [3,8•]. Briefly, The PCL-R is a 20-item clinical construct rating scale that uses a semi-structured interview, case-history information, and specific scoring criteria to rate each item on a three-point scale (0, 1, 2) according to the extent to which it applies to a given individual. In some cases, this “standard” procedure (interview plus file information) is replaced by a “non-standard” procedure, in which only file information is used to score the items. The items are listed in Table 1. Total scores can range from zero to 40 and reflect the degree to which the individual matches the prototypical psychopathic individual. Internal consistency and inter-rater reliability generally are high. Although the PCL-R yields dimensional scores, it also may be used to classify individuals for research and clinical purposes. In North America a cut score of 30 typically is used with PCL-R and PCL:YV research on psychopathy. Other cut scores have been used, depending on the purpose of the assessments and the context in which they are used.

Structural Models of the Psychopathy Checklist-Revised

The study of any psychological construct relies on a clear delineation of its underlying dimensionality. Understanding

Table 1. Psychopathy Checklist-Revised items

1. Glibness and/or superficial charm*
2. Grandiose sense of self-worth*
3. Need for stimulation and/or proneness to boredom[†]
4. Pathological lying*
5. Conning and/or manipulative*
6. Lack of remorse or guilt*
7. Shallow affect*
8. Callous and/or lack of empathy*
9. Parasitic lifestyle*
10. Poor behavioral controls[†]
11. Promiscuous sexual behavior[†]
12. Early behavior problems[†]
13. Lack of realistic, long-term goals[†]
14. Impulsivity[†]
15. Irresponsibility[†]
16. Failure to accept responsibility for own actions*
17. Many short-term marital relationships[†]
18. Juvenile delinquency[†]
19. Revocation of conditional release[†]
20. Criminal versatility[†]

*=Original factor 1 items.

[†]=Original factor 2 items.

[‡]=Added to factor 2 in the second edition, Hare [3].

(Adapted from Hare [11])

its dimensionality helps to interpret scores on a measure of the construct and the pattern of correlations between the dimensions and relevant external variables. Structural equation modeling (SEM) provides a powerful methodology for testing hypotheses about dimensionality that involve non-experimental data [9]. A special case of SEM is confirmatory factor analysis (CFA).

An early exploratory factor analysis indicated that two correlated dimensions underpinned the PCL-R items [10,11]. Factor 1 consisted of eight “interpersonal and affective” items (1, 2, 4, 5, 6, 7, 8, and 16), and Factor 2 consisted of nine “socially deviant” items (3, 9, 10, 12, 13, 14, 15, 18, and 19). Three items (11, 17, and 20) did not load on either factor.

Although this factor structure has been replicated several times, a review of the EFA studies [12•] suggests that a more fine-grained parsing of the two-factor PCL model may be possible, and investigators have recently opted to use confirmatory factor analysis and other multivariate statistical tools to provide rigorous tests of new structural models of psychopathy. Using a combination of cluster analysis, item response theory (see below), CFA, and subjective decisions, Cooke and Michie [13] developed a model of psychopathy consisting of 13 selected items, seven testlets, and three factors. Seven items (“orphans”) were excluded as being too antisocial in nature. This model is problematic for several reasons [12•]: convoluted and questionable procedures for the inclusion/exclusion of scale items; over-fitting (10 factors used to model 13 items); and evidence of model misspecification (error variance terms set to zero to avoid negative variance

parameters). The authors claimed they had defined psychopathy solely in terms of personality traits, without reference to “downstream” antisocial behaviors. The claim is dubious at best, given that most of the PCL-R items in their model are inferred from behaviors that are antisocial, asocial, or otherwise disturbing to others [3,8•]. Additionally, there seems to be no consistent rationale for their distinction between some items they consider to be core traits (Parasitic lifestyle, Pathological lying, Conning/manipulative behavior) and some they consider to be products of these traits (Poor behavioral controls, Early behavioral problems). Even items that they declared to be measures of criminality (Items 19 and 20) are indications of the extent to which the individual violates formalized (legal) rules of conduct. Perhaps a clue to the rationale for selection of the 13-item set is the comment by Cooke (Cooke, Personal communication) that other item sets did not produce a clear three-factor solution.

In personality theory and psychopathology there are difficulties in making simple distinctions between source and surface traits. The problem is exacerbated by the likelihood that traits and their products are linked to some of the same underlying psychobiological processes, with the pathways to the latter being more complex than those to the former. Even if we had clear indications of what the core psychopathic traits are, it is unclear how we could measure them directly, without reference to surface manifestations, except perhaps in some abstract, philosophical manner. Additionally, there are cogent arguments that, like other personality disorders, an integral part of psychopathy is the emergence of an early and persistent pattern of problematic behaviors, and that these behaviors are important in defining the condition [14•,15,16]. From an evolutionary psychology perspective [15,17], psychopathy is a heritable adaptive life strategy in which a central feature is the early emergence of antisocial behavior, including aggressive sexuality. The view that major dimensions of personality reflect trait dispositions and characteristic adaptations to the environment [18] is consistent with twin studies on the heritability of antisocial behavior [19] and on the trait and action features of psychopathy [20,21•].

A Four-Factor Model

Hare [3] recently proposed that at least four latent variable dimensions are needed to represent the PCL-R construct of psychopathy: Interpersonal (items, 1, 2, 4, 5); Affective (items, 6, 7, 8, 16); Lifestyle (items, 3, 9, 13, 14, 15); and Antisocial (items, 10, 12, 18, 19, 20). Two items (11 and 17) did not load on any factor. The first three factors are identical with those in the three-factor model [13]. CFA studies, using a range of fit indices, have shown good support for this four-factor model, not only for the PCL-R [22], but for the PCL:SV [23•,24] and the PCL:YV [7,25]. The pattern of correlations among the four factors in the PCL-R and the PCL:SV (but not in the PCL:YV) is consis-

tent with the presence of two broad factors, one consisting of the eight items that comprise the Interpersonal and Affective factors, and the other consisting of the 10 items that comprise the Lifestyle and Antisocial factors [3]. These broad factors are the same as those in the original two-factor model of the PCL-R [10,11], but with the addition of Item 20 to the second factor.

Although model fit for these CFAs is good, even better fit is obtained when the items in the PCL Scales are more properly treated as ordinal variables. These analyses, described by Hare and Neumann [8•], involved use of the Mplus modeling program [26] and a robust weighted least squares parameter estimation procedure. The samples consisted of 5964 adult offenders (17% female) assessed with the PCL-R, 1631 adolescents (11% female) assessed with the PCL:YV, and 514 participants (61% female) from a community sample assessed with the PCL:SV as part of the MacArthur Risk Assessment Study [27]. The purpose of these analyses was to evaluate the generalizability of the four-factor model across distinctive samples, consisting of adults, adolescents, and general community participants. Preliminary analyses indicated that the males and females in each sample had equivalent covariance matrices, indicating that it was appropriate to use pooled male and female samples for subsequent analyses.

For the CFAs, we used a relative fit index, the Tucker Lewis index (TLI), to test how well the hypothesized four-factor model fit relative to a null (unstructured) model. We also used two absolute indices, the standardized root mean square (SRMR) and root mean square error of approximation (RMSEA), to determine how well the four-factor model reproduced the observed data. The fit of the four-factor model was excellent for the both the PCL-R (TLI=0.94, RMSEA=0.07, SRMR=0.05) and for the PCL:YV (TLI=0.97, RMSEA=0.07, SRMR=0.05) samples. The standardized parameter estimates for these two samples were similar to one another, and only the model for the PCL-R is presented in Figure 1.

The studies described previously indicate clearly that in offender populations antisocial behavior is an important component of psychopathy, as measured by the PCL Scales. A previous CFA of the MacArthur Risk Assessment Study PCL:SV data by Vitacco *et al.* [23•] indicated that the four-factor model also applies to civil psychiatric patients. To determine if the model may apply to the general population, we [8•] did a CFA on the PCL:SV scores from the community sample in the MacArthur Risk Assessment Study. Fit for the four-factor model was excellent (TLI=0.98, RMSEA=0.04, SRMR=0.05). The items on the Antisocial factor had substantial factor loadings and correlated significantly with the other three psychopathy factors, highlighting the critical nature of antisocial behavior in the psychopathy construct.

Hill *et al.* [24] have found that the four-factor model, relative to the three-factor model, accounts for greater variance in maximum security patients' aggression at 6-month

follow-up and in psychiatric patients' community violence at 10-week follow-up [23•]. Each study found that, in addition to the antisocial factor, other psychopathy factors also were critical predictors. In terms of research with the PCL-R, Walsh *et al.* [28] found that the antisocial factor of the PCL-R contributed uniquely to postdicting blind ratings of instrumentality of violence. Therefore, current findings suggest that the four-factor model has incremental validity over the three-factor in predicting important external correlates of psychopathy.

A significant strength of the four-factor model is that it can be used in longitudinal research to study the relations between the emergence of early antisocial tendencies and development of other psychopathic personality features. For instance, psychopathic traits (callousness, impulsivity) are predictors of future antisocial behavior [29,30]. Prior antisocial behavior is associated with higher levels of callousness and other psychopathic traits [31,32]. Additionally, Knight and Sims-Knight [33] found good fit for an SEM that hypothesized that physical and/or verbal abuse produced callousness and/or lack of emotionality. Such findings are consistent with the fact that repeated exposure to antisocial acts desensitizes individuals' negative emotional responses to such behavior [34], suggesting that exposure to—or engagement in—antisocial behavior can precede development of callousness or other psychopathy traits.

Item Response Theory

Because of its demonstrated importance in basic and applied research, the PCL-R has been subjected to unusually intense scrutiny and critical analysis, conceptual and statistical. Although it has fared well on both fronts, like all psychologic instruments its generalizability requires continual evaluation. One goal has been to determine the extent to which the PCL-R score metric has scalar equivalence, a condition that holds when test scores represent the same level of a construct (psychopathy) across diverse populations.

The application of item response theory (IRT) to psychopathy as measured by the PCL-R and the PCL:SV is described in detail elsewhere [35••,36–38]. Briefly, IRT models provide a mathematic expression of the relationship between a score on an individual item and the underlying construct or latent trait, theta (θ). For PCL-R items a graded response model characterizes each item according to parameters that indicate the discriminating value of the item and the threshold at which it discriminates, with respect to θ . IRT also provides estimates of the amount of information provided by a test and its items, and the precision of estimates at various levels of the trait. When comparing groups for scalar equivalence, IRT provides information on group differences in the trait-item score relationship. When a difference occurs the item is said to exhibit differential item functioning (DIF). IRT also provides information about the scalar equivalence of total test scores, depicted by test characteristic curves (TCCs).

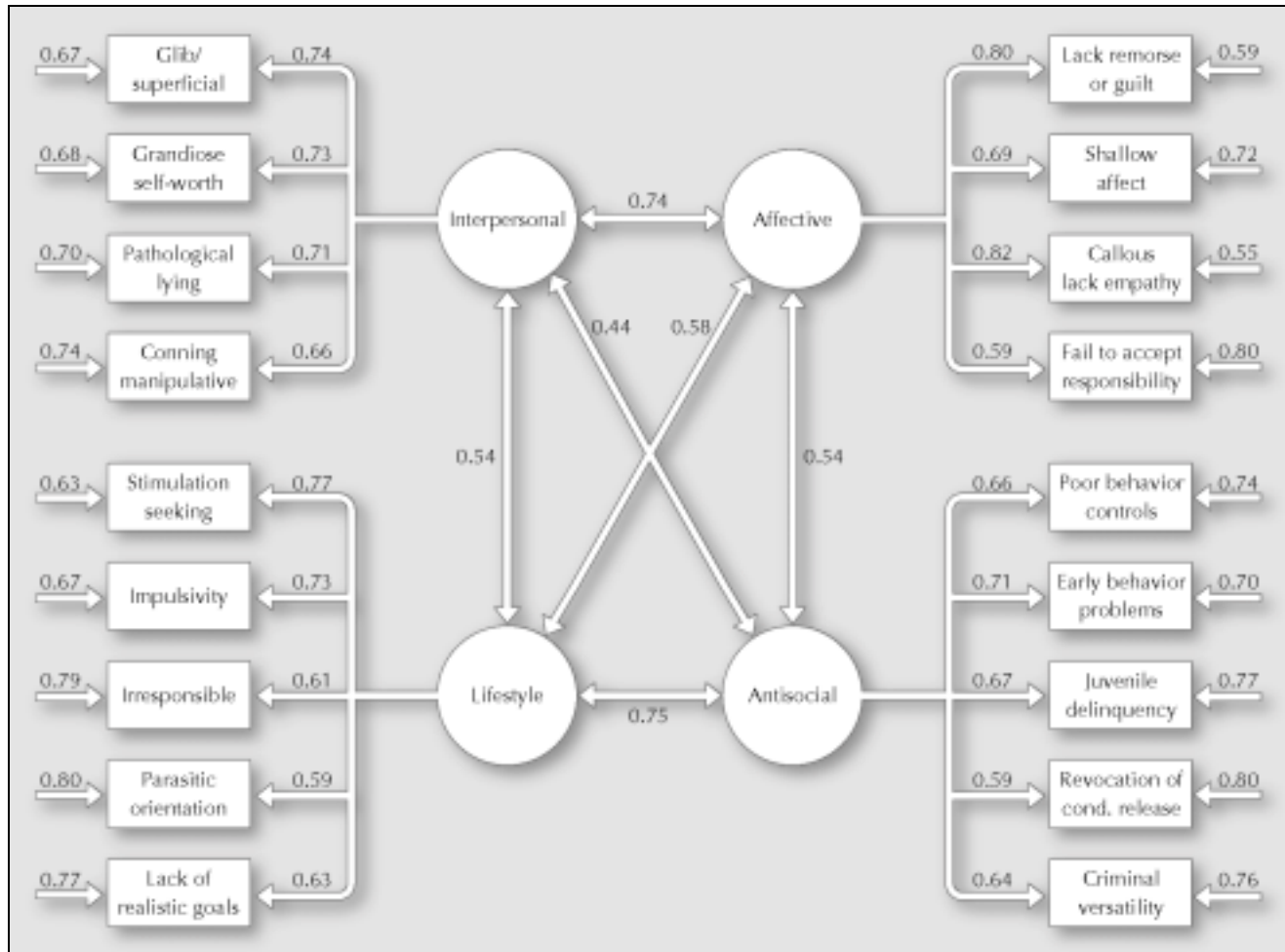


Figure 1. Standardized parameter estimates for the four-factor Psychopathy Checklist-Revised model of psychopathy for male offenders. The model does not include Item 11 (Promiscuous sexual behavior) and Item 17 (Many short-term marital relationships). The pattern of correlations among the factors implies two broad factors (Interpersonal/Affective; Lifestyle/Antisocial).

Bolt *et al.* [35••] recently conducted a multigroup IRT analysis of the PCL-R, using large samples of male and female offenders, and male forensic psychiatric patients, assessed from interview and file information. Various indices indicated that the assumption of unidimensionality typically required for IRT analyses was met for each sample. Separate DIF analyses indicated that for each comparison group the items that showed DIF with respect to the reference group tended to come from the Lifestyle and Antisocial factors. For each group, the Interpersonal and Affective items had higher discrimination and threshold parameters, than did the Lifestyle and Antisocial items. However, in each sample there was considerable variation in the discriminating value of the items and in thresholds, suggesting that there may be cultural and ethnic variations in the way some PCL-R items function. We concluded, as have others [37,38], that the PCL-R is a good measure of psychopathy because all items contribute to the estimate of θ and because different items function efficiently at different levels of the trait.

Item response theory can be used to estimate the amount of information provided by a test and its items, and to determine the precision of estimates at various levels of the trait. Bolt *et al.* [35••] computed information functions for PCL-R Total and Factor scores for each of the four groups described previously, based on a common latent trait metric. The information functions for Total scores seemed similar to one another, although slightly more information was provided by the PCL-R for male offenders than for the other groups. This is shown specifically in Figure 4 of Bolt *et al.* [35••]. The maximum amount of information was near the middle of the trait ($\theta=0$). The Interpersonal and Affective factors provided more information than did the Lifestyle and Antisocial factors, especially at higher levels of the trait.

Although in these samples the Interpersonal and Affective items showed less DIF than the other items, suggesting they should function well as anchors for cross-cultural research [35••], it does not follow that these other items are unimportant in such research. For example, an IRT analysis of a large sample of English male offenders [11] indicated

that the discriminating value, thresholds, and information functions of the Lifestyle and Antisocial factors were approximately as great as they were for the Interpersonal and Affective factors. It seems that the presence of impulsive lifestyle and antisocial features are more informative of psychopathy in English male offenders than in North American offenders. Additionally, recent research with adolescents and individuals from the general community shows that the antisocial item thresholds are substantially larger than those seen in male offender samples [8•], suggesting that antisocial behavior may be a more salient indicator of psychopathy in adolescent or general community samples than in adult forensic samples.

A TCC plots the expected PCL-R score as a function of the latent trait. In multigroup analyses TCCs from different groups can be compared to determine if a given score on the PCL-R has the same meaning for each group, with respect to the underlying trait of psychopathy. With male offenders as the reference group, and using a common latent trait metric, Bolt *et al.* [35••] compared TCCs for each of the three data sets described previously. The TCCs were very similar for all groups, particularly in the mid-range of the trait, with only small differences at the lower and upper levels of the trait. This suggests that in mid-range a given PCL-R score represents much the same level of psychopathy in male and female offenders and male forensic psychiatric patients. Exceptions occurred at relatively low PCL-R scores, where the level of psychopathy (relative to male offenders) seemed to be slightly overestimated in the other groups, and at higher PCL-R scores the level of psychopathy seemed to be slightly underestimated, in each case by only 1 or 2 points. A similar analysis by Cooke *et al.* [36] indicated that the TCCs for samples of African-American and white male offenders were virtually identical, indicating that a given PCL-R score had much the same meaning for each sample. Similar results were obtained in the study of English offenders described previously [11]. That is, the TCCs were similar for North American and English male offenders, suggesting that in each group a given PCL-R score has much the same meaning, with respect to psychopathy. However, more research is needed on the role of ethnic and other factors on the PCL instruments.

Multidimensional Scaling

Although CFA and IRT help to delineate the structural properties of a test, the former assumes linearity and thus provides a limited means of understanding latent structures, whereas the latter usually requires items to reflect a single underlying dimension. An important and potentially very informative new direction in research on psychopathy makes use of multidimensional scaling techniques [39]. MDS can be considered as a non-parametric alternative to factor analysis that does not assume that a linear structure exists. Instead, structures are interpreted as emergent

properties of the data. MDS allows statistical structures to be unfolded within a geometric space so that distances between points in space represent the strength of association. These scalograms are interpreted with respect to underlying theoretical facets. The researcher then can identify a theoretical correspondence to the structure of the data.

Interpreting a multidimensional analysis depends on a theoretical mapping of the underlying concepts that the researcher is aiming to explore within the data. These facets, if distinct, can be identified as clusters of items within the MDS space. In addition to having good face validity, the clusters should show correspondence to previous work examining the same constructs, as in all scientific methods. One study has applied MDS to the PCL:SV scores of 573 Swedish offenders and forensic patients [40]. The results indicated some correspondence to the two- and four-factor solutions for the PCL:SV.

A recent MDS study of 4600 male offenders rated on the PCL-R has been conducted by Bishopp and Hare [41]. The measure of fit in an MDS model is assessed from the amount of stress present within the solution. The lower the stress the better the fit, determined by Young's stress index [39]. Some authors are very strict about stress within an MDS analysis, whereas others argue that interpretability is more important, suggesting a more relaxed approach [39]. A two-dimensional solution using all 20 items was associated with high stress (poor fit), primarily because of the presence of item 11 (promiscuous sexual behavior) and item 17 (many short-term marital relationships). When these items were excluded, as they are in the two- and four-factor models, stress was low (good fit), and the solution provided convergence with the two- and four-factor models. However, evidence for a dimensional structure that seems to provide more information about psychopathy than do the linear factor analytic and IRT models. Rather than two or four factors, the MDS analysis suggested that as many as seven facets may be required to characterize the PCL-R conception of psychopathy: Cognitive style, Interpersonal, Affective, Developmental Antisocial, Adult Antisocial, Impulsivity, and Parasitic/Irresponsibility. The structure is readily interpreted in terms of general personality theory in which traits and actions represent the dynamic patterns of psychopathic personality. The MDS solution deconstructed psychopathy into dimensions that were not all identified in the linear models. For example, promiscuous sexual behavior (item 11) and many marital relationships (item 17) do not load on any PCL-R factor, but the MDS analysis suggests that the former is related to the exploitative interpersonal features of psychopathy whereas the latter is related to its impulsive, irresponsible features. It is possible that there is an eighth dimension reflecting sexual behavior and relationships, a possibility consistent with the evolutionary psychology model [15].

Although preliminary, these MDS results provide support for the view that psychopathy is an extreme variant of normal personality [41,42]. The MDS findings also cast

some light on the issue of differentiating between source traits and surface manifestations of these traits. For example, the analyses suggest that potential source traits include callousness and/or lack of empathy and impulsivity, and that surface traits include antisocial behaviors, grandiosity, cheating, lying, and manipulating. This is quite different from the argument proffered by Cooke and Michie [13] and Cooke *et al.* [48]. The use of MDS complements linear models and suggests alternate ways of understanding the psychopathy construct.

Latent Growth Models

A relatively new longitudinal approach in research on psychopathy involves latent growth models (LGMs). This approach has the advantage of separating the level of some phenomenon (violence) at any given time from the rate of change or growth of the phenomenon over time [26]. Neumann and Vitacco [43] recently used LGM to examine how the four psychopathy factors and a psychotic symptom factor predicted growth in violence in psychiatric outpatients. They found excellent support for the four-factor model (TLI=0.96, RMSEA=0.05) alone, and for an LGM where the four psychopathy factors and the psychotic symptom factor predicted a violence intercept factor and a slope factor (TLI=0.97, RMSEA=0.05). The findings indicated that the absolute level of violence at any given follow-up was primarily explained by the antisocial psychopathy factor and the psychotic symptom factor. In terms of growth in violent behavior, the Interpersonal psychopathy factor predicted an increased slope or rate of change in violent acts with time. This model accounted for 65% and 18% of the variance, respectively, in the level of and growth in violent acts during a 30-week follow-up. Psychopathy is well-known as a potent risk factor for violence [3,27], but most research has been concerned with predicting a single event, usually the first violent act after release from custody. But the variables that predict an event at time 1 may not be the same variables that predict events at later times. Clearly, additional research using LGMs for understanding the development and consequences of psychopathy and other critical variables during multiple periods is warranted.

Psychopathy: Categorical or Dimensional?

Do psychopathic individuals differ from the rest of us in degree or in kind? There has been considerable debate, but little empirical research, on the topic. Many theorists and researchers prefer dimensional conceptualizations of personality disorders, whereas others adopt a categorical view (that an individual either does or does not have antisocial personality disorder/psychopathy).

Harris *et al.* [44] used archival file information to obtain PCL-R scores for a large sample of male forensic patients to determine if the dimensional scores on the

PCL-R reflected a continuum or a categorical construct. Using four different methods, they obtained results consistent with the hypothesis that psychopathy is a discrete category, or taxon, defined by antisocial behaviors and early behavioral problems, and with an optimal PCL-R cut score of approximately 20 for inclusion in the taxon. However, their taxon may have been more reflective of persistent antisociality or criminality than of psychopathy.

Two recent studies investigated the issue using self-report measures of psychopathy, with results that favored a dimensional construct [45,46]. In a large-sample study of the PCL-R, using the most recent taxometric procedures, Guay *et al.* [47] obtained strong evidence for the dimensionality of the PCL-R and for each of the factors in the four-factor model. One interpretation of the results, consistent with the MDS data described previously, is that psychopathy is a coalescence of extremes on numerous dimensional traits. The findings have important implications for the clinical and research use of cut scores for making decisions about individuals and groups. They also suggest that it will be fruitful to investigate the etiology and development of the construct in terms of related dimensions in a multidimensional space for clinical assessment and for research on its etiology and development.

Conclusions

The structural properties of the PCL Scales are of more than academic interest. Among other things, they help to delineate the latent variables that define the construct of psychopathy. The four-factor model indicates that contrary to some arguments the presence of early and persistent antisocial behavior is an important feature of the construct. The latent variable model also becomes important in accounting for the associations between the components of psychopathy and a variety of external correlates, including risk for violence, treatment options, and psychobiological processes. Although factor analysis identifies four dimensions underpinning the PCL-R assessment of psychopathy, multidimensional scaling suggests that more dimensions may be required to fully account for the construct.

The nature of the causal relationship between early antisocial tendencies and other psychopathic traits is of considerable importance, but largely unexplored. It strikes us as too simplistic to assume that antisocial tendencies are merely consequences of other psychopathic features [48]. An equally plausible model is that antisocial features influence the nature and development of other psychopathic features [14,49]. For example, basic longitudinal research indicates that the imitative behavior of toddlers plays an important role in their development of moral conscience [50]. Exposure to, and engagement in, antisocial acts may play a role in the development of callous, manipulative, and impulsive psychopathic traits, which may then lead to further anti-

social behavior. Given that the modeling results to date [8•,22,23•] indicate a moderate to strong covariation of four dimensions of psychopathy (Interpersonal, Affective, Behavioral, and Antisocial), it would be prudent to assume that the longitudinal relations among these dimensions are interactive and reciprocal, and that the “real” core of psychopathy has yet to be uncovered.

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Psychopathy and Risk for Recidivism and Violence¹

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Abstract

Psychopathy is a personality disorder defined by a cluster of interpersonal, affective, lifestyle, and antisocial characteristics with serious, negative consequences for society. Among the most devastating features of the disorder are a callous disregard for the rights of others and a propensity for predatory behavior and violence. Following a brief discussion of the clinical concept of psychopathy and its assessment, I focus on the empirical literature on its association with crime and violence, the key role psychopathy plays in the new generation of risk assessment tools, and the implications of new research for the issue of its treatability.

Introduction

Aggression and violence are not unitary constructs. They take many forms and involve many levels of interpersonal and social complexity. The causes of violence at the interpersonal level are not the same as those that involve conflicts between groups or nations. However we define aggression and violence, they are the result of exceedingly complex interactions between genetic/biological factors and social/environmental factors. It is unlikely that we soon will have more than a rudimentary grasp of these interactions, given our penchant for investigating the two domains in isolation. Notwithstanding the importance of these interactions, we already know enough about the social and environmental correlates of individual and group violence to develop preventative strategies, given sufficient public pressure and political will. We know relatively little about the biological bases of human violence, in part because of the complexity of the problems but also because until recently we lacked the investigative tools needed to provide basic information about the workings of the human brain.

It is unlikely that we ever will have a unified theory of violence. However, I believe that we now can see the modest beginnings of what might be referred to as a “mini-theory” of human predatory violence, based on the clinical and empirical research on psychopathy. It can be argued that the aggression and violence of the psychopath are instrumental, predatory, and cold-blooded, and owe more to the nature of the individual than to the social and environmental forces that help to drive most other types of violence. However, the issue addressed in this paper is the role played by psychopathy in the assessment of risk for criminal acts, particularly those that are violent.

The Assessment of Risk

Extensive discussions of the theories and methodologies of risk assessment are provided elsewhere (e.g., see Hart, 1998; Monahan & Steadman, 1994; Monahan et al., 2001; Quinsey et al, 1998). The latest generation of risk assessment instruments largely has dispelled the old legal and psychiatric saw that useful predictions cannot be made about criminal behavior. Much of the recent debate has more to do with the relative effectiveness of actuarial instruments and structured clinical assessments. The former are empirically-derived sets of static (primarily criminal history, demographic) risk factors, and include the

¹ A revised and updated version (July, 2005) of a chapter published in N. Gray, J. Laing, & L. Noaks (Eds.). (2002). *Criminal Justice, Mental Health, and the Politics of Risk*. London: Cavendish. (pp. 27-47). With some additional material from the *Hare PCL-R, 2nd Edition* (2003) and relevant recent articles. **For use only in PCL-R Workshops, Seminars, and presentations by Robert Hare or Darkstone Research Group.**

Violent Risk Appraisal Guide (VRAG; Quinsey et al, 1998), *the Rapid Risk for Sexual Offense Recidivism* (RRASOR; Hanson, 1997), and the *STATIC-2000* (Hanson & Thornton, 2000), instruments that improve considerably on unstructured clinical judgments or impressions. However, procedures that include *structured* clinical decisions based on specific criteria, are proving to be at least as good as purely actuarial scales. For example, the *HCR-20: Assessing risk for violence* (Webster, Douglas, Eaves, & Hart, 1997) assesses 10 historical (H) variables, 5 clinical (C) variables, and 5 risk management (R) variables. The Level of Service Inventory-Revised (LSI-R; Andrews & Bonta, 1995) assesses. Its psychometric properties appear to be the same with English offenders as with North American offenders (Hollin, Palmer, & Clark, 2003), although its predictive utility in the UK remains to be determined.

All decisions about risk are influenced by the quality of the information available, the reliability with which this information is coded, the base rate for outcome variables (e.g., recidivism, violence), the nature of the population of offenders and patients used to derive the prediction schemes, and the problems associated with using group data to make decisions about individuals. Moreover, practical and legal issues such as the relative significance to the individual and to society of the likelihood of false positives, false negatives, and so forth, play an important role in determining how information about risk is used.

Psychopathy: The Concept

The modern conception of psychopathy is the result of several hundred years of clinical investigation and speculation by European and American psychiatrists and psychologists (see detailed accounts by Berrios, 1996; Millon, Simonsen, Birket-Smith, & Davis, 1998; McCord & McCord, 1964; Pichot, 1978). As Millon et al. (1998) put it, "Psychopathy was the first personality disorder to be recognized in psychiatry. The concept has a long historical and clinical tradition, and in the last decade a growing body of research has supported its validity..." (p. 28).

Although the etiology, dynamics, and conceptual boundaries of this personality disorder remain the subject of debate and research, there is a consistent clinical and empirical tradition concerning its core affective, interpersonal, and behavioral attributes. On the interpersonal level, psychopaths are grandiose, arrogant, callous, dominant, superficial, and manipulative. Affectively, they are short-tempered, unable to form strong emotional bond with others, and lacking in empathy, guilt or remorse. These interpersonal and affective features are associated with a socially deviant lifestyle that includes irresponsible and impulsive behavior, and a tendency to ignore or violate social conventions and mores.

Psychopathy cannot be understood solely, or even primarily, in terms of social and environmental forces and influences. It is likely that genetic factors contribute significantly to the formation of the personality traits and temperament considered essential to the disorder, although its lifelong expression is a product of complex interactions between biological/temperamental predispositions and social forces (Hare, 1998a; Livesley, 1998). Certainly, the traits and behaviors that define adult psychopathy begin to manifest themselves early in childhood, in some cases perhaps as a combination of two diagnostic categories, conduct disorder and attention-deficit hyperactivity disorder (Frick, 1998; Lynam, 1996; McBride, 1998).

The biological and environmental mechanisms responsible for the development and maintenance of psychopathy are not well understood, though subject to much speculation (see Hare, 1998a; Lykken, 1995; Mealey, 1995). However, several recent studies implicate a strong genetic/biological basis for the development of psychopathic features (Blonigen, Carlson, Kreuger, & Patrick, 2003; Blonigen, Hicks, Kreuger, Patrick, & Iacono, 2005; Larsson, Andershed, & Lichtenstein, in Press; Viding, 2004; Viding, Blair, Moffitt, & Plomin, 2005). Whether viewed as a mental disorder, a product of cerebral insult, an evolved "cheater" strategy for passing on one's gene pool (Mealey, 1995), or simply as a variant of normal personality (Widiger, 1998), psychopathy clearly presents society with a serious problem, as the rest of this paper will attest.

Although not all psychopaths come into formal contact with the criminal justice system (see Babiak, 1995; Hare, 1998b), their defining features clearly place them at high risk for crime and violence (Hare,

Cooke, & Hart, 1999). The problem, of course, is to identify these individuals as accurately as possible, particularly in situations where a diagnosis of psychopathy has serious implications for both the individual and society.

The Assessment of Psychopathy

The PCL-R and its Derivatives

The PCL-R was designed to measure the clinical construct of psychopathy, not to assess risk for recidivism or violence. However, because of its demonstrated ability to predict recidivism, violence, and treatment outcome the PCL-R routinely is used in assessments of risks, either on its own or, more appropriately, as part of a battery of established risk factors (see below).

Extensive descriptions of the development and psychometric properties of the PCL-R and its derivatives are available elsewhere (Bolt, Hare, Vitale, & Newman, 2004; Cooke, Forth, & Hare, 1998; Cooke & Michie, 1997; Cooke, Michie, Hart, & Hare, 1999; Forth, Kosson, & Hare, 2003; Hare, 1991, 2003; Hare & Neumann, 2005; in press; Hart, Cox, & Hare, 1995) and only a brief outline is provided here.

The PCL-R is a clinical construct rating scale that uses a semi-structured interview, case-history information, and specific scoring criteria to rate each of 20 items on a 3-point scale (0, 1, 2) according to the extent to which it applies to a given individual. Total scores can range from 0 to 40 and reflect the degree to which the individual matches the prototypical psychopath. In North America a score of 30 typically is used as a diagnostic cut score for research on psychopathy. Item response theory (IRT) analyses of the large data sets described in the 2nd Edition of the PCL-R Manual (Hare, 2003) and in Bolt et al. (2004) indicate that a score of 30 represents much the same level of the latent trait of psychopathy in North American male offenders, female offenders, male forensic psychiatric patients, and male offenders assessed from file reviews, as well as in English male offenders. However, lower cut scores (around 25) have proven useful in several research and applied contexts. IRT analyses (Cooke, Kosson, & Michie, 2001) and a meta-analytic review (Skeem, Edens, Camp, & Colwell, 2004) indicate that the PCL-R functions the same in African-American and Caucasian offenders and patients. The 2nd Edition presents a descriptive scheme in which PCL-R scores are organized into five levels, a procedure that may facilitate risk assessments and that avoids the use of the label, psychopathy.

Total PCL-R scores are highly reliable when used with trained and experienced raters. The intraclass correlation (ICC) typically exceeds .80 for a single rater (ICC₁) and .90 for the average of two raters (ICC₂). Internal consistency (alpha coefficients of .80+ and mean inter-item correlations of .20+) is also high.

Although developed primarily with data from male offenders and forensic patients, the psychometric properties of the PCL-R now are well established in a variety of other offender and patient populations, including females, substance abusers, and sex offenders (e.g., Brown & Forth, 1997; Cooke et al., 1998; Hare, 1998a; Rice & Harris, 1997; McDermott et al., 2000; Porter et al., 2000; Salekin, Rogers, & Sewell, 1997, Salekin, Rogers, Ustad, & Sewell, 1998; Windle & Dumenci, 1999). Early indications are that the PCL-R has good cross-cultural generalizability (e.g., Cooke, 1998; Gonçalves, 1999; Grann, Långström, Tengström, & Stålenheim, 1998; Hare, 2000; Moltó, Poy, & Torrubia, 2000; Pham, 1998).

PCL: SV. A 12-item version of the PCL-R, the PCL:SV (Hart et al., 1995) was developed for use in the MacArthur Risk Assessment study (Steadman et al., 1999). It is conceptually and empirically related to the PCL-R (Hart et al., 1995; Cooke et al., 1999) and is used as a screen for psychopathy in forensic populations or as a stand-alone instrument for research with noncriminals, including civil psychiatric patients (as in the MacArthur study). There is rapidly accumulating evidence for the construct validity of the PCL:SV, including its ability to predict aggression and violence in offenders and in both forensic and civil psychiatric patients (see below).

PCL: YV. The PCL:YV (Forth et al., 2003) is an age-appropriate modification of the PCL-R intended for use with adolescents. It appears to have the same psychometric and predictive properties as its adult counterpart (e.g., Brandt, Kennedy, Patrick, & Curtin, 1997; Cruise, Rogers, Neumann, & Sewell, 2000; Forth & Burke, 1998; Forth, Hart, & Hare, 1990; Gretton, McBride, O'Shaughnessy, Kumka, & Hare, 2001; Toupin, Mercier, Déry, Côté, & Hodgins, 1996).

Some populations present users of the PCL-R and its derivatives with special problems. For example, Morrissey (2003) has discussed the issues involved in doing PCL-R assessments of offenders and forensic patients with learning disability, including low intellectual functioning and significant impairment in adaptive functioning. Her recommendations should greatly facilitate working with these populations, and should encourage other clinicians and researchers to do the same with other special populations.

There is an extensive empirical literature indicating that in forensic populations the items in the PCL-R and PCL:SV measure a unitary construct (e.g., Bolt et al., 2004; Cooke & Michie, 1999; Hare, 1991, 2003; Harpur, Hare, & Hakstian, 1989; McDermott et al., 2000; Windle & Dumenci, 1999). Early analyses indicated that the items could be organized into two broad clusters or factors. Factor 1 reflects the interpersonal and affective components of the disorder, whereas Factor 2 is more closely allied with a socially deviant lifestyle. IRT has been used to investigate the discriminating properties of individual PCL-R and PCL:SV items. IRT provides information about the extent to which an item (or group of items) is discriminating of (relevant to) a given construct or trait, in this case, psychopathy. The evidence is clear that the interpersonal and affective (Factor 1) items generally are more discriminating of the psychopathy construct than are the socially deviant (Factor 2) items, but that the latter function more efficiently at lower levels of the trait than do Factor 1 items (Bolt et al., 2004; Cooke & Michie, 1997; Cooke et al., 1999, 2001; Hare, 2003).

Cooke and Michie (2001) found that a *selected* set of 13 PCL-R items defined a superordinate construct (psychopathy) made up of three correlated clusters or factors, referred to here as: Interpersonal (4 items); Affective (4 items); and Lifestyle (5 items). The first two factors represented a split of the original PCL-R Factor 1 into two parts, while the third factor was derived from PCL-R Factor 2. However, the clinical and statistical bases for the exclusion of seven “antisocial” items from the analyses have been challenged. Recent confirmatory factor analyses of very large data sets from the 2nd Edition of the PCL-R Manual (Hare, 2003; Hare & Neumann, 2005) clearly indicate that a 4-factor model (18 items) fits the data well: Interpersonal, Affective, Lifestyle, and Antisocial. The first three factors are the same as those identified by Cooke & Michie (2001) while the Antisocial, factor consists of five items excluded them. The pattern of correlations among the four factors, as well as hierarchical confirmatory factor analyses (Hare, 2003; Hare & Neumann, 2005) indicate the presence of two-higher-order factors, one identical with the original Factor 1 (Interpersonal/Affective), and the other the same as the original Factor 2 (Lifestyle/Antisocial), but with the addition of one item (Criminal versatility). Several investigators independently have tested this model, with results that strongly support a four-factor model for the PCL-R (Leistico, Salekin, & Rogers, 2004; Vitacco, Rogers, Neumann, Harrison, & Vincent, in press), the PCL:SV (Hill, Neumann, & Rogers, 2004; Vitacco, Neumann, & Jackson, in press), and the PCL:YV (Forth et al., 2003; Forth, Kosson, Neumann, & Hare, 2005). In the PCL-R and PCL:SV studies (but not in the PCL:YV analyses) the pattern of correlations among the four factors strongly implies two higher-order factors. The Vitacco, Neumann, and Jackson (in press) study makes the interesting point that the antisocial components of psychopathy, which some investigators consider to be “downstream” manifestations of more core personality traits (e.g., Cooke et al, 2001), might just as readily be considered to be “upstream.” Indeed, a recent structural equation modeling study (Neumann, Vitacco, & Hare, 2005) indicates that the antisocial features of psychopathy are as “predictive” of the interpersonal, affective, and lifestyle features as the latter are of the former. The PCL-R and PCL:SV 2-factor, 4-facet models are depicted in Tables 1 and 2, respectively.

Table 1	
Factors and Facets in the Hare Psychopathy Checklist-Revised (PCL-R)	
Factor 1: Interpersonal/Affective	
Facet 1: Interpersonal	Facet 2: Affective
Glibness/superficial charm	Lack of remorse
Grandiose self-worth	Shallow affect
Lying	Lack of empathy
Conning/manipulative	Will not accept responsibility
Factor 2: Lifestyle/Antisocial	
Facet 3: Lifestyle	Facet 4: Antisocial
Need for stimulation	Poor behavioral controls
Parasitic lifestyle	Early behavioral problems
Lack of goals	Juvenile delinquency
Impulsivity	Revocation of conditional release
Irresponsibility	Criminal versatility
<p>Note: From Hare, 2003. Item 11, Promiscuous sexual behavior, and Item 17, Many short-term marital relationships, contribute to the Total PCL-R score but do not load on any factors or facets.</p>	

Table 2	
Factors and Facets in the Hare Psychopathy Checklist: Screening Version (PCL:SV)	
Factor 1: Interpersonal/Affective	
Facet 1: Interpersonal	Facet 2: Affective
Superficial	Lacks remorse
Grandiose	Lacks empathy
Deceitful	Doesn't accept responsibility
Factor 2: Lifestyle/Antisocial	
Facet 3: Lifestyle	Facet 4: Antisocial
Impulsive	Poor behavioral controls
Poor behavioral controls	Adolescent antisocial behavior
Irresponsibility	Adult antisocial behavior

Clinicians and researchers should continue to base their PCL-R, PCL:SV, and PCL:YV assessments on the complete set of items as the most reliable measures of psychopathy, but the factor/facet structure allows for more detailed analyses of the individual.

Non-Clinical Instruments Related to the PCL-R

The P-Scan. *The Hare P-Scan* (Hare & Hervé, 1999) is a nonclinical tool in which mental health and criminal justice system professionals rate an individual on 120 items (scored 0, 1, 2) relevant to the personality and behavioral features of psychopathy. The information helps the user to make reasonably informed evaluations and judgments about offenders, patients, suspects, and other individuals of interest. It is not used to make a formal assessment of psychopathy, but provides the user with a computerized report on the interpersonal, affective (emotional) lifestyle, and antisocial features of the individual.

The B-Scan. *The B-Scan 360* (Babiak & Hare, 2004) is a "360-degree" multi-rater instrument that is used by organizations to evaluate current or potential management candidates, and to screen for, and identify, problematic individuals. The B-Scan 360 was developed out of the corporate and forensic research of Paul Babiak and Robert Hare. It consists of 111 behavioral descriptors that identify specific dysfunctional behavioral patterns that, if left unchecked, could potentially have a negative impact on the organization and its employees. The four Domains or style areas and 16 Facets or scales measured by the B-Scan 360 are: 1. *Personal Style* (Insincere, Arrogant, Untrustworthy, Manipulative); 2. *Emotional Style* (Insensitive, Remorseless, Shallow, Blaming); 3. *Organizational Maturity* (Impatient, Erratic, Unreliable, Unfocused); and 4. *Antisocial Behaviors* (Parasitic, Dramatic, Unethical, Bullying). The four Domains are derived from the PCL-R conception of psychopathy, and are similar to those measured by the P-Scan. The B-Scan is not used to make a formal assessment of psychopathy, but provides the user with a computerized report on the problematic features of the individual that may interfere with the proper operations of the organization. (see www.B-Scan.com).

APSD. *The Antisocial Process Screening Device* (Frick & Hare, 2001) is a rating scale for use with children from 6 to 13 years of age. It consists of 20 scaled items that measure three dimensions of behavior thought to be precursors to psychopathic traits: 1) Callous and unemotional (CU); 2) Narcissism (NAR); and 3) Impulsivity (IMP). The items are completed separately by a parent and a teacher of the child.

DSM-IV

The attributes measured by the PCL-R are similar in many respects to the diagnostic criteria for dyssocial personality disorder listed in the tenth revision of the International Classification of Diseases and Related Disorders (ICD-10; World Health Organization, 1990). However, they differ in important ways from the criteria for antisocial personality disorder (APD) contained in the American Psychiatric Association's (1994) fourth revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). The latter reflect the assumptions that it is difficult for clinicians to assess personality traits reliably, and that early-onset delinquency is a cardinal symptom of the disorder (Robins, 1978). These assumptions account for the heavy emphasis on delinquent and antisocial behavior in the criteria for APD (Hare & Hart, 1995; Rogers, Salekin, Sewell, & Cruise, 2000; Widiger et al., 1996). In forensic populations the prevalence of APD is much higher (> 50%) than the prevalence of psychopathy (< 30%), resulting in an asymmetric association between the PCL-R and APD. In this respect, it is noteworthy that APD is strongly associated with PCL-R Factor 2 items, but only weakly associated with Factor 1 items. Most psychopaths meet the criteria for APD, but most of the offenders with APD are not psychopaths. Yet, as DSM-IV puts it, "antisocial personality disorder (is) also known as psychopathy... (p.), effectively equating two different constructs. About this unfortunate and untenable position, Rogers et al., (2000) had

this to say: “As noted by Hare (1998), DSM-IV does considerable disservice to diagnostic clarity in its equating of APD to psychopathy” (pp. 236-237).

Recently, Quinsey, Harris, Rice, and Cormier (1998) claimed that when the APD items are summed to provide a continuous score (symptom counts, rather than a categorical diagnosis) the correlation with PCL-R Total scores is “in the .90s, indicating that the PCL-R and APD measure the same underlying construct, but that the dichotomous manner in which the APD diagnosis is arrived at wastes information” (p. 83). However, these results apparently were contaminated by having raters score both the PCL-R and the APD items from the same archival file information. Quite a different picture emerges when the PCL-R and the APD items are scored, independently, from both file and interview data (Hare, 2000). Under these circumstances, the PCL-R correlates with APD symptom counts about the same as it does with APD diagnoses. For example, in a sample of 306 male offenders Hemphill and Hare (2000) found that APD symptom counts were correlated .65 with PCL-R Total scores, .44 with Factor 1 scores, and .68 with Factor 2 scores. In addition, conduct disorder symptom counts correlated .51, .44, and .68 with PCL-R Total, Factor 1, and Factor 2 scores, respectively. Adult symptom counts correlated .59, .46, and .48 with PCL-R Total, Factor 1, and Factor 2 scores, respectively. Much the same pattern of correlations has been obtained between DSM-IV conduct disorder symptom counts and PCL:YV Total, Factor 1, and Factor 2 scores (Brandt et al., 1997; Forth, 1995; Forth et al., 2003; Toupin et al., 1996). The PCL-R and its derivatives do *not* measure the same construct as does APD.

Psychopathy and Crime

In the past few years there has been a dramatic change in the perceived and actual role played by psychopathy in the criminal justice system. Formerly, a prevailing view was that clinical diagnoses such as psychopathy were of little value in understanding and predicting criminal behaviors. However, even a cursory inspection of the features that define the disorder--callousness, impulsivity, egocentricity, grandiosity, irresponsibility, lack of empathy, guilt, or remorse, and so forth--indicates that psychopaths should be much more likely than other members of the general public to bend and break the rules and laws of society.

Although psychopathy is closely associated with antisocial and criminal behavior, psychopaths are qualitatively different from others who routinely engage in criminal behavior, different even from those whose criminal conduct is extremely serious and persistent. The typical criminal career is relatively short, but there are individuals who devote most of their adolescent and adult life to delinquent and criminal activities. Among these persistent offenders are psychopaths, who begin their antisocial and criminal activities at a relatively early age, and continue to engage in these activities throughout much of the lifespan. Many of these “career” criminals become less grossly antisocial in middle age. About half of the criminal psychopaths we have studied show a relatively sharp reduction in criminality around age 35 or 40 (Hare, McPherson, & Forth, 1988). This does not mean that they have given up crime completely, only that their level of general criminal activity has decreased to that of the average persistent offender. Moreover, this age-related decrease in crime may not apply violent acts. The propensity for psychopaths to engage in violent and aggressive behavior appears to decrease very little with age.

Psychopathy and Violence

The importance of aggression and violence in psychopathic symptomatology has always been clear, and is well represented in the diagnostic criteria for dyssocial personality disorder (ICD-10) and psychopathy (PCL-R). Each set contains one criterion directly related to a history of irritability, hostility, and aggression, including overt physical violence. In addition, each set contains several criteria that are indirectly related to aggression or violence (e.g., callousness, lack of remorse).

The association between psychopathy and violence should not be surprising. Many of the characteristics important for inhibiting antisocial and violent behavior--empathy, close emotional bonds, fear of punishment, guilt--are lacking or seriously deficient in psychopaths. Moreover, their egocentricity,

grandiosity, sense of entitlement, impulsivity, general lack of behavioral inhibitions, and need for power and control, constitute what might be described as the perfect prescription for asocial, antisocial, and criminal acts. This would help to explain why psychopaths make up only about 1% of the general population but as much as a quarter of our prison populations. It also would explain why they find it so easy to victimize the vulnerable and to use intimidation and violence as tools to achieve power and control over others. As Silver, Mulvey, & Monahan (1999) put it, "Psychopathy's defining characteristics, such as impulsivity, criminal versatility, callousness, and lack of empathy or remorse make the conceptual link between violence and psychopathy straightforward" (p. 244).

Many of the attitudes and behavior of psychopaths have a predatory quality about them. Psychopaths apparently see others as little more than emotional, physical, and financial prey, and feel justified in their belief that the world is made up of "givers and takers" and that they are "natural born takers." They are skilled at deception and manipulation (camouflage), stalking, and locating life's "feeding grounds" and "watering holes." Moreover, their use of intimidation and violence tends to be cold-blooded and instrumental, and is more likely to be straightforward, uncomplicated, and businesslike ("a matter of process") than an expression of deep-seated distress or understandable precipitating factors. It lacks the emotional coloring that characterizes the violence of most other individuals. The reactions of psychopaths to the damage they have inflicted are more likely to be cool indifference, a sense of power, pleasure, or smug satisfaction than regret or concern for what they have done. The ease with which psychopaths engage in violence has very real significance for society in general and for law enforcement personnel in particular. For example, a study by the Federal Bureau of Investigation (1992) found that almost half of the law enforcement officers who died in the line of duty were killed by individuals, mostly strangers, who closely matched the personality profile of the psychopath.

Woodworth and Porter (2002) investigated the relationship between psychopathy and the nature of homicides committed by a sample of 125 Canadian offenders. They hypothesized that the homicides of psychopathic offenders (PCL-R score ≥ 30) would more likely be instrumental (planned and motivated by an external goal) or "cold-blooded" in nature, whereas homicides committed by other offenders (PCL-R score < 30) would more closely resemble "crimes of passion" associated with a high level of spontaneity and reactivity. The authors coded the index homicides on a 4-point scale: 1 = purely reactive; 2 = reactive/instrumental; 3 = instrumental/reactive; and 4 = purely instrumental. Scores on this reactive-instrumental scale were significantly correlated with PCL-R Total scores (.45), Factor 1 scores (.46), and Factor 2 scores (.31). The partial correlation between the reactive-instrumental scale and PCL-R Total and Factor 1 scores, removing the effects of Factor 2, was .39 and .37, respectively, whereas the partial correlation with PCL-R Total and Factor 2 scores, removing the effects of Factor 1, was .13 and .09, respectively (*ns* in each case). That is, only Factor 1 played a significant role in predicting level of instrumentality in homicide. Additional analyses determined that, among psychopaths 93.3% of the homicides were primarily instrumental, whereas among nonpsychopaths 51.6% of the homicides were primarily instrumental. When the nonpsychopathic group was divided into low (PCL-R score < 20) and medium (score between 20 and 30) groups, the percentage of homicides that were primarily reactive was 28.2 for the low group and 67.4 for the medium group. Woodworth and Porter (2002) concluded that psychopaths engage in far more instrumental or "cold-blooded" homicides than do other offenders. They also argued that impulsivity in psychopaths may have less to do with a lack of control than with conscious decision-making following a rapid consideration of the gravity of the consequences.

Psychopathy: Risk For Recidivism and Violence

Some criminologists argue that the most important thing criminals have in common is that they have been convicted of criminal acts, and that clinical constructs such as psychopathy are "mythical" or of little value in helping to understand individual criminals (e.g., Toch, 1998). A corollary of such a position is that two offenders with similar criminal and demographic backgrounds should pose much the same risk for reoffending, even though one is an egocentric, cold-blooded, and remorseless individual while the

other is not. Logically, they should not present the same risk. And empirically, they do not, particularly with respect to violence.

Indeed, the significance of psychopathy as a robust risk factor for recidivism in general, and for violence in particular, is now well established (see meta-analyses by Dolan & Doyle, 2000; Gendreau, Goggin, & Smith, 2002; Hemphill & Hare, 2004; Hemphill, Hare, & Wong, 1998; Salekin, Rogers, & Sewell, 1996). In their review, Salekin et al. (1996) concluded that the ability of the PCL-R to predict violence was "unparalleled" and "unprecedented" in the literature on the assessment of dangerousness. They commented that this conclusion was based largely on work with White, Canadian offenders, but subsequent research indicates that their conclusions may have considerable generality. In a more recent meta-analysis, Hemphill et al. (1998) found that in the first year following release from prison psychopaths are three times more likely to reoffend, and four times more likely to violently reoffend, than are other offenders. The same pattern is found with White and African-American offenders in the United States (Hemphill, Newman, & Hare, 2001). Although the PCL-R and its derivatives are consistently associated with crime and violence, they should be used in conjunction with other risk factors and purpose-built instruments, such as the VRAG, SORAG, HCR-20, RRASOR, and the Static-2000.

Some commentators have expressed concerns that purpose-built risk tools sometimes outperform the PCL-R and its derivatives in predicting general and/or violent recidivism (e.g., Gendreau et al., 2003). Such concerns are misdirected, given that the PCL-R measures a clinical construct and its predictive validity depends on the relevance of psychopathy to the particular sample and context. Both risk tools and the PCL-R are useful, but for different reasons, the former because they are designed to maximize predictive efficiency in circumscribed contexts, the latter because it measures a construct that is the most explanatory and generalizable risk factor identified to date, and in many contexts, performs as well or better than specialized risk tools (Hemphill & Hare, 2004).

Although a detailed account of psychopathy as a risk for recidivism and violence is beyond the scope of this presentation, some examples may be helpful. Unless otherwise indicated, the terms "high" and "low" PCL-R scores refer to scores at or near the upper cutoff of 30, and at or near the lower cutoff of 20, respectively. The term "medium" PCL-R refers to scores between the upper and lower cutoffs.

Adult Offenders

In the first prospective study of its type (Hart, Kropp, & Hare, 1988), the PCL-R was administered to 231 male offenders prior to their conditional release from a federal prison, and their progress in the community was followed for up to approximately four years or until "failure," defined as a return to prison because of a new offence or a violation of the terms of the conditional release. Multiple regression analyses indicated that the PCL-R made a significant contribution to the prediction of failure, over and above the contribution made by relevant criminal-history and demographic variables. Because it is important to know when failure occurs, the data were subjected to survival analysis in which failure (recidivism, reoffending, or return to prison) was determined as a function of time following release. Within three years the percentage of offenders in the high, medium, and low PCL-R groups who had failed was approximately 80, 62, and 31, respectively. Similar results have been obtained by other investigators. For example, Hodgins, Cote, and Ross (1992) administered the French version of the PCL-R to 97 male offenders prior to their release on parole, and followed their progress for up to one year. Within one year about 60% of those with high PCL-R scores, 30% of those with medium scores, and about 10% of those with low scores, had failed. Serin and Amos (1995) administered the PCL-R to 299 male offenders and followed them for up to eight years. At the end of this period, about 80% of the high PCL-R group, 60% of the medium group, and 25% of the low group had reoffended or had were back in prison.

Results from a representative sample of 728 offenders in the English Prison Service indicate that the PCL-R is a relatively strong predictor of institutional misconduct, assaults on staff and inmates, and property damage (Hare, Clark, Grann, & Thornton, 2000). Within two years following the release of 278

offenders, the reconviction rate for those with a PCL-R score above 25 was 82%, whereas the reconviction rate for those with a score of 25 or below was 40%.

The role of psychopathy in the prediction of violence is particularly impressive. When measured by the PCL-R or its derivatives, it frequently is the *best* predictor. Harris, Rice, and Quinsey (1993) found that the PCL-R was the single most important predictor of violent recidivism in a large sample of offenders released from a maximum security unit and a pretrial assessment center. In the Serin and Amos (1995) study, described above, the rate for *violent* reoffending was about 40% for the psychopaths but only about 10% for the nonpsychopaths. Hemphill et al. (2000) found that the violent recidivism rate for a sample of 930 White and 267 African-American offenders at 8 years post-release was about 23%, 16%, and 8% for offenders with high, medium, and low PCL-R scores, respectively.

In the English Prison Service study described above (Hare et al., 2000), the reconviction rate for a violent offense was 38% for those with a PCL-R score of above 25, but only 3% for those with a score of 25 or less, a ratio of more than 12 to 1. A stepwise logistic regression analysis, with the PCL-R and a battery of established needs and risk factors as predictors, correctly classified 91% of the outcomes, violent reconviction. Contrary to the position exemplified by Toch (1998), the *only* predictor to enter the equation was the PCL-R.

In a Swedish study, Grann, Långström, Tengström, and Kullgren (1999) evaluated the relationship between the PCL-R and violent reoffending in a sample of 352 personality disordered offenders released into the community. They found that risk for violent recidivism during a follow-up period that averaged more than four years was about 65%, 48%, and 22% for those with high, medium, and low PCL-R scores, respectively. Grann et al. (1999) also performed a receiver operating characteristic (ROC) analysis of the PCL-R and violent recidivism. The ROC curve is a plot of true positives (sensitivity) against false positives (1 minus specificity), and is independent of the base rate for violence. The area under the curve (AUC; the area between the curve and the diagonal) represents the probability that a violent patient will have a higher PCL-R score than will a nonviolent patient. The AUC was .67 within 6 months, .71 within 1 year, and .70 within 5 years following release. They concluded that the PCL-R was as valid a predictor of violent recidivism in Swedish forensic settings as it is in North American settings, a conclusion that held whether or not the offenders were born in Sweden, and even after other risk factors were taken into account.

Relatively little research has been conducted on psychopathy in adult female offenders. However, the available data indicate that, on average, about 10% of female offenders meet the PCL-R “criteria” for psychopathy (Hare, 2001, 2003).

Richards, Casey, Lucente, Kafami, and Walters (2003) examined the relationship of the PCL-R to risky sexual and drug-use behaviors among 126 women (66% African-American, 31.7% White) participants in a year-long drug abuse treatment program in a maximum security prison. Women with a PCL-R score of 30 or more, or a PCL:SV score of 18 or more, were not eligible for the treatment program, resulting in a restricted sample. Nevertheless, Total scores on the PCL-R correlated significantly with several risk-taking behaviors, including multiple sexual partners (.29), shared “cookers” (.24), and intravenous drug use (.25). Analyses of the individual factor scores revealed that Factor 2 correlated positively with multiple sexual partners (.28), while Factor 1 exhibited a negative correlation (-.30) with unprotected vaginal sex. The PCL:SV Factor 2 score was significantly correlated with anal sex (.30) and a drug-using partner (.35), while Factor 1 was negatively correlated (-.40) with unprotected vaginal sex. The authors speculated that the negative relationship between Factor 1 and unprotected vaginal sex may reflect a perception by those with high Factor 1 scores that their own self-interest and protection are paramount, and that they are less likely than other women to be persuaded or coerced into engaging in unprotected sex.

The recidivism rate for psychopathic female offenders is considerably higher than it is for other female offenders. For example, in one study (Hemphill et al., 1999) about 62% of the female offenders with high PCL-R scores reoffended within one year of release, compared with less than 32% of those with

medium scores, and 18% of those with low scores. Loucks and Zamble (2000) reported that the reconviction rate at five years post-release was 68% and 28% for female offenders with PCL-R scores above and below the median, respectively. Salekin et al. (1998) reported that at 50 days following release from prison the recidivism rate for female psychopaths was almost seven times the rate for other female offenders. However, after 50 days the difference between the groups disappeared. In a study of female offenders (about 2/3 African-American) in a maximum-security institution, Richards, Casey, & Lucente (2003) reported that during the post-release period (approximately 5 years) the correlation between the PCL-R and length of time to the first incarceration for a felony offense was $-.27$ among 239 releases. A series of Cox regression analyses indicated that the PCL-R (especially Factor 1) was more important in predicting recidivism than were the type and “dose” of treatment program in which the offenders had participated. The authors noted that, across treatment conditions, a one-point increase in the Factor 1 score was associated with an 11% increase in the likelihood of being reincarcerated. Survival analyses indicated that within 800 days after release approximately 60% of those with high PCL-R scores, but only about 30% of those with low scores, had been reincarcerated. The treatment effects in this study are discussed in a later section.

The association between psychopathy and violence in adult female offenders has yet to be determined.

Adolescent Offenders

Psychopathy does not emerge unannounced in adulthood. The precursors are apparent at an early age, and the disorder can be measured reliably in adolescence with the PCL:YV (Forth & Burke, 1998; Forth et al., 2003). The base rate of psychopathy is at least as high among adolescent offenders as among their adult counterparts. These adolescent psychopaths are at much higher risk for recidivism and violence than are other adolescent offenders. In one study, Gretton, Hare, & Catchpole, (2004) examined the predictive validity of the PCL:YV in a large sample of young offenders, age 12 to 18, who had been sent by the courts to a youth facility for pre-sentence psychological and psychiatric evaluation. In the 10-year follow-up period, the violent reoffense rate for offenders with high, medium, and low PCL:YV scores was approximately 80%, 68%, and 55%, respectively. Even when relevant demographic and criminal history variables were taken into account, the PCL:YV made a substantial and significant contribution to the prediction of violent offending. In fact, a history of violence was unrelated to subsequent violence among offenders with high or low PCL:YV scores. That is, offenders with no prior evidence of violence were just as likely to commit a violent offence during the follow-up period as were those with a history of violence.

Forth et al., (1990) administered an early version of the PCL:YV to a sample of high risk adolescent offenders in a maximum security facility. Forth (1995) reported that subsequent to their release into the community the psychopaths, then approaching early adulthood, committed almost four times as many violent crimes as did the other offenders. Toupin et al. (1996) administered a French translation of the PCL-R (see Côté & Hodgins, 1996) to male adolescents receiving treatment in rehabilitation centers, day centers, or special educational programs. During a 1-year follow-up period, PCL-R scores were significantly correlated with delinquency, aggressive behavior, alcohol use, and number of aggressive conduct disorder symptoms. Similar results were obtained by Brandt et al. (1997) with a sample of mostly African-American young offenders. Stafford & Cornell (2003) found that the PCL:YV was a strong predictor of a variety of forms of institutional aggression, including reactive and instrumental violence, in adolescent inpatients.

Recently there has been a dramatic upsurge in research on adolescent psychopathy. Much of this research is described in the PCL:YV Manual (Forth et al., 2003). In addition, there are several special journal issues devoted to the topic, with a number of recurrent themes, including: the stability into adulthood of traits and behaviors identified as psychopathic in adolescence; the predictive validity of adolescent psychopathic traits; the ethical and practical issues associated with labeling; and comparisons of various conceptions and measures of adolescent psychopathy (e.g., see the special issues on juvenile

psychopathy published in *Law and Human Behavior*, 2002, v. 26; and in *Behavioral Sciences and the Law*, 2003, vol. 21).

Forensic Psychiatric Patients

The prevalence of psychopathy, as measured by the PCL-R or PCL:SV, is somewhat lower in forensic psychiatric populations in North America (about 10-15%) than it is in prison populations (about 15-25%). However, forensic patients who meet the PCL-R criteria for psychopathy or who have a significant number of psychopathic features are at much higher risk for recidivism and violence than are other forensic patients. For example, several studies have found that psychopathy is predictive of institutional aggression and violence in forensic psychiatric hospitals (Hill, Rogers, & Bickford, 1996; Heilbrun et al., 1998). Doyle, Dolan, & McGovern (2002) compared the PCL:SV, the VRAG, and the HCR-20 in their prediction of inpatient violence in an English medium-security forensic psychiatric facility. They reported (p. 141) that the PCL:SV was “the most robust predictor of in-patient violence and contributes significantly to the predictive validity of the VRAG and H-10 scale of the HCR-20.” In an ROC analysis, Doyle et al. (2002) obtained an AUC for the prediction of violence of .76 for the PCL:SV, .76 for Factor 1, and .72 for Factor 2 of the PCL:SV.

Rice and Harris (1992) found that scores on the PCL-R were as predictive of recidivism a sample of male not-guilty-by-reason-of-insanity (NGRI) schizophrenics as in a sample of nonpsychotic offenders. Hart and Hare (1989) found that only a small minority of consecutive admissions to a forensic psychiatric hospital were psychopaths, but that many patients exhibited a significant number of PCL-R symptoms. Further, the PCL-R predicted recidivism rates in a 5-year follow-up period (Wintrup, 1994).

A Swedish study (Tengström, Grann, Långström, & Kullgren, 2000) illustrates that there is a strong association between psychopathy and violence even in forensic patients with a history of violence. The sample in this study consisted of 202 violent psychotic offenders (most of whom were schizophrenics) with a mean PCL-R score of 18.2 (SD = 7.5). Patients with a PCL-R score above 25 (22% of the sample) had a violent recidivism rate of 66% in the post-release follow-up period (which averaged 51 months), whereas those with a PCL-R score of 25 or below had a recidivism rate of 18%. A set of established risk factors for this population could not improve on the predictive power of the PCL-R. Moreover, PCL-R Factor 1 (interpersonal/affective features) was as predictive of violence as was Factor 2 (socially deviant lifestyle). An additional finding of note was a sharp increase in the likelihood of a violent offence shown by the psychopaths at about 48 months post-release. Apparently this coincided with the end of intensive community supervision, suggesting that tight supervision is a protective factor for psychopaths. An ROC analysis obtained an AUC of .75 for the PCL-R and violent recidivism within five years.

In a sample of mentally disordered offenders in the UK, Gray, Hill, McLeish, Timmons, MacCulloch, & Snowden (2003) reported that the PCL-R (particularly Factor 2) significantly predicted institutional incidents (over about 3 months post-assessment) involving physical aggression or violence to property. However, they also found that the HCR-20 and the 16-item *Brief Psychiatric Rating Scale* (BPRS; Overall & Gorham, 1962) were stronger predictors than was the PCL-R. The results for the HCR-20 are not surprising, given that its development as a risk instrument. However, the success of the BPRS is noteworthy, and indicates that in a forensic psychiatric population measures of current psychiatric illness and symptoms may be very predictive of institutional infractions.

Civil Psychiatric Patients

The relationship between psychopathy and the prediction of violence is not confined to prison and forensic psychiatric populations. Several recent studies clearly indicate that the PCL:SV is one of the strongest risk factors for violence in civil psychiatric patients.

In one study, Douglas, Ogloff, & Nicholls (1997) assessed post-release community violence in a sample of 167 male and 112 female patients who had been involuntarily committed to a civil psychiatric facility. Although very few of the patients had a score high enough to warrant a diagnosis of psychopathy,

the PCL:SV nevertheless was highly predictive of violent behaviors and arrests for violent crimes. When the distribution of PCL:SV scores was split at the median (about 8 on a scale of 0-24), the odds ratio for an arrest for violent crime was about 10 times higher for patients above the median than it was for those below the median. The results of an ROC analysis of the PCL:SV and violent arrests yielded an AUC of .75.

In the MacArthur Foundation's Violence Risk Assessment Study, the most extensive and thorough study of its sort ever conducted, 134 potential predictors of violence in 939 patients were evaluated over a 20-week period following discharge from a civil psychiatric facility (Steadman et al., 1999). The single best predictor was the PCL:SV. The prevalence of post-discharge violence was 35.7% for patients with a PCL:SV score of 13 or more (out of a maximum of 24), but only 12.6% for patients with a PCL:SV score of less than 13. In presenting their results, the authors used a "classification tree" approach in which a hierarchy of decisions is made about the risk posed by a given patient. In this scheme, the first decision is whether or not the patient has a PCL:SV score of 13 or more. Silver et al. (1999) used a subsample of 293 of these patients to investigate the impact that neighborhood factors have on individual risk factors for violence in discharged patients. Again, the single best predictor of violence was the PCL:SV; the odds that a patient with a PCL:SV score of 13 or more would commit a violent act were 5.3 times higher than were the odds that a patient with a score below 13 would commit such an act. Although patients discharged into neighborhoods with "concentrated poverty" generally were at higher risk for violence than were those discharged into neighborhoods with less poverty, the odds ratio for psychopathy associated with violence changed very little (from 5.3 to 4.8) when concentrated poverty was added to the equation.

In a recent reanalysis of the MacArthur data, Vitacco et al. (in press) found that the two of the four PCL:SV facets were strongly correlated with violence at 20 weeks: Affective, .41; Antisocial, .40. That is, one component of each of the original Factors 1 and 2 was predictive of violence.

Harris, Rice, and Camilleri (2004) applied a modified 10-item version of the VRAG to the MacArthur data and reported that its predictive validity was almost as high as that of the classification tree approach used by Steadman et al. (1999). Of the items in the VRAG, the PCL:SV was by far the best predictor. Harris et al. commented that even if the base rate of psychopathy or psychopathic features in a population is relatively low, "...the personality traits associated with psychopathy are among the most important causes of aggression" (p. 1070). Further, they stated that the fact that "psychopathy is such a robust predictor of violence across populations suggests that personality traits associated with psychopathy must be among its most important causes" (p. 1072).

Sexual Violence

The last few years have seen a sharp increase in public and professional attention paid to sex offenders, particularly those who commit a new offense following release from a treatment program or prison. It has long been recognized that psychopathic sex offenders present special problems for therapists and the criminal justice system. For example, the Kansas Sexually Violent Predator Act established procedures for the involuntary commitment of sexually violent predators, defined as "any person who has been convicted of or charged with a sexually violent offense and who suffers from a mental abnormality or personality disorder which makes the person likely to engage in the predatory acts of sexual violence." In a landmark decision (Kansas vs. Hendricks, June, 1997), the United States Supreme Court upheld the constitutionality of such an involuntary commitment. As a result, many States are now introducing legislation that will allow for the civil commitment of dangerous sex offenders following their release from prison. Because most of these individuals will be psychopaths, Tucker (1999) has argued that the Supreme Court's decision will result in mixing the "bad" with the "mad," psychopathic criminals with psychiatric patients.

Several studies have investigated the prevalence of psychopathy among various types of sex offenders (e.g., Brown & Forth, 1997; Miller, Geddings, Levenston, and Patrick, 1994; Porter et al., 2000; Quinsey, Rice, & Harris, 1995). In general, the prevalence of psychopathy, as measured by the PCL-R, is much

lower in child molesters than in rapists or “mixed” offenders. For example, Porter et al. (2000) obtained PCL-R scores for a sample of 228 sex offenders. They found that the percentage of each type of sex offender with a PCL-R score of 30 or above was as follows: extra-familial molesters, 6.3; incest offenders, 10.8; mixed molesters, 6.3; rapists, 35.9; mixed rapists/molesters, 6.4.

The PCL-R is a moderate predictor of sexual recidivism (see Hare, 2003). Hildebrand, de Ruiter, & de Vogel (2004) found that the PCL-R was significantly correlated (point-biserial r) with general (.30), nonsexual violent (.28), violent (.32), and sexual (.24) recidivism in an 11-year follow-up of sex offenders. Olver (2003b) reported that the PCL-R was correlated with general (.31), violent (.32), and sexual (.18) recidivism in a sample of 113 sex offenders over a 10-year period. In a multisite study of 396 sex offenders, Harris, Rice, Quinsey, Lalumière, & Boer (2003) found that the PCL-R correlated .32 with violent recidivism and .17 with sexual recidivism over an 5-year period.

The offences of psychopathic sex offenders are likely to be more violent or sadistic than are those of other sex offenders (Barbaree, Seto, Serin, Amos, and Preston, 1994; Brown and Forth, 1997; Firestone, Bradford, Greenberg, & Larose, 1998; Miller et al., 1994; Serin, Malcolm, Khanna, & Barbaree, 1994). In extreme cases--for example, among serial killers-- comorbidity of psychopathy and sadistic personality is very high (Hare et al., 1999; Stone, 1998). In their PCL-R study of murderers, Porter, Woodworth, Earle, Drugge, & Boer (2003) concluded that “not only are psychopathic offenders disproportionately more likely to engage in sexual homicide (than are other murderers), but, when they do, they use significantly more gratuitous and sadistic violence” (p. 467).

A Deadly Combination

Sex offenders generally are resistant to treatment, but it is the psychopaths among them who are most likely to recidivate early and often. Quinsey et al. (1995) concluded that psychopathy functions as a general predictor of sexual and violent recidivism. They found that within 6 years of release from prison more than 80% of the psychopaths, but only about 20% of the nonpsychopaths, had violently recidivated. Many, but not all, of their offenses were sexual in nature.

One of the most deadly combinations to emerge from the recent research on sex offenders is psychopathy coupled with evidence of deviant sexual arousal. In a recent follow-up of 340 sex offenders, Rice and Harris (1997) reported that the violent recidivism rate was about 90% for offenders with a PCL-R score of 25 or more, and about 50% for those with a PCL-R score of less than 25. In addition, however, they found that sexual recidivism (as opposed to violent recidivism in general) was strongly predicted by a combination of a high PCL-R score and phallometric evidence of deviant sexual arousal, defined as any phallometric test that indicated a preference for deviant stimuli, such as children, rape cues, or nonsexual violence cues. Thus, about 70% of those with a PCL-R score of 25 or more *and* evidence of deviant sexual arousal committed a sexual offence, compared with about 40% of all other groups. Recently, Serin and Mailloux (in press) obtained PCL-R scores and measures of deviant sexual arousal from a Canadian sample of 68 sex offenders released from a federal prison. Within four years of release, 70% of the offenders with a PCL-R score above the median for the sample and evidence of deviant sexual arousal had reoffended, compared with about 15% of those with a PCL-R score below the median and no evidence of deviant sexual arousal. Serin, Mailloux, and Malcolm (2001) did not differentiate between sexual and nonsexual reoffending, perhaps because of the small sample they used. Harris & Hanson (1998) reported that offenders with a high PCL-R score and behavioral evidence of sexual deviance had committed more pre-index sexual offences, more kidnapping and forcible confinements, and more general (nonsexual) offences, and were more likely to violently recidivate, than were other offenders.

More recently, Olver and Wong (2002b) scored 113 sex offenders on a sexual deviance scale, based on their lifestyle and criminal behaviors. The scale was derived from the Violence Risk Scale: Sex Offender Version (Wong & Hare, in press), and consists of five items each scored on a 4-point scale (1-4). The PCL-R was scored from file reviews. As indicated above, Olver and Wong (2002a) reported that in this sample the PCL-R was significantly correlated with general and nonsexual violent reconvictions,

but not with sexual reconvictions, over a 10-year period. The combination of psychopathy and deviant arousal added little to the prediction of general recidivism, but was associated with a high rate of sexual recidivism. This is consistent with the findings reported by Rice and Harris (1997). Olver and Wong (2002b) reported that high psychopathy (PCL-R score > 29) and deviant sexual arousal (above the median on the sexual deviance scale) was associated with a sexual recidivism rate of about 60%, compared with a rate of about 35% for the high psychopathy-nondeviant sexual arousal, and about 22% for the combinations of low psychopathy-deviant arousal and low psychopathy-nondeviant arousal. In their retrospective follow-up study of Dutch rapists, Hildebrand et al. (2004) combined PCL-R scores with scores on the Sexual Deviation item from the Sexual Violence Risk-20 (SVR-20; Boer, Hart, Kropp, & Webster, 1997). The item defines sexual deviation as a relatively stable pattern of deviant sexual arousal, and is scored on a 3-point scale from all available behavioral and clinical information. Of the 94 offenders, 54 met the study criterion for sexual deviance. The combination of psychopathy (PCL-R cut score = 26) and sexual deviance was strongly predictive of sexual recidivism. Thus, the sexual recidivism rate was 71% for the High PCL-R/deviant group, 25% for the High PCL-R/nondeviant group, 30% for the Low PCL-R/deviant group, and 18% for the Low PCL-R/nondeviant group. The authors concluded that the present findings offered considerable evidence that the combination of psychopathy and structured clinical measures of sexual deviance is of special importance in the prediction of sexual violence.

The implications of psychopathy and deviant sexual arousal are just as serious among adolescent sex offenders as among their adult counterparts. Gretton et al. (2001) tracked the criminal activities of 220 adolescent sex offenders released from a sex offender treatment facility. Their mean score on the PCL:YV was 21.7 (SD = 7.0). The reconviction rate for sexual offences in the first 5 years following release was about 30% for those with high PCL:YV scores and about 15% for those with low PCL:YV scores. However, the pattern for other types of offences was quite different. Thus, in the follow-up period half of the offenders committed another crime, and the rate of offending was more than three times as high in those with high PCL:YV scores than in those with low scores. The young offenders with high PCL:YV scores who also exhibited phallometric evidence of deviant sexual arousal were not at increased risk for sexual reoffending, but posed by far the highest risk of general reoffending; about 90% of these individuals committed at least one offence in the follow-up period. The difference between these results and those obtained by Rice and Harris (1997) with adult sex offenders is that the deadly combination was predictive of sexual violence in adults, whereas it was predictive of general offending, including violence, in adolescents. However, in a more recent study of 396 sex offenders from four different sites, Harris et al. (2003) reported that the psychopathy-sexual deviance combination was predictive of violent recidivism, both sexual and nonsexual. The authors commented, "Because of the robustness of this (psychopathy x sexual deviance) interaction and its prognostic significance, its inclusion in the next generation of actuarial instruments for sex offenders should increase predictive accuracy" of general violent recidivism.

Psychopathic sex offenders are more likely than other sex offenders to be convicted of a nonsexual than a sexual offense (e.g., Porter et al., 2000). Many of these individuals are not so much specialized sex offenders as they are general, versatile offenders. Their misbehavior--sexual and otherwise--presumably is a reflection of a factors not specifically related to sexual behavior. For the psychopaths, these factors no doubt include their personality structure, their predatory stance, and their readiness to take advantage of any opportunities that come their way. It may be more important to target the antisocial tendencies and behaviors of so-called psychopathic sex offenders than it is to treat their sexual deviancy.

For an interesting model that integrates psychopathic features and other risk factors (static, dynamic) for sexual offending, see Beech and Ward (2003).

Treatment of Psychopaths

There is little convincing scientific evidence that psychopaths respond favorably to treatment and intervention (see Dolan & Coid, 1993; Hare, 1998b; Losel, 1998; Suedfeld & Landon, 1978). This does not mean that their attitudes and behaviors are immutable, only that there have been no methodologically sound treatment or "resocialization" programs that have been shown to work with psychopaths. On the other hand, there are legitimate concerns that the "nothing works" philosophy is not grounded in solid research (D'Silva, Duggan, & McCarthy, (2004).

Ogloff, Wong, and Greenwood (1990) reported that psychopaths, defined by a PCL-R score of at least 30, derived little benefit from a therapeutic community program designed to treat personality-disordered offenders. The psychopaths stayed in the program for a shorter time, were less motivated, and showed less clinical improvement than did other offenders. It might be argued that even though the psychopaths did not do well in this program, some residual benefits could conceivably show up following their release from prison. However, in a survival analysis Hemphill (1991) found that the estimated reconviction rate in the first year following release was twice as high for the psychopaths as for the other offenders. Rice, Harris, and Cormier (1992) retrospectively scored the PCL-R from the institutional files of patients of a maximum security psychiatric facility. They defined psychopaths by a PCL-R score of 25 or more, and nonpsychopaths by a score below 25. They then compared the violent recidivism rate of patients who had been treated in an intensive and lengthy therapeutic community program with patients who had not taken part in the program. For nonpsychopaths, the violent recidivism rate of treated patients was half that of untreated patients. But the violent recidivism rate of treated psychopaths was about 50% higher than that of untreated psychopaths. Therapy apparently made the psychopaths worse. But why? The simple answer is that group therapy and insight-oriented programs may help psychopaths to develop better ways of manipulating, deceiving, and using people, but do little to help them to understand themselves. As a consequence, following release into the community they may be more likely than untreated psychopaths to continue to place themselves in situations where the potential for violence is high.

The findings by Rice et al. (1992), though intriguing and suggestive, were based on retrospective research with a particular population of mentally disordered offenders, and with an unusual, complex, and highly controversial treatment program that included the use of LSD and nude-encounter therapy. These problems notwithstanding, there is recent evidence that psychopaths are not good candidates for traditional forms of prison treatment. Some recent findings from the English Prison Service (Hare et al., 2000) indicate that various short-term treatment programs have little effect on the post-release recidivism rates of offenders with low or medium PCL-R scores. However, these same programs appear to *increase* the post-release recidivism rates of offenders with high scores on the interpersonal/affective (PCL-R Factor 1) components of psychopathy. Within two years following release from prison the reconviction rate for offenders with a high Factor 1 score (9 or more) was 85.8% if they had participated in a treatment program, but was 58.8% if they had not participated in a treatment program. Treatment had no effect on the reconviction rates of those with low Factor 1 scores. For them, the reconviction rate was, on average, about 30%. Similar findings were obtained when offenders with high educational and social needs were provided with educational upgrading and the development of social skills. However, an interesting difference was that offenders with low to moderate PCL-R Factor 1 scores seemed to derive considerable benefit from these programs, as reflected in a reduced reconviction rate. Some indication of the psychopathy-related processes that might occur during institutional treatment programs is provided by a study conducted in an English prison hospital. Hobson, Shine, and Roberts (2000) administered the PCL-R to patients when they entered the hospital for treatment in a well-developed therapeutic community program. Their behavior during treatment sessions and while on the wards was evaluated with specially designed checklists. High scores on the PCL-R were strongly predictive of disruptive behaviors during treatment sessions and on the wards 3 months and 6 months following admission to the prison. The effect was entirely due to the interpersonal and affective features of psychopathy (PCL-R Factor 1). The results clearly indicated that the psychopaths manipulated the system to satisfy their own need for power, control,

and prestige. They played “head games” with other inmates and staff, continually tested the boundaries and looked for people and things to exploit, and showed no genuine interest in changing their own attitudes and behavior. Nevertheless, they managed to manipulate and fool some staff into thinking their efforts were sincere and that they were making good progress.

The consequences of this manipulation of staff may be reflected in reconviction rates. Seto and Barbaree (1999) reported that sex offenders with at least a moderate number of psychopathic features (PCL-R score of 15 or higher) who convinced therapists that they had gained insight into their behavior and had changed for the better actually reoffended at the highest rates. Indeed, their reoffense rate for serious (sexual and other violent) crimes was more than *four* times the rate shown by all other offenders. Seto and Barbaree (in press) presented results of a longer follow-up period (5 years) for this sample of offenders. The psychopathy-treatment evaluation effect was greatly reduced. The authors disagreed on the interpretation of these findings, one (Seto) arguing that the effect was real but weak, the other (Barbaree) arguing that there was no effect.

A limitation of the Seto and Barbaree (1999) and the Seto and Barbaree (in press) studies was that they used a very low score to define high and low PCL-R groups. Looman, Abracen, Serin, & Marquis (2005) used a cut score of 25 to subdivide their sample of 129 sex offenders into Low and High groups. The offenders took part in a treatment program designed for sex offenders at high risk for recidivism or with significant treatment needs, or both. During the post-release follow-up period (approximately 4-5 years) those offenders with PCL-R scores of at least 25 and who had been considered to have made good progress in therapy, recidivated at the highest rate. However, a recent study by Langton (2003), in which additional offenders were added to the Seto & Barbaree (1999), found that the previously obtained psychopathy-treatment effect did not occur, using PCL-R cut scores of 15 and 25. Unlike most other offenders, psychopaths suffer little personal distress, see little wrong with their attitudes and behavior, and seek treatment only when it is in their best interests to do so, such as when seeking probation or parole. It is therefore not surprising that they derive little benefit from traditional prison programs, particularly those aimed at the development of empathy, conscience, and interpersonal skills. Whether or not they are able to manipulate skilled therapists into falsely concluding that they have made good progress, and then recidivate at an unusually high rate, is an issue that remains unresolved.

Richards et al. (2003) evaluated the effects of several different treatment regimes (including a therapeutic community) in 404 female substance abusers in a maximum security facility. PCL-R scores significantly predicted poor treatment response, removals from the program for noncompliance, violent and disruptive rule violations, avoidance of urinalysis, and new charges in the community. High PCL-R scores also were associated with relatively high rates of post-release offending, regardless of the treatment regime involved.

Although some reviewers (e.g., Salekin, 2002) have suggested that clinical pessimism might be replaced with a degree of clinical optimism, most clinicians and researchers are rightly pessimistic about the treatability of psychopaths *with traditional methods*. What then? Do we simply keep them in prison until they are old enough to pose little risk to society? Do we ask psychopaths to participate in treatment programs that have little chance of success and that fool them and others into thinking that the exercise is worthwhile and of practical benefit to them? Rather than being discouraged, we should mount a concerted effort to develop innovative procedures designed specifically for psychopathic offenders. Lösel (1998) has provided a thoughtful analysis of the issues involved in the treatment and management of psychopathic and other offenders, and has outlined in some detail the requirements for an effective program. An extensive set of program guidelines for development of a program specifically designed for psychopaths is now available (Wong & Hare, 2005). In brief, we propose that relapse-prevention techniques should be integrated with elements of the best available cognitive-behavioral correctional programs. The program is less concerned with developing empathy and conscience or effecting changes in personality than with convincing participants that they alone are responsible for their behavior, and that

they can learn more prosocial ways of using their strengths and abilities to satisfy their needs and wants. It involves tight control and supervision, both in the institution and following release into the community, as well as comparisons with carefully selected groups of offenders treated in standard correctional programs. The experimental design would permit empirical evaluation of its treatment and intervention modules (what works and what doesn't work for particular individuals). That is, some modules or components might be effective with psychopaths but not with other offenders, and vice versa. Because correctional programs are constantly in danger of erosion because of changing institutional priorities, community concerns, and political pressures, we proposed stringent safeguards for maintaining the integrity of the program.

Conclusions

There is a substantial amount of empirical evidence that psychopathy, as measured by the PCL-R and its derivatives, is a predictor of recidivism and violence in prison, forensic psychiatric, and civil psychiatric populations. Indeed, the PCL-R is one of the most generalizable of the risk factors identified thus far, and for this reason it is included in a variety of risk assessment procedures, both purely actuarial (e.g., the VARAG; Quinsey et al, 1998) and structured clinical (e.g., the HCR-20; Webster et al, 1997). Although psychopathy is not the only risk factor for recidivism and violence, it is too important to ignore, particularly with respect to violence.

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