

**Chapter 8**  
**BEHAVIORAL AND COGNITIVE**  
**CORRELATES OF CRIME**

**Table 8.1. Results from studies of the relationship between impulsivity and criminal/antisocial behavior. (Overall consistency score = 97.5%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics				Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive			NORTH AMERICA Miller & Brown 1991; WL Johnson et al. 1993; Stanford et al. 1996 [3]	ASIA India: Misra 1983:35 EUROPE England: Gibson 1964; Eysenck & Eysenck 1971; Foggitt et al. 1974; Eysenck & McGurk 1980; Osborn & West 1980; Germany: Schwenkmezger 1983 MIDDLE EAST Israel: Rotenberg & Nachson 1979 NORTH AMERICA Canada: Tremblay et al. 1994; Kerr et al. 1996; United States: Healy & Bronner 1936:62; Docter & Winter 1954; Eisen 1956; Gibbens 1958; Hathaway et al. 1960; Gough 1971; Jensen 1973:466; Curtiss et al. 1979; Oas 1983; Widom et al. 1983; Roff & Wirt 1984:115; Roys & Wiehe 1988; Mak 1990; Mak 1991; Feldman & Weinberger 1994; White et al. 1994 PACIFIC New Zealand: Lynam et al. 1993:193; White et al. 1994 [28]	EUROPE England: Farrington 1993:15 NORTH AMERICA Canada: Fedora & Reddon 1993:329; United States: Guze et al. 1969; Barratt 1994:64 PACIFIC New Zealand: Krueger et al. 1994 [5]	NORTH AMERICA United States: Erickson & Roberts 1966; Roberts et al. 1974; Tinklenberg et al. 1996 [3]	EUROPE England: SB Eysenck 1981; Spain: Ortet et al. 1988; Luengo et al. 1994 NORTH AMERICA Canada: Tremblay et al. 1994; Kerr et al. 1997; United States: Marohn et al. 1971; Hindelang 1972:77; Rowe 1986:523; Grasmick et al. 1993; Lynam et al. 1993:194; Wood et al. 1993; Caspi et al. 1994; White et al. 1994; Longshore et al. 1996 PACIFIC Australia: Mak 1987; Heaven 1989; Rigby et al. 1989; Heaven 1993:71; New Zealand: White et al. 1994 [19]	ASIA China: Wong et al. 1997 NORTH AMERICA United States: White et al. 1987:729; Wood et al. 1995 [3]	EUROPE England: Sandberg et al. 1978; Farrington et al. 1990; Farrington 1997:100; Tranah et al. 1998 NORTH AMERICA Canada: Tremblay et al. 1994 United States: Dodge 1985; Newman 1981; McDermott 1993:422 [7]	EUROPE England: Blackburn 1969; Spain: Silva et al. 1986 NORTH AMERICA Canada: Hare 1982:270; Belmore & Quinsey 1994 United States: Kipnis 1971; Schalling 1978:95; Heilbrun 1982:553; Oas 1985; Dickman 1990 [9]
Not Sign.							NORTH AMERICA United States: Saunders et al. 1973 [1]		EUROPE England: Farrington 1993:15 [1]	
Negative										

**Table 8.2. Results from studies of the relationship between sensation seeking/risk taking and criminal/antisocial behavior. (Overall consistency score for sensation seeking = 98.2%; well established) (Overall consistency score for risk taking=100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use			
Sensation Seeking	Positive			NORTH AMERICA <i>United States</i> : Scourfield et al. 1996 [1]	ASIA <i>Russia</i> : Ruchkin et al. 1998b(N) EUROPE <i>Germany</i> : Losel 1975(R); Schwenkmezger 1983(R) NORTH AMERICA <i>United States</i> : Fadey & Farley 1972; Farley & Sewell 1976; Whitehill et al. 1976; Donnelly 1981:426; Serok 1981; Perez & Torrubia 1985; Tremblay et al. 1994 [10]	EUROPE <i>England</i> : Farrington 1993:16; Farrington 1997b:97(R) <i>Spain</i> : Perez 1983a; <i>Sweden</i> : Dahlback 1990a, 1990b NORTH AMERICA <i>United States</i> : Horvath & Zuckerman 1993 [6]	EUROPE <i>Spain</i> : Goma et al. 1988:213 [1]	ASIA <i>Russia</i> : Ruchkin et al. 1998 EUROPE <i>Belgium</i> : Simo & Perez 1991; <i>England</i> : Otero-Lopez et al. 1994:472; Farrington 1997b:97(R); <i>Spain</i> : Perez 1983b; Perez & Torrubia 1985; Luengo et al. 1994 NORTH AMERICA <i>United States</i> : Fadey & Farley 1972; White et al. 1985; Young 1990; Newcomb & McGee 1991; Wood et al. 1993; Arnett et al. 1997 [13]	EUROPE <i>England</i> : Kohn & Annis 1977; <i>Spain</i> : Luengo et al. 1994 MIDDLE EAST <i>Israel</i> : Teichmann et al. 1989 NORTH AMERICA <i>United States</i> : Zuckerman et al. 1972; Jessor & Jessor 1977; Sutker et al. 1978; Segal et al. 1980; Galizio & Stein 1983; Hobfall & Segal 1983; Satinder & Black 1984; Jaffe & Archer 1987; Brook et al. 1988:151; Andrucci et al. 1989; Wood et al. 1995; Liu & Kaplan 1996; Arnett et al. 1997 PACIFIC <i>Australia</i> : Andrew & Cronin 1997 [17]	EUROPE <i>Norway</i> : Thuen & Bendixen 1996:54 NORTH AMERICA <i>United States</i> : Orris 1969; Whitehill et al. 1976; DeMyer-Gapin & Scott 1977(N); Frick et al. 1995 [5]	EUROPE <i>England</i> : Blackburn 1969 NORTH AMERICA <i>United States</i> : Quay 1965b; Emmons & Webb 1974 [3]
	Not Sign.							NORTH AMERICA <i>United States</i> : Karoly 1975 [1]			
	Negative										
Risk Taking	Positive			NORTH AMERICA <i>United States</i> : Harano et al. 1973; Harano 1975; Lewis & Shanok 1977; Shanok & Lewis 1981 [4]			EUROPE <i>Sweden</i> : Dahlback 1990a; Dahlback 1990b NORTH AMERICA <i>United States</i> : Levine & Singer 1988 [3]	NORTH AMERICA <i>United States</i> : Hogan & Jones 1983:17 [1]			
	Not Sign.										
	Negative										

**Table 8.3. Results from studies of the relationship between childhood aggression and bullying and criminal/antisocial behavior. (Overall consistency score for childhood aggression=95.3%; well established) (Overall consistency score for childhood bullying = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions		
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use			
A	Positive	EUROPE <i>Finland:</i> Pulkkinen 1983; Pulkkinen & Pitkanen 1993 NORTH AMERICA <i>United States:</i> Justice et al. 1974 [3]		NORTH AMERICA <i>Canada:</i> Dobkin et al. 1995; <i>United States:</i> Kellam et al. 1983 [2]	EUROPE <i>England:</i> Farrington 1979; Stattin & Magnusson 1989; <i>Finland:</i> Viemero 1992; <i>Scotland:</i> Mulligan et al. 1963;1085 NORTH AMERICA <i>United States:</i> Havighurst et al. 1962; Feldhurst et al. 1973; Farley & Sewell 1976; Loney et al. 1981; Pakiz et al. 1992; Pakiz et al. 1997 [10]	EUROPE <i>Finland:</i> Viemero 1996; <i>England:</i> Magnusson et al. 1983; Farrington 1986; Stattin & Magnusson 1991; <i>Sweden:</i> Kirkegaard-Sorensen & Mednick 1977; Olweus 1980 NORTH AMERICA <i>United States:</i> Kandel et al. 1976; Kupersmidt & Coie 1990; Brook et al. 1996 [9]	EUROPE <i>England:</i> Mulligan et al. 1963; <i>Finland:</i> Pulkkinen 1983 NORTH AMERICA <i>United States:</i> Wenk et al. 1972 [3]	EUROPE <i>England:</i> Farrington 1986 NORTH AMERICA <i>Canada:</i> Haapasalo & Tremblay 1994; Tremblay et al. 1995; <i>United States:</i> Loeber 1988 [4]	NORTH AMERICA <i>United States:</i> Robins et al. 1970; Kay et al. 1978; Kellam et al. 1980; Kellam & Brown 1982; Kellam et al. 1983; Baumrind 1985; Block et al. 1988; Shedler & Block 1990; Brook et al. 1992; Dukarm et al. 1996; TJ Allen et al. 1997 [11]	NORTH AMERICA <i>United States:</i> Stewart et al. 1981; Biederman et al. 1996:1198 [2]	EUROPE <i>Finland:</i> Viemero 1992 NORTH AMERICA <i>United States:</i> Cadoret & Stewart 1991; Robins et al. 1991 [3]
	Not sign.										
	Negative							EUROPE <i>Sweden:</i> Stattin & Magnusson 1984 [1]			
B	Positive	EUROPE <i>England:</i> Farrington 1993 [1]			EUROPE <i>Sweden:</i> Jonsson 1967:205; <i>Norway:</i> Olweus 1993 [2]	NORTH AMERICA <i>United States:</i> Cairns & Cairns 1994:227 [1]	EUROPE <i>England:</i> Farrington 1989; <i>Scotland:</i> Beck 1994; Power et al. 1997 PACIFIC <i>Hawaii:</i> Werner & Smith 1992:113 [4]	EUROPE <i>Switzerland:</i> Killias & Rabasa 1997 PACIFIC <i>Australia:</i> Rigby & Cox 1996 [2]		NORTH AMERICA <i>United States:</i> Russo et al. 1994:64; Biederman et al. 1996:1199 [2]	
	Not Sign.										
	Negative										

**Table 8.4. Results from studies of the relationship between trustworthiness & lying and criminality/antisocial behavior. (T -- trustworthiness; L -- chronic lying and deception; C -- cheating in school) (Overall consistency score for trustworthiness =100%; well established) (Overall consistency score for lying and cheating=100%; well established correlate)**

Nature of the Relationship		Types and Seriousness of Offenses							Clinical Conditions		
		Official Statistics					Self-Reported		Conduct Disorders	Antisocial Personality	
		Violent Offenses	Property Offenses	Drug Offenses	Delinquency and Misdemeanors	General & Unspecified Offenses	Recidivism	Victimful or Overall Offending			Illegal Drug Use
T r u s t w o r t h y	Negative							NORTH AMERICA <i>United States:</i> Hogan & Jones 1983:17 [1]	NORTH AMERICA <i>United States:</i> Smith & Fogg 1975; Gulas & King 1976; Goldstein & Sappington 1977; Kay et al. 1978; Janes et al. 1979; Wingard et al. 1979 [6]		NORTH AMERICA <i>United States:</i> Costa & McCrae 1990; Clark & Livesley 1994; Harper et al. 1994 [3]
	Not sign.										
	Positive										
L & C h e a t.	Positive		NORTH AMERICA <i>United States:</i> McCord 1977(L) [1]		EUROPE <i>England:</i> Farrington 1981(L); Farrington 1987:31(L) NORTH AMERICA <i>United States:</i> Mitchell & Rosa 1981(L) [3]	EUROPE <i>England:</i> Farrington 1993:15(L); <i>Finland:</i> Pulkkinen 1983(L) [3]		NORTH AMERICA <i>United States:</i> Rowe 1986:523(L) [1]	NORTH AMERICA <i>United States:</i> Catalano et al. 1996(C) [1]	NORTH AMERICA <i>United States:</i> Rowe 1986(L) [1]	NORTH AMERICA <i>Canada:</i> Seto et al. 1997(L) PACIFIC <i>New Zealand:</i> Mulder et al. 1994:282(L) [2]
	Not sign.										
	Negative										

**Table 8.5. Results from studies of the relationship between extroversion and criminal/antisocial behavior. (Overall consistency score = 68.3%; probable correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Anti-social Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive				ASIA India: Shanmugam 1980; Singh 1980 EUROPE England: Price 1968; Eysenck & Eysenck 1978:207; Lane & Hymans 1982; Farrington 1997:100 NORTH AMERICA Canada: Saklofske & Eysenck 1980; United States: McCord 1977; Ensminger et al. 1983 PACIFIC Australia: Bartholomew 1963 [11]	EUROPE England: Burgess 1972; Eysenck & Eysenck 1973; Wilson & McClean 1974; Poland: Sanocki 1969 [4]	EUROPE England: Eysenck & Eysenck 1970 [1]	ASIA China: Ma et al. 1996:262 EUROPE England: Gibson 1967; Allsopp & Feldman 1974; Shapland & Rushton 1975; Allsopp & Feldman 1976; S. B. Eysenck 1981; Rushton & Chrisjohn 1981; Farrington 1992; Farrington 1997:100 NORTH AMERICA Canada: Cote & Leblanc 1982; United States: Siegman 1963; Hindalang 1971:26; Hindalang & Weis 1972:272; Hogan & Jones 1983:17 PACIFIC Australia: Saklofske et al. 1978; Heaven 1996:748 [16]	EUROPE Spain: Calafat et al. 1994 NORTH AMERICA United States: Kay et al. 1978; Shammugan 1979; Wingard et al. 1979:140; Segal 1983; Chassin 1984 [6]	EUROPE England: Lane 1987 NORTH AMERICA United States: Gabrys et al. 1988 [2]	NORTH AMERICA United States: Stewart & Leone 1978 [1]
Not Sign.		EUROPE Netherlands: Buikhuisen & Hemmel 1972 [1]		EUROPE England: Bartholomew 1959; Hoghughi & Forrest 1970; West & Farrington 1973; Allsopp 1975; Putnins 1982; Lane 1987; Portugal: Fonseca & Yule 1995 MIDDLE EAST Israel: Addad & Leslau 1990 [8]	EUROPE England: Eysenck & Eysenck 1970 PACIFIC New Zealand: Black & Gregson 1973 [2]		EUROPE England: West & Farrington 1973:198; Furnham 1984:416 [2]	NORTH AMERICA United States: Cookson 1994 [1]	EUROPE England: Tranah et al. 1998 [1]	
Negative				EUROPE Scotland: Hoghughi & Forrest 1970:247; Forrest 1977 [2]						

**Table 8.6. Results from studies of the relationship between psychoticism and criminal/antisocial behavior. (Overall consistency score = 95.5%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive				EUROPE England: Putnins 1982; Lane 1987; Scotland: Forrest 1977 PACIFIC Australia: Heaven 1994; Heaven 1996:748 [5]	ASIA Bangladesh: Rahman & Hussain 1984 EUROPE England: Eysenck & Eysenck 1970; PK Burgess 1972; Wilson & McClean 1974 [4]	EUROPE England: DE Smith & Smith 1977 [1]	ASIA China: Ma et al. 1996:262 EUROPE England: Allsopp & Feldman 1974; Allsopp & Feldman 1976; Rushton & Chrisjohn 1981; Furnham 1984:416 NORTH AMERICA Canada: Cote & Leblanc 1982 PACIFIC Australia: Heaven 1993:71; Heaven 1994:452; New Zealand: Saklofske et al. 1978 [9]		EUROPE England: Tranah et al. 1998 NORTH AMERICA United States: Gabrys 1983 [2]	
Not sign.						EUROPE England: Eysenck & Eysenck 1970 [1]				
Negative										

**Table 8.7. Results from studies of the relationship between neuroticism and criminal/antisocial behavior. (Overall consistency score = 60.0%; possible correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive				ASIA <i>India</i> : Singh 1980 EUROPE <i>England</i> : Bartholomew 1959; Lane 1987; Farrington 1992 MIDDLE EAST <i>Israel</i> : Addad & Leslau 1990 PACIFIC <i>Australia</i> : Bartholomew 1963 [6]	ASIA <i>Bangladesh</i> : Rahman & Hussain 1984 EUROPE <i>England</i> : PK Burgess 1972; Farrington 1993:16 [3]		ASIA <i>China</i> : Ma et al. 1996:262 EUROPE <i>England</i> : Ailsopp & Feldman 1976; Shapland & Rushton 1975; Ailsopp & Feldman 1976 [4]	NORTH AMERICA <i>United States</i> : Shammugan 1979 [1]	NORTH AMERICA <i>United States</i> : Gabrys 1983 [1]	
Not sign.				EUROPE <i>England</i> : Hoghugh & Forrest 1970; West & Farrington 1973; Putnins 1982; <i>Scotland</i> : Forrest 1977 [4]	EUROPE <i>Poland</i> : Sanocki 1969 [1]	EUROPE <i>England</i> : Eysenck & Eysenck 1970 [1]	EUROPE <i>England</i> : Rushton & Chrisjohn 1981; Furnham 1984:416 PACIFIC <i>New Zealand</i> : Saklofske et al. 1978 [3]		EUROPE <i>England</i> : Tranah et al. 1998 [1]	
Negative										

**Table 8.8. Results from studies of the relationship between frequent boredom and criminal/antisocial behavior. (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive							NORTH AMERICA <i>Canada</i> : Wasson 1981; <i>United States</i> : Ellis & Thompson 1989; Cochran et al. 1994; Wood et al. 1995 [4]		NORTH AMERICA <i>Canada</i> : Levenson et al. 1995:153 [1]	
Not sign.										
Negative										

**Table 8.9. Relationships between alcohol use and criminal/antisocial behavior. (Overall consistency score = 96.2%; well established correlate)**

Nature of Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Use of Illegal Drugs		
Positive	EUROPE <i>Finland</i> : Virkkunen 1974; <i>Scotland</i> : Gillies 1965; <i>Sweden</i> : Wiklund & Lidberg 1990 NORTH AMERICA <i>United States</i> : Mayfield 1976; Mungas 1983:360 PACIFIC <i>Australia</i> : I Smith 1990 [6]	NORTH AMERICA <i>United States</i> : Cordilia 1985 [1]		EUROPE <i>England</i> : Farrington 1982:190; Farrington 1988:72; <i>Finland</i> : Pulkkinen 1982:27; <i>Sweden</i> : Rydelius 1983; Stattin et al. 1997:204 NORTH AMERICA <i>Canada</i> : Smart et al. 1997; <i>United States</i> : Blacker et al. 1965; Pearce & Garrett 1970; Glueck & Glueck 1974:150 [9]	EUROPE <i>England</i> : Hore 1988; <i>Germany</i> : Kerner 1993; <i>Scotland</i> : Crawford et al. 1982 NORTH AMERICA <i>Canada</i> : Seltzer & Langford 1984; <i>United States</i> : Shupe 1954; Grigsby 1963:304; Collins & Schlenger 1988; Almog et al. 1993 [8]	EUROPE <i>Germany</i> : Kerner et al. 1997:418; <i>Sweden</i> : Stattin et al. 1997:204 NORTH AMERICA <i>United States</i> : Heller & Ehrlich 1984; Klassman & O'Connor 1988 [4]	EUROPE <i>England</i> : McMurrin & Hollin 1989; Farrington & West 1990 NORTH AMERICA <i>United States</i> : Globette & Windham 1967; Watts & Wright 1990; Harford & Parker 1994; Fergusson et al. 1996; Zhang et al. 1997 [7]	NORTH AMERICA <i>United States</i> : Cockerham et al. 1976; Globetti et al. 1978; Eisterhold et al. 1979; Kirk 1979; Gibbons et al. 1986; DS Miller & Miller 1997 [6]	ASIA <i>Russia</i> : Parker et al. 1996 NORTH AMERICA <i>United States</i> : Robins et al. 1962; KM Thompson & Wilsnack 1984; Helzer & Pryzbeck 1988; Windle 1990; Conger et al. 1991; EO Johnson et al. 1995:666; Moss & Kirisci 1995:645; Biederman et al. 1996 [9]	NORTH AMERICA <i>Canada</i> : Mailloux et al. 1997 PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283 [2]
Not Sign.										
Negative						NORTH AMERICA <i>United States</i> : Menzies & Webster 1995 [1]				

**Table 8.10. Relationships between recreational drug use and criminal/antisocial behavior. (Overall consistency score = 97.9%; well established)**

Nature of Relationship	Type and Seriousness of Offenses						Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Victimful & Overall Offending	Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Delinquency	General & Unspecified Offenses	Recidivism				
Positive	NORTH AMERICA <i>United States</i> : Gardner & Shoemaker 1989 [1]	EUROPE <i>England</i> : Farrington 1977 NORTH AMERICA <i>United States</i> : Kane & Patterson 1972; Forslund 1977; Donnermeyer et al. 1987 [4]	EUROPE <i>England</i> : Farrington 1979, 1988:72; Nagin & Land 1993:352; Hagell & Newburn 1996:14; <i>Finland</i> : Pulkkinen 1982:27; <i>Sweden</i> : Stattin & Magnusson 1996:619 NORTH AMERICA <i>Canada</i> : Smart et al. 1997; <i>United States</i> : Jacoby et al. 1973; O'Donnell et al. 1976; Stephens & McBride 1976; Johnston et al. 1978; Kandel et al. 1978; Jessor 1979; McGlothlin 1979; Nurco 1979; Clayton 1981; White et al. 1985; White et al. 1987:735; Brook et al. 1992; Laub & Sampson 1994:242 [20]	NORTH AMERICA <i>United States</i> : McGlothlin 1979; McBride & McCoy 1981; Clayton & Tuchfeld 1982; Anglin & Speckart 1988; Stacy & Newcomb 1995 [5]	EUROPE <i>England</i> : Osborn & West 1980; Hagell & Newburn 1996:14 NORTH AMERICA <i>United States</i> : MR Gottfredson & Mitchell-Herzfelt 1982; Hoffman & Beck 1985; Dembo et al. 1987; Niarhos & Routh 1992; Dembo et al. 1995:1444 [7]	NORTH AMERICA <i>Canada</i> : Gillis & Hagan 1982:522; <i>United States</i> : Voss & Stephens 1973; Kratoski & Kratoski 1975; Elliott & Ageton 1976; McBride 1976; Block & Goodman 1978; Levine & Kozak 1979; Rathus et al. 1980; Bachman et al. 1981; McBride & McCoy 1981; Wright & Moore 1982; Donovan & Jessor 1985; Hawkins et al. 1986; Kandel et al. 1986(females); Herzog et al. 1987; Newcomb & Bentler 1988; Elliott et al. 1989; Hops et al. 1990; Watts & Wright 1990; Van Kammen et al. 1991; Andrews et al. 1993; Huizinga et al. 1993; Laub & Sampson 1994:242; Dembo et al. 1995b:273; Allen et al. 1996; Brook et al. 1996; Saner & Ellickson 1996; Bankston & Zhou 1997:356; Vazsonyi & Flannery 1997; Zhang et al. 1997; Stice et al. 1998 [30]	EUROPE <i>England</i> : Rutter 1996:496; <i>Sweden</i> : Holmberg 1985 NORTH AMERICA <i>Canada</i> : Boyle et al. 1992; <i>United States</i> : Gittelman et al. 1985; Kandel et al. 1986; Simcha-Fagan et al. 1986; Hundley 1987; Robins & McEvoy 1990; Tomas et al. 1990; Windle 1990; Van Kammen et al. 1991; Brook et al. 1992; Gfeller & Hundley 1994; Van Kammen & Loeber 1994; Brook & Newcomb 1995; Biederman et al. 1996; Brook et al. 1996; Booth & Zhang 1997; Neumark & Anthony 1997; Stewart et al. 1997 [20]	NORTH AMERICA <i>Canada</i> : Mailloux et al. 1997; <i>United States</i> : Hill et al. 1960; Regier et al. 1990; SS Smith & Newman 1990; Martin et al. 1997 PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283 [6]	
Not Sign.					PACIFIC <i>Australia</i> : Broadhurst et al. 1988 [1]	NORTH AMERICA <i>United States</i> : Kandel et al. 1986(males) [1]			



Negative									
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**Table 8.11. Results from studies of the relationship between number of sex partners and early age of onset of sexual intercourse and criminality/antisocial behavior. (Overall consistency score for number of sex partners = 97.8%; well established correlate) (Overall consistency score for age of onset of sexual intercourse = 100%; well established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses								Clinical Conditions		
	Official Statistics						Self-Reported		Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspecified Offenses	Recidivism	Victimful or Overall Offending	Illegal Drug Use			
# Sex Partners	Positive	NORTH AMERICA <i>United States:</i> Kaplun & Reich 1977:656 [1]			EUROPE <i>England:</i> West & Farrington 1973; Farrington 1988:72 NORTH AMERICA <i>Canada:</i> Bogaert 1993; <i>United States:</i> Gebhard et al. 1965:598; Cantwell 1981:22; Jessor et al. 1983; Figueria-McDonough 1984; Donovan & Jessor 1985; Donovan et al. 1988; Rowe et al. 1989 [10]	EUROPE <i>England:</i> West & Farrington 1977; Farrington 1982:190 [2]	EUROPE <i>England:</i> Osborn & West 1980 [1]	EUROPE <i>England:</i> Schofield 1965:151 NORTH AMERICA <i>United States:</i> Elliott & Morse 1987; Elliott & Morse 1989; Weiher et al. 1991; Huizinga et al. 1993 [5]	EUROPE <i>England:</i> Noble et al. 1972 NORTH AMERICA <i>United States:</i> Blumenfield et al. 1972:607; Arafat & Yorburg 1973; Vener & Stewart 1974; Murstein & Holden 1979; J Gibbs et al. 1984; Donovan & Jessor 1985; Bentler & Newcomb 1986; Zabin et al. 1986; Yamaguchi & Kandel 1987; Donovan et al. 1988; Mott & Haurin 1988; Farrell et al. 1992; McGee & Newcomb 1992:775; Strunin & Hingson 1992; Durbin et al. 1993; Huizinga et al. 1993; Tildesley et al. 1995; DuRant et al. 1998 PACIFIC <i>Australia:</i> Reynolds & Rob 1988 [20]	EUROPE <i>Sweden:</i> Stattin & Magnusson 1996:621 NORTH AMERICA <i>United States:</i> Robins 1966:139; Booth & Zhang 1997 PACIFIC <i>New Zealand:</i> Bardone et al. 1996 [4]	NORTH AMERICA <i>United States:</i> Cantwell 1981:22 [1]
	Not sign										NORTH AMERICA <i>Canada:</i> Seto et al. 1997:305 [1]
	Negative										
Early Onset	Positive				NORTH AMERICA <i>United States:</i> Reitsma-Street et al. 1985:421; Condy et al. 1987 [2]	NORTH AMERICA <i>United States:</i> Yochelson & Samenow 1976:178 [1]		NORTH AMERICA <i>Canada:</i> Bogaert 1993; <i>United States:</i> Zucker & Devoe 1975; Bachman et al. 1981; Jessor et al. 1983; DC Rowe et al. 1988; Elliott et al. 1989; Newcomb & Bentler 1989:243; DC Rowe et al. 1989 [8]	NORTH AMERICA <i>United States:</i> Jessor & Jessor 1977; PY Miller & Simon 1974; Vener & Stewart 1974; Jessor et al. 1983; Jessor 1987; Christopher & Cate 1988; Donovan et al. 1988; Mott & Haurin 1988; Rosenbaum & Kandel 1990; Cornelius et al. 1993; Dorius et al. 1993; Costa et al. 1995; Shrier et al. 1996 [13]	EUROPE <i>Sweden:</i> Stattin & Magnusson 1996:621 NORTH AMERICA <i>United States:</i> LN Robins & Price 1991; Zoccolillo & Rogers 1991; Fergusson et al. 1994 PACIFIC <i>New Zealand:</i> Bardone et al. 1996:821 [5]	NORTH AMERICA <i>Canada:</i> Seto et al. 1997:305 [1]
	Not sign.										
	Negative										

**Table 8.12. Results from studies of a relationship between handedness and criminal/antisocial behavior. (Overall consistency score = 61.9%; possible correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Left/Mixed Handers More Criminal/Antisocial	NORTH AMERICA <i>United States:</i> Krynicky 1978 [1]			NORTH AMERICA <i>Canada:</i> Yeudall et al. 1982; <i>United States:</i> Fitzhugh 1973 [2]	EUROPE <i>Italy:</i> Lombroso 1903; <i>England:</i> H. Ellis 1910:118 NORTH AMERICA <i>United States:</i> Virkkunen et al. 1976; Gabrielli & Mednick 1980 [4]	EUROPE <i>England:</i> West cited in Ellis 1990:486 [1]	NORTH AMERICA <i>United States:</i> Ellis & Ames 1989 PACIFIC <i>New Zealand:</i> Feehan et al. 1990 [2]		NORTH AMERICA <i>United States:</i> Grace 1987; PACIFIC <i>New Zealand:</i> Feehan et al. 1990 [2]	EUROPE <i>England:</i> Standage 1983 [1]
No Sign. Differences				EUROPE <i>England:</i> West & Farrington 1977; NORTH AMERICA <i>Canada:</i> Yeudall et al. 1982 [2]	EUROPE <i>England:</i> Goring 1913:214 NORTH AMERICA <i>Canada:</i> Hare & Forth 1985; Hare & Connolly 1987:225; <i>United States:</i> Denno 1985:773 [4]					
Right Handers more Criminal/Antisocial				NORTH AMERICA <i>United States:</i> Nachshon & Denno 1987 [1]						

**Table 8.13. Results from studies of the relationship between academic performance (grade point average -- GPA) and criminal/antisocial behavior. (Overall consistency score = 96.0%; well established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses								Clinical Conditions	
	Official Statistics				Self-Reported				Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Negative	EUROPE <i>England:</i> Farrington 1989 NORTH AMERICA <i>United States:</i> Andrew 1979 [2]			ASIA <i>China:</i> Gao 1986 EUROPE <i>England:</i> Burt 1925; Burt 1931; Gibbens 1963; Offord et al. 1978; Farrington 1979; Nagin & Land 1993;352; <i>Finland:</i> Rantakallio et al. 1995; <i>Poland:</i> Zabczyaska 1977; <i>Scotland:</i> Ferguson 1952:29; <i>Sweden:</i> Jonsson 1975:184; Sarnecki & Sollenhag 1985 NORTH AMERICA <i>Canada:</i> Gomme 1982; Frechette & LeBlanc 1987; Tremblay et al. 1992; LeBlanc 1994; <i>United States:</i> Sullivan 1927; Glueck & Glueck 1934:87; Bond & Fendrick 1936; Fredrick & Bond 1936; Healy & Bronner 1936:61; Moore 1936; Moore 1937; Kvaraceus 1945:141; Glueck & Glueck 1950; Reiss & Rhodes 1961:723; Slocum & Stone 1963:205; Palmore & Hammond 1964; Short & Stodtbeck 1965:238; Robins & Hill 1966:329; Polk 1969; Rhodes & Reiss 1969; Burns 1971; Empey & Lubeck 1971; Kelly 1971; Kelly & Balch 1971; Venezia 1971; Wolfgang et al. 1972; Feldhusen et al. 1973; Frease 1973; Kelly & Pink 1973; Swift et al. 1973; Kelly 1974; Mauser 1974; Polk et al. 1974; Poremba 1975; GF Jensen 1976:382; Noblit 1976; Ackerman et al. 1977; Bazemore & Noblit 1978; Jerse & Fakouri 1978; Phillips & Kelly 1979; Broder et al. 1981; Eron 1982:201; Elifson et al. 1983:521; Meltzer et al. 1984; Figueira-McDonough 1983; Plutchik 1983:70; Farnsworth et al. 1985; Lawrence 1985; Lawrence 1991; Ward & Tittle 1994; Rowe 1997:150 PACIFIC <i>Hawaii:</i> Werner 1987:27; Werner & Smith 1992; <i>New Zealand:</i> Williams & McGee 1994 [66]	EUROPE <i>Denmark:</i> Raine et al. 1994a; <i>England:</i> H. Ellis 1910:132; Farrington 1993:16; Farrington 1997b:97; <i>Sweden:</i> Kirkegaard-Sorensen & Mednick 1977 NORTH AMERICA <i>United States:</i> Polk 1975; Robins 1979 [7]	EUROPE <i>Germany:</i> Richter et al. 1996 NORTH AMERICA <i>United States:</i> Meade 1973:483; Niarhos & Routh 1992 [3]	ASIA <i>China:</i> Ma et al. 1996 EUROPE <i>Belgium:</i> Born & Gavray 1994:147; <i>England:</i> Farrington 1973; Farrington 1979:99; Farrington 1997:100; <i>Norway:</i> Cochran & Bo 1989; <i>Switzerland:</i> Killias et al. 1994:198 NORTH AMERICA <i>Canada:</i> WG West 1984; LeBlanc et al. 1992; <i>United States:</i> Gold 1963:44; Hirschi 1969:111; Polk 1969; Backman 1970; Kelly & Balch 1971; Silberberg & Silberberg 1971; Elliott & Voss 1974; Polk et al. 1974; Senna et al. 1974; Polk 1975; Jensen 1976; Jensen & Eve 1976; Mann 1976; Backman et al. 1978; Gold 1978:296; Offer et al. 1979; Krohn & Massey 1980; Akers et al. 1981; Broder et al. 1981; Hundley 1982; Wiatrowski et al. 1982; Brook et al. 1983; Hogan & Jones 1983:17; Wells & Rankin 1983; McCarthy & Hoge 1984; Menard & Morse 1984:1371; Donovan & Jessor 1985; LaGrange & White 1985; Lawrence 1985; Levine & Singer 1988:392; Tygart 1988; Elliott et al. 1989; Agnew & White 1992:486; Lynam et al. 1993; Sampson & Laub 1993; Broidy 1995:551; Joseph 1996; Rowe 1997:150; Vazsonyi & Flannery 1997 [46]	EUROPE <i>England:</i> Engel et al. 1987; Miller & Plant 1996:397 NORTH AMERICA <i>Canada:</i> Annis et al. 1971; Moyer & Fejer 1972; Bakal et al. 1976; Killeern 1977; Hundley 1985; <i>United States:</i> Palmore & Hammond 1964; Frumkin et al. 1969; Gossett et al. 1972; Senna et al. 1974; Galli & Stone 1975; Brook et al. 1977; Kandel et al. 1978; Smith & Fogg 1978; Kirk 1979; Fors & Rojek 1983:213-214; Krohn et al. 1984; Mills & Noyes 1984; Friedman et al. 1985; Barnes & Welte 1986; Wolford & Swisher 1986; Newcomb et al. 1987:418; White et al. 1987:729; Marston et al. 1988; Elliott et al. 1989; Wallace & Bachman 1991:351; McGee & Newcomb 1992; Bachman & Schulenberg 1993; Shannon et al. 1993; Schulenberg et al. 1994; Beauvais et al. 1996; Jenkins 1996; Younger et al. 1996; Dozier & Barnes 1997; DS Miller & Miller 1997; Duncan et al. 1998 [37]	EUROPE <i>England:</i> Rutter et al. 1970; Cochrane 1979:204 NORTH AMERICA <i>United States:</i> Canad; Ledingham & Schwartzman 1984 <i>United States:</i> Moffitt 1990; Dishion et al. 1991; Wentzel 1993 [6]	EUROPE <i>England:</i> Reitsma-Streit et al. 1985 NORTH AMERICA <i>United States:</i> Pakiz et al. 1997 [2]
Not Sign.				NORTH AMERICA <i>United States:</i> Kupersmidt & Coie 1998 [1]		NORTH AMERICA <i>United States:</i> Myner et al. 1998:77 [1]		NORTH AMERICA <i>United States:</i> Steffenhagen et al. 1969; Blumenfield et al. 1972; Simon et al. 1974; Finnell & Jones 1975; Agnew & White 1992:486 [5]		
Positive										



**Table 8.14. Results from studies of the relationship between intelligence and criminal/antisocial behavior. (Overall consistency score = 78.6%; probable correlate) (Overall consistency score without self-reports = 80.0%; probable correlate)**

Nature of the Relationship	Types and Seriousness of Offenses								Clinical Conditions	
	Official Statistics						Self-Reported		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offen.	Drug Offen.	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Negative	EUROPE Denmark: Høgh & Wolf 1981 [1]			ASIA India: Shanmugam 1980 EUROPE Denmark: Moffitt et al. 1981; England: Eilenberg 1961; Gibson & West 1970; Rutter et al. 1975; Moffitt et al. 1981; Sturge 1982; Farrington 1987:32; Nagin & Land 1993:352; Farrington 1997:100; Finland: Jarvelin et al. 1995; Rantakallio et al. 1995; Spain: Diaz et al. 1984:313; Sweden: Hartelius 1965; Jonsson 1967:200; Jonsson 1975:184; Stattin et al. 1997:204 NORTH AMERICA Canada: Rogers & Austin 1934; United States: Fernald 1920:527; Goddard 1921; Coldwell 1929; M Elliott 1929:574; Mendenhall 1932; Ruggles 1932; Glueck & Glueck 1934:292; Glueck 1935; Lane & Witty 1935; Charles 1936; Moore 1937; Owen 1937; Jameson 1938; Mann & Mann 1939; Lichtenstein & Brown 1938; Kvaraceus 1944; Franklin 1945; Altus & Clark 1949; Glueck & Glueck 1950; Shulman 1951; Diller 1952; Prentice & Kelly 1973; KM Murphy & d'Angelo 1963:345; Naar 1965; Ahmad 1966; Conger & Miller 1966:191; Robins & Hill 1966:331; Wolfgang et al. 1972:58; Miller et al. 1974; Yeadall et al. 1982:261; Menard & Morse 1984; Lawrence 1985; Kandel et al. 1988; Denno 1990; Ward & Tittle 1994; Coughlin & Vuchinich 1996:497; Rowe 1997:150; Kasen et al. 1998:58 PACIFIC Australia: Tennison-Wood 1932; McRae 1934; Hawaii: Werner 1987:25; Werner & Smith 1992:104; New Zealand: White et al. 1989; Lynam et al. 1993 [62]	EUROPE Denmark: Høgh & Wolf 1981; England: Goring 1913; West & Farrington 1973:123; Farrington 1993:15; Farrington 1997b:97; Finland: Tiihonen et al. 1993; Germany: Goppinger 1983; Sweden: Stattin & Klackenburg-Larsson 1993 NORTH AMERICA United States: Zeleny 1933; Brown & Hartman 1938; McGarvey et al. 1981; Hains & Ryan 1983:1540; Eisenman 1990, 1991; AD Davis et al. 1991; Schweinhart et al. 1993 [15]	EUROPE England: Frank 1931; Shulman 1951; Germany: Schwind 1975; Richter et al. 1996:339; Sweden: Stattin et al. 1997:204 NORTH AMERICA United States: Tibbitts 1931; Shakow & Millard 1935 [7]	EUROPE England: Gibson & West 1970; West & Farrington 1973:131; Farrington 1997b:97 NORTH AMERICA United States: Hirschi 1969; Jessor 1976; Moffitt et al. 1981; Wiatrowski et al. 1981; Menard & Morse 1984; Lynam et al. 1993; Blackson & Tarter 1994:818; Williams & McGee 1994 PACIFIC New Zealand: Moffitt & Silva 1988; White et al. 1989; Moffitt et al. 1995 [14]	EUROPE Ireland: Timms et al. 1973 NORTH AMERICA United States: Bear & Richards 1981; Codina et al. 1998 (females) [3]	EUROPE England: Rutter et al. 1970:227; West & Farrington 1973; Rutter et al. 1975; McMichael 1979; Richman et al. 1982; Maughan et al. 1985; Farrington et al. 1990; Farrington 1993:15 Netherlands: Wiegman et al. 1992; Scotland: May 1975 NORTH AMERICA Canada: Andre et al. 1994; United States: Schonfeld et al. 1988; Robins et al. 1991:278; Wentzel 1993:360 [14]	EUROPE Finland: Virkkunen & Luukkonen 1977:222 NORTH AMERICA United States: Wiens et al. 1959; Robins 1966:156; O'Kane et al. 1996; Arnett et al. 1997:1424 [5]
Not sign.			EUROPE England: Rutter et al. 1970:227 NORTH AMERICA Canada: Valliant & Bergeron 1997; United States: Baker et al. 1929; Maller 1937; Lichtenstein & Brown 1938 PACIFIC New Zealand: Black & Hornblow 1973:88 [6]	EUROPE Germany: Richter et al. 1996 NORTH AMERICA United States: Murchison 1926; Doll 1930; Townes et al. 1981 [4]	EUROPE England: Lane & Witty 1935; B Marcus 1955 NORTH AMERICA United States: Tolman 1938; Kirkpatrick 1937; Merrill 1947; Hartman 1940; AH Roberts et al. 1974:835 PACIFIC New Zealand: Black & Hornblow 1973 [8]	NORTH AMERICA Canada: Bogaert & Rushton 1989:1075; United States: Broidy 1995:550; Rowe 1997:150 [3]	NORTH AMERICA United States: Wexler 1975; Codina et al. 1998 (males) [2]			
Positive					EUROPE England: Calhoun 1928; Hill 1936 NORTH AMERICA United States: Murchison 1926; Hartmann 1940 [4]		NORTH AMERICA United States: Kellam et al. 1980 [1]			

**Table 8.15. Results from studies of the relationship between intellectual imbalance and criminal/antisocial behavior. (Overall consistency score = 77.0%; probable correlate)**

Nature of the Relationship	Types and Seriousness of Offenses							Clinical Conditions		
	Official Statistics				Self-Reported			Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
PIQ significantly higher than VIQ				EUROPE <i>Denmark</i> : Buikhuisen et al. 1988; <i>England</i> : Payne 1960; Rutter et al. 1975; Rutter et al. 1979; Sturge 1982 NORTH AMERICA <i>United States</i> : Werder et al. 1943; Wechsler 1944; Franklin 1945; Sloan & Cutts 1945:96; Altus & Clark 1949; Glueck & Glueck 1950; Diller 1952; Doppelt & Seashore 1959; Prentice & Kelly 1963; Camp 1966; Matarazzo 1972:433; Ganzer & Sarason 1973; Andrew 1974; Ollendick 1979; Haynes & Bensch 1983; Tarter et al. 1984; Tarter et al. 1985; Grace & Sweeney 1986; Walsh et al. 1987; Jensen & Faulstich 1988; Culbertson et al. 1989; PACIFIC <i>New Zealand</i> : Lynam et al. 1993:193 [27]	EUROPE <i>Denmark</i> : Moffitt et al. 1981; <i>England</i> : Farrington 1993:15; <i>Germany</i> : Richter et al. 1996:338; <i>Sweden</i> : Stattin & Klockenberg-Larsson 1993 [4]	EUROPE <i>Denmark</i> : Moffitt et al. 1981:155 <i>England</i> : Farrington 1995:941 NORTH AMERICA <i>United States</i> : Solway et al. 1975; Haynes & Bensch 1981; Blecker 1983 [5]	NORTH AMERICA <i>United States</i> : Moffitt et al. 1981; Maguin et al. 1993 PACIFIC <i>New Zealand</i> : Moffitt & Silva 1988 [3]		NORTH AMERICA <i>United States</i> : Wechsler 1944:155; Fisher 1961 [2] NORTH AMERICA <i>United States</i> : Wechsler 1958:160; Camp 1977; Richman et al. 1982; Kender et al. 1985 PACIFIC <i>New Zealand</i> : McGee et al. 1986; Henry et al. 1992 [6]	NORTH AMERICA <i>United States</i> : Wechsler 1944:155; Fisher 1961 [2]
VIQ and PIQ not sign. different				NORTH AMERICA <i>United States</i> : Henning & Levy 1967; Foster 1959; Davis et al. 1991; Law & Faison 1996 [4]	EUROPE <i>England</i> : Farrington 1993:15 PACIFIC <i>New Zealand</i> : Walters 1953 [2]		NORTH AMERICA <i>United States</i> : Meltzer et al. 1984; Tarter et al. 1985 [2]		EUROPE <i>England</i> : Farrington 1993:15 [1]	EUROPE <i>Finland</i> : Virkkunen & Luukkonen 1977:222 NORTH AMERICA <i>United States</i> : Strother 1944:398; Naar 1965 [3]
VIQ significantly higher than PIQ								NORTH AMERICA <i>United States</i> : Fleming et al. 1982 [1]		

**Table 8.16. Results from studies of the relationship between learning disabilities (excluding those specifically attributed to slow reading/language development) and criminal/antisocial behavior. (Overall consistency score = 94.7%; established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses							Clinical Conditions		
	Official Statistics				Self-Reported			Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspec. Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive				EUROPE <i>England</i> : Yule & Rutter 1968; <i>Sweden</i> : Jonsson 1967:198; Gath et al. 1970:219; Jonsson 1975:184; Virkkunen & Nuutila 1976 NORTH AMERICA <i>Canada</i> : Underwood 1976; <i>United States</i> : Mulligan 1972; Mauser 1974; Miller et al. 1974; Poremba 1975; Barrows et al. 1977; Bachara & Zaba 1978; Zinkus & Gottlieb 1978; Keilitz et al. 1979; Lewis et al. 1980; Broder et al. 1981; Post 1981; J Zimmerman et al. 1981; Wilgosh & Paitich 1982; Dunivant 1984; Roff & Wirt 1984:115; Epstein et al. 1985; Keilitz & Dunivant 1986; Grande 1988; Larson 1988; Leone et al. 1991 [27]		NORTH AMERICA <i>United States</i> : California Youth Authority 1982 [1]	NORTH AMERICA <i>United States</i> : Rubenstein 1982 [1]	NORTH AMERICA <i>United States</i> : Maag et al. 1994; Katimas et al. 1996 [2]	EUROPE <i>England</i> : Yule & Rutter 1968; Davie et al. 1972; Rutter et al. 1976 NORTH AMERICA <i>United States</i> : Harris 1961; Williams & McGee 1994 PACIFIC <i>New Zealand</i> : McGee et al. 1986 [6]	NORTH AMERICA <i>United States</i> : FA Elliott 1978:150 [1]
Not Sign.							NORTH AMERICA <i>United States</i> : Broder et al. 1981; J Zimmerman et al. 1981[2]			
Negative										

**Table 8.17. Results from studies of the relationship between slow reading development and criminal/antisocial behavior (Codes: D -- dyslexia; I -- illiteracy; L -- slow language development; R -- reading retardation). (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics				Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offens.	Drug Offens.	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive	NORTH AMERICA <i>United States</i> : Brearley 1932:145 (R) [1]			EUROPE <i>England</i> : Critchley 1968(R); Rutter et al. 1970:247(R); <i>Sweden</i> : Jonsson 1975:184(R) NORTH AMERICA <i>United States</i> : Sullivan 1927(R); Lane & Witty 1934(R); Hill 1935(R); Fendrick & Bond 1936(R); Glueck & Glueck 1950(I); Fabian 1955(R); Harrower 1955(R); Margolin et al. 1955(R); Mulligan 1972(D); Herjanic & Penick 1972(R); Hogenson 1974(R); Rizzo 1975(D); Andrew 1978(R); Andrew 1979(R); Meltzer et al. 1984(R) PACIFIC <i>New Zealand</i> : Moffitt et al. 1994(R) [20]	EUROPE <i>Sweden</i> : Stattin & Klackenber g Larsson 1993(L) [1]	NORTH AMERICA <i>United States</i> : Ganger & Sarason 1973(R) [1]			EUROPE <i>England</i> : Yule & Rutter 1968(R); Gregory 1965(R); <i>Scotland</i> : McMichael 1979(R); Maughan et al. 1985(R) [3]	NORTH AMERICA <i>United States</i> : Ziskind et al. 1977(R); Rodriguez 1993(L) [2]
Not sign.										
Negative										

**Table 8.18. Results from studies of the relationship between attention deficit hyperactivity disorders (ADHD) and criminal/ antisocial behavior. (Overall consistency score = 98.7%; well established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses								Clinical Conditions	
	Official Statistics						Self-Reported		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive	EUROPE Sweden: af Klinteberg et al. 1993 [1]		EUROPE Sweden: af Klinteberg et al. 1993 NORTH AMERICA United States: Blouin et al. 1978; Barkley et al. 1990; Crowley & Riggs 1995; Wilens et al. 1998 [5]	EUROPE Norway: Troland 1988 NORTH AMERICA Canada: Offord et al. 1989; United States: Mendelson et al. 1971; Weiss et al. 1971; Huessy et al. 1974; Borland & Heckman 1976; Ackerman et al. 1977; Milman 1979; Weiss et al. 1979; Loney et al. 1981; Mattes et al. 1982:115; Satterfield et al. 1982; Loney et al. 1983; Roff & Wirt 1984:115; Gittelman et al. 1985; Mannuzza et al. 1989; Shaywitz & Shaywitz 1989; Barkley et al. 1990; Barkley et al. 1991; Loeber 1990; Armistead et al. 1992; Biederman et al. 1996 PACIFIC New Zealand: Moffitt 1990 [23]	EUROPE England: Farrington 1990, Farrington 1993; Sweden: Nylander 1979 NORTH AMERICA United States: Satterfield et al. 1982; Weiss et al. 1985; Satterfield 1987; Mannuzza et al. 1989; Lilienfeld & Waldman 1990; Mannuzza et al. 1991 [9]	EUROPE England: Knight & West 1975; Farrington et al. 1990:73 NORTH AMERICA United States: Satterfield et al. 1982; Wierson & Forehand 1995:64 [4]	NORTH AMERICA United States: Stewart et al. 1973; Peeples & Loeber 1994 PACIFIC New Zealand: Fergusson & Horwood 1995:482 [3]	MIDDLE EAST Israel: Teichmann et al. 1989 NORTH AMERICA United States: Gittelman et al. 1985; Friedman et al. 1991; Biederman et al. 1996; Wilens et al. 1997 PACIFIC New Zealand: Fergusson & Horwood 1995:482 [6]	EUROPE England: Sandberg et al. 1978; Sandberg et al. 1980; Schachar et al. 1981; August et al. 1983; Schachar 1991; Taylor et al. 1996; Norway: Backe-Hansen & Ogdan 1996 NORTH AMERICA Canada: Offord & Bennett 1994; United States: Prinz et al. 1981; Stewart et al. 1981; McGee et al. 1985; Johnston et al. 1985; Munir et al. 1987; Walker et al. 1987; Wallander 1988; Mannuzza et al. 1989; Barkley et al. 1990; Biederman et al. 1991; Faraone et al. 1991; Abikoff & Klein 1992; Mannuzza et al. 1993; McDermott 1993:422; Crowley & Riggs 1995; Biederman et al. 1996; MacDonald & Achenbach 1996; Greene et al. 1997:763; Whitmore et al. 1997:93; Wilens et al. 1997 [27]	NORTH AMERICA Canada: Hare 1970:67; United States: Porges 1977; Ziskind et al. 1977:256; Satterfield 1978; Loney et al. 1981; Hechtman et al. 1984; Weiss et al. 1985; Loeber 1990; Mannuzza et al. 1993 [9]
Not sign.								NORTH AMERICA United States: Weiss et al. 1979 [1]		
Negative										

**Table 8.19. Results from studies of the relationship between Oppositional Defiant Disorders (ODD) and criminal/antisocial behavior. (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive				NORTH AMERICA United States: Russo et al. 1994; Simons et al. 1994a; Biederman et al. 1996 [3]			NORTH AMERICA United States: Simons et al. 1998 [2]	NORTH AMERICA Canada: Dobkin et al. 1995:1210 [1]	NORTH AMERICA Canada: Tremblay et al. 1994; United States: Reich et al. 1979; AC Anderson et al. 1987; Hinshaw et al. 1993; McDermott 1993:422; Lahey et al. 1995; MacDonald & Achenbach 1996; Christian et al. 1997; Faraone et al. 1997; Hewitt et al. 1997:960 SOUTH-CENTRAL AMERICA & CARIBBEAN Puerto Rico: Bird et al. 1988 [11]	NORTH AMERICA United States: Langbehn et al. 1998 [1]
Not sign.										





Not sign.									
Negative									

**Table 8.22. Relationships between compulsive gambling and criminal/antisocial behavior. (A -- diagnosed gambling addiction; F -- gambling frequency) (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offending		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending		
Positive			NORTH AMERICA <i>United States:</i> Ramirez et al. 1983(A); McCormick 1993(A) [2]	EUROPE <i>England:</i> Farrington 1988:72(A) NORTH AMERICA <i>United States:</i> Nagin & Land 1993:353(A) [2]				NORTH AMERICA <i>United States:</i> Lesieur et al. 1986(F); Proimos et al. 1998(F) [2]	NORTH AMERICA <i>Canada:</i> Bland et al. 1993(A); <i>United States:</i> McCormick et al. 1987(A) PACIFIC <i>Australia:</i> Blaszczyński et al. 1989(A); Blaszczyński & McConaghy 1994(A) [4]
Not sign.									
Negative									

**Table 8.23. Results from studies of the relationship between enuresis and criminal/antisocial behavior. (Overall consistency score = 87.5%; established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offens.	Property Offenses	Drug Offens.	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive		EUROPE <i>France:</i> Bachel 1948 [1]		EUROPE <i>England:</i> Argyle 1964:63; Rutter et al. 1970; <i>Sweden:</i> Hartelius 1965:113; Jonsson 1967:197; Jonsson 1975:184 NORTH AMERICA <i>United States:</i> Michaels 1938; Michaels 1943; Glueck & Glueck 1950; Michaels 1955; Hader 1965 [10]		EUROPE <i>Finland:</i> Repo et al. 1997 [1]		EUROPE <i>Spain:</i> Calafat et al. 1997:17 [1]	EUROPE <i>England:</i> Rutter et al. 1973; <i>Sweden:</i> Hallgren 1957; Jarvelin et al. 1990 NORTH AMERICA <i>United States:</i> Pillay et al. 1989; Feeham et al. 1990; Byrd et al. 1996 PACIFIC <i>New Zealand:</i> Fergusson & Horwood 1994 [7]	NORTH AMERICA <i>United States:</i> Ziskind et al. 1977:256 [1]
Not Sign.				NORTH AMERICA <i>United States:</i> Rosenow 1920 [1]					EUROPE <i>Netherlands:</i> Hirasings et al. 1997 NORTH AMERICA <i>United States:</i> Warzak 1993 [2]	
Negative										

**Table 8.24. Results from studies of the relationship between mental illness in general and criminal/antisocial behavior. (Overall consistency score = 92.9%; established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses								Clinical Conditions	
	Official Statistics						Self-Reported		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive	EUROPE <i>Denmark</i> : Gottlieb et al. 1987; <i>Finland</i> : Tiihonen & Hakola 1994; Eronen et al. 1996; <i>Sweden</i> : Lindqvist 1986; Hodgins 1992; Adler & Lidberg 1995 NORTH AMERICA <i>Canada</i> : Cote & Hodgins 1992; <i>United States</i> : Giovannoni & Gurel 1967; Sosowsky 1978; Steadman et al. 1978; Ribner & Steadman 1981; Gottlieb et al. 1987; Link et al. 1992; Steadman et al. 1993; Swanson 1994:113 [14]	EUROPE <i>Sweden</i> : Hodgins 1992 [1]	EUROPE <i>Netherlands</i> : Hendricks 1990; <i>Sweden</i> : Mueser et al. 1992; Sandell & Bertling 1996 NORTH AMERICA <i>United States</i> : Kosten et al. 1982; Rounsaville et al. 1982; Khantzian & Treece 1985; Woody et al. 1985; Jainchill et al. 1986; Kosten & Rounsaville 1986; Weiss et al. 1986; Christie et al. 1988; Ross et al. 1988; Bukstein et al. 1989; Reiger et al. 1990; Rounsaville et al. 1991 PACIFIC <i>Hawaii</i> : Werner & Smith 1992:104 [16]	NORTH AMERICA <i>Canada</i> : Andre et al. 1994; <i>United States</i> : Balla et al. 1974; Lewis et al. 1985 [3]	EUROPE <i>Denmark</i> : Ortmann 1981; Hodgins et al. 1996; <i>Finland</i> : Joukamaa 1991; Tiihonen et al. 1993; Tiihonen et al. 1997 NORTH AMERICA <i>Canada</i> : Hodgins & Cote 1990; Motvik & Porporino 1991; Palermo et al. 1992a; Bland et al. 1998:276; <i>United States</i> : Rapoport & Lassen 1965; Rapoport & Lassen 1966; Giovannoni & Gurel 1967; Yarvis 1972; Sosowsky 1974; Swank & Winer 1976; Zitrin et al. 1976; Durbin et al. 1977; Sosowsky 1978; Steadman et al. 1978; Shore et al. 1980; Sosowsky 1980; Shanok & Lewis 1981:227; Lamb & Grant 1982; Schuerman & Kobrin 1984; Washington & Diamond 1985; Valdiserri et al. 1986; Hyde & Seiter 1987; Neighbors et al. 1987; Daniel et al. 1988; Harry & Steadman 1988; Holcomb & Ahr 1988; McFarland et al. 1989; Hodgins 1993; Friedman et al. 1996:399; Teplin et al. 1996 [35]	EUROPE <i>Netherlands</i> : Buikhuisen & Hoekstra 1974:65 NORTH AMERICA <i>United States</i> : Koenigsberg et al. 1977 [2]	NORTH AMERICA <i>United States</i> : Steadman & Felson 1984; Swanson et al. 1990; Link et al. 1992 [3]	NORTH AMERICA <i>United States</i> : Helzer 1988 [1]	NORTH AMERICA <i>Canada</i> : Kutcher et al. 1989; <i>United States</i> : Biederman et al. 1997 [2]	PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283[1]
Not sign.	EUROPE <i>England</i> : Modestin & Ammann 1995 [1]				NORTH AMERICA <i>United States</i> : Guze et al. 1969 [1]	NORTH AMERICA <i>United States</i> : Lueger & Cadman 1982 Dembo et al. 1995a:1444 [2]		NORTH AMERICA <i>United States</i> : Richek et al. 1975 [1]		
Negative		NORTH AMERICA <i>United States</i> : Giovannoni & Gurel 1967 [1]								

**Table 8.25. Results from studies of the relationship between schizophrenia and criminal/antisocial behavior. (Overall consistency score = 80.9%; established correlate)**

Nature of the Relationship	Types and Seriousness of Offenses							Clinical Conditions		
	Official Statistics					Self-Reported		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive	EUROPE <i>England</i> : Taylor 1985; <i>Finland</i> : Eronen et al. 1996; <i>Germany</i> : Boeker & Haefner 1973; <i>Sweden</i> : Lindqvist & Allebeck 1990 NORTH AMERICA <i>United States</i> : Swanson et al. 1990; Cirincione et al. 1992; Monahan 1992; Eronen 1995 [8]		EUROPE <i>Sweden</i> : Lindqvist & Allebeck 1989 NORTH AMERICA <i>United States</i> : Pantan 1958; Mueser et al. 1990; Regier et al. 1990; Mueser et al. 1992 [5]	EUROPE <i>Germany</i> : Gross & Kaltenback 1975; Lewis & Shanok 1978 [2]	EUROPE <i>Denmark</i> : Silverton 1985; <i>England</i> : Coid et al. 1993; <i>Finland</i> : Tiihonen et al. 1997; <i>Sweden</i> : Lindqvist & Allebeck 1990:346 NORTH AMERICA <i>Canada</i> : Bland et al. 1998:276; <i>United States</i> : Dunham et al. 1939; Roth & Erwin 1971; Link et al. 1992; Wessely et al. 1994 [9]			NORTH AMERICA <i>United States</i> : Breakey et al. 1974; Richard et al. 1985; Barbee et al. 1989; Drake et al. 1989; Mueser et al. 1990; Test et al. 1989; Swanson et al. 1990; Dixon et al. 1990 [8]	NORTH AMERICA <i>United States</i> : Morriss et al. 1956; O'Neil & Robins 1958; Robins & Price 1991 [3]	EUROPE <i>Sweden</i> : Bland et al. 1987; Jackson et al. 1991 NORTH AMERICA <i>United States</i> : Robins et al. 1991:288 [3]
Not sign.					NORTH AMERICA <i>United States</i> : Kloek 1968; Guze et al. 1969; Teplin et al. 1996 [3]					
Negative						NORTH AMERICA <i>Canada</i> : Rice & Harris 1995 <i>United States</i> : Lidz et al. 1993 [2]				

**Table 8.26. Relationships between minor and major depression and criminal/antisocial behavior. (Overall consistency score minor depression = 84.6%; established correlate) (Overall consistency score for major depression = 81.3%; probable correlate)**

Nature of the Relationship		Type and Seriousness of Offenses							Antisocial Clinical Conditions		
		Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
		Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Minor	Positive	EUROPE <i>France</i> : Benezech & Bourgeois 1992 [1]			NORTH AMERICA <i>Canada</i> : Sas et al. 1985; Sas & Jaffe 1986; Reddon et al. 1996; <i>United States</i> : Kashani et al. 1980 [3]	EUROPE & Switzerland : Modestin et al. 1996b	NORTH AMERICA <i>United States</i> : McManus et al. 1984 [1]		NORTH AMERICA <i>United States</i> : Paton et al. 1977; Hogan & Jones 1983:17; Johnston & O'Malley 1986; Deykin et al. 1987; Greenbaum et al. 1991; Van Hasselt et al. 1993; Barnet et al. 1995 PACIFIC <i>Australia</i> : Reynolds & Rob 1988 [8]	NORTH AMERICA <i>Canada</i> : Fleming et al. 1989; <i>United States</i> : Kovacs et al. 1988; Loeber et al. 1991; Robins & Price 1991; Lahey et al. 1992; Hinshaw et al. 1993; Myers et al. 1993 [7]	PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283 (women) [1]
	Not sign.							EUROPE <i>Spain</i> : Calafat et al. 1994 MIDDLE EAST <i>Israel</i> : Teichmann et al. 1989 NORTH AMERICA <i>United States</i> : Yamaguchi & Kandel 1984 [3]		PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283 (men) [1]	
	Negative										
Major	Positive		NORTH AMERICA <i>United States</i> : Kleinman et al. 1990 [1]	NORTH AMERICA <i>United States</i> : Chiles et al. 1980; McManus et al. 1984 [2]			EUROPE <i>Switzerland</i> : Modestin et al. 1996b [1]	NORTH AMERICA <i>United States</i> : Kandel & Davies 1986; Reiger et al. 1990; Swanson et al. 1992; Lin et al. 1996	NORTH AMERICA <i>United States</i> : Puig-Antich 1982; Herkov & Myers 1996; Clark et al. 1997; Whitmore et al. 1997:93 [4]	PACIFIC <i>New Zealand</i> : Bardone et al. 1996:820 [1]	
	Not sign.						PACIFIC <i>New Zealand</i> : Bardone et al. 1996:820 [1]	NORTH AMERICA <i>United States</i> : Garber et al. 1988; Harrington et al. 1990 [2]			
	Negative										

**Table 8.27. Results from studies of the relationship between bipolar depression and criminal/antisocial behavior. (Overall consistency score = 90.9%; established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive			NORTH AMERICA <i>United States</i> : Estroff et al. 1985 [1]		EUROPE <i>Switzerland</i> : Modestin et al. 1996b NORTH AMERICA <i>Canada</i> : Bland et al. 1998:276 [2]				NORTH AMERICA <i>Canada</i> : Kutcher et al. 1989; <i>United States</i> : Biederman et al. 1996; Wozniak et al. 1995; Biederman et al. 1997 [4]	NORTH AMERICA <i>United States</i> : Thorneloe & Crews 1981; Robins et al. 1991:288; McElroy et al. 1992 [3]
Not sign.					NORTH AMERICA <i>United States</i> : Guze et al. 1969 [1]					
Negative										

**Table 8.28. Results from studies of the relationship between suicide and criminal/antisocial behavior. (I -- suicide ideation; A -- suicide attempts; C -- completed suicide) (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive			EUROPE <i>Sweden</i> : Allebeck & Allgulander 1990(C) NORTH AMERICA <i>United States</i> : McKenry et al. 1983(A); RC Fowler et al. 1986(C); Rich et al. 1988(C); Rich et al. 1989(C); Deykin et al. 1994(I) [6]	NORTH AMERICA <i>United States</i> : Alessi et al. 1984(A) [1]	EUROPE <i>Sweden</i> : Belfrage 1991(C); Lidberg 1993(C); Belfrage 1994(C) NORTH AMERICA <i>Canada</i> : Dept. of the Solicitor General 1976(C); Bland et al. 1998:276(A) PACIFIC <i>Australia</i> : O'Toole & Stankov 1992:713(A) [6]		NORTH AMERICA <i>United States</i> : Frances et al. 1987(I); Juon & Ensminger 1997(I&A) [2]	EUROPE <i>England</i> : Morgan et al. 1976; <i>Sweden</i> : Casey 1989(A); Bukstein et al. 1993(A) NORTH AMERICA <i>United States</i> : Levy & Deykin 1989(I); Berman & Schwartz 1990(A); Ravinus 1990(A); Anonymous 1991(A); Kandel et al. 1991(I); Kirkpatrick-Smith et al. 1991(I); Felts et al. 1992(I); Adams & Overholser 1992(I); Kaminer 1992(A&C); Rich et al. 1992(I); Swanson et al. 1992(A); Garrison et al. 1993(I&A); King et al. 1993(A); Adams et al. 1994(A); Kinnier et al. 1994(A); Young et al. 1994(A); Burge et al. 1995; Juon & Ensminger 1997(I&A); Mezzich et al. 1997(I&A); Windle & Windle 1997:925(A); Trammel et al. 1998(A) [23]	EUROPE <i>England</i> : Shaffer 1974(A) NORTH AMERICA <i>United States</i> : Shafii et al. 1985(C); Apter et al. 1988(A) [3]	EUROPE <i>Iceland</i> : Helgason 1964(C) NORTH AMERICA <i>United States</i> : Dorpat & Ripley 1960(C); Rich et al. 1986(C) PACIFIC <i>New Zealand</i> : Mulder et al. 1994:283(A) [4]
Not Sign.										
Negative										



**Table 8.29. Results from studies of the relationship between self-esteem and criminal/antisocial behavior. (Overall consistency score = 74.6%; probable correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Negative			NORTH AMERICA United States: Pandina & Schuele 1983; Ress & Wilborn 1983 [2]	ASIA <i>Korea</i> : Kim 1967 EUROPE <i>England</i> : Eyo-Isidore 1981 MIDDLE EAST <i>Saudi Arabia</i> : Hilmi 1988 NORTH AMERICA <i>United States</i> : Dorn 1968; Fitts & Hamner 1969; Kaplan 1975; Martinez et al. 1979; Lund & Salary 1980; Truckenmiller 1982:84; Singh et al. 1986; Ward & Tittle 1994; Edwards 1996:980 [12]		NORTH AMERICA <i>Canada</i> : Gendreau et al. 1979 [1]	ASIA <i>China</i> : Leung & Lau 1989 NORTH AMERICA <i>Canada</i> : Annis et al. 1971; Riggs 1973; <i>United States</i> : Peterson et al. 1961; Matchett 1971; Jensen 1972; Kaplan 1975; Kaplan 1976; Kaplan 1978; Kaplan 1980; Bynner et al. 1981:420; Hogan & Mookherjee 1981; Hogan & Jones 1983:17; McCarthy & Hoge 1984; Rosenberg 1978; Schweitzer et al. 1992 PACIFIC <i>Australia</i> : Cole et al. 1989; Heaven 1993:73; Heaven 1996; Rigby & Cox 1996 INTERNATIONAL <i>Multiple Countries</i> : Cormier et al. 1973 [21]	NORTH AMERICA <i>United States</i> : RA Ball 1977:114; Burke et al. 1978; Smith & Fogg 1978; Kaplan 1980; Bry et al. 1982; Miller et al. 1982; Wright & Moore 1982; Bry 1983; Chassin 1984; Dielman et al. 1984; Kaplan 1985; Steffenhagen & Steffenhagen 1985; Dielman et al. 1987; White et al. 1987:729; Blau et al. 1988; Kaestner 1997:168 [16]	NORTH AMERICA <i>United States</i> : Pakiz et al. 1992 [1]	
Not sign.				NORTH AMERICA <i>United States</i> : Dietz 1969; Calhoun et al. 1984 [2]		NORTH AMERICA <i>United States</i> : Cox 1996:21 [1]	EUROPE <i>Spain</i> : Luengo et al. 1994 NORTH AMERICA <i>United States</i> : Atkins 1974; Mann 1976; Gold 1978; McCarthy & Hoge 1984 [5]	NORTH AMERICA <i>United States</i> : Bennett 1974; Galli & Stone 1975; Richek et al. 1975; Jessor & Jessor 1977; Barrett et al. 1991; Moore et al. 1996 [6]		
Positive						NORTH AMERICA <i>United States</i> : Byrd et al. 1993 [1]		EUROPE <i>Spain</i> : Luengo et al. 1994 [1]		

**Table 8.30. Results from studies of the relationship between rebellious/defiant/negative attitudes toward authority and criminal/antisocial behavior. (Overall consistency score = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses							Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Positive				EUROPE <i>England</i> : Gibbens 1962 NORTH AMERICA <i>Canada</i> : LeBlanc 1992:344; <i>United States</i> : Conger & Miller 1966; Stein et al. 1966; Hindelang 1972; Feldman & Weinberger 1994 [6]		NORTH AMERICA <i>United States</i> : Tolman 1938 [1]	ASIA <i>Russia</i> : Ruchkin et al. 1998b EUROPE <i>England</i> : Reicher & Emler 1985; <i>Scotland</i> : Reicher & Emler 1985; Emler & Reicher 1987 NORTH AMERICA <i>United States</i> : Jensen 1969; Buffalo & Rogers 1971; Hindelang 1973; Cernkovich 1978a; Cernkovich 1978b; Ginsberg & Greenley 1978; Brook & Newcomb 1995:406; Ross 1994:80; Stacy & Newcomb 1995 PACIFIC <i>Australia</i> : Rigby et al. 1989; Heaven 1993:71 [15]	EUROPE <i>Finland</i> : Pulkkinen 1990; NORTH AMERICA <i>United States</i> : Blumenfield et al. 1972:607; Smith & Fogg 1978; Jessor & Jessor 1977; Jessor & Jessor 1978; Kandel 1978; Wingard et al. 1980; Chassin 1984; Johnston et al. 1986; Newcomb et al. 1986; Simcha-Fagan et al. 1986; Stein et al. 1987; White et al. 1987; Newcomb & Bentler 1988; Cloninger et al. 1988 [15]	NORTH AMERICA <i>United States</i> : deBlois & Stewart 1980; Dodge 1985; Maziade et al. 1985 [3]	
Not										



sign.										
Negative										

**Table 8.31. Results from studies of the relationship between delayed gratification and future orientation and criminal/antisocial behavior. (Overall consistency score for delayed gratification = 100%; well established correlate) (Overall consistency score for future orientation = 80.0%; probable correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions		
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug & Alcohol Use			
Gratification	Negative				NORTH AMERICA <i>Canada:</i> Tremblay et al. 1994; <i>United States:</i> Riddle & Roberts 1977 [2]			NORTH AMERICA <i>United States:</i> Mischel 1961; Mischel & Gilligan 1964; White et al. 1994:201 [3]		NORTH AMERICA <i>United States:</i> Krueger et al. 1996 [1]	NORTH AMERICA <i>United States:</i> Blanchard et al. 1977; Newman et al. 1992 [2]
	Not sign.										
	Positive										
Orientation	Negative				NORTH AMERICA <i>United States:</i> Quay 1965a; Siegman 1966; Stein et al. 1966; Landau 1975 [4]						
	Not sign.				NORTH AMERICA <i>United States:</i> Siegman 1961 [1]						
	Positive										

**Table 8.32. Results from studies of the relationship between feelings of external locus of control and criminal/antisocial behavior. (Overall consistency score = 87.5%; established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality
	Violent Off.	Property Off.	Drug Off.	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive				NORTH AMERICA <i>United States:</i> Conger & Miller 1966:138; Duke & Fenhagen 1975; Beck & Ollendick 1976; Kumchy & Sawyer 1980; PACIFIC <i>Hawaii:</i> Werner 1987:31 [5]		EUROPE <i>Germany:</i> Richter et al. 1996 NORTH AMERICA <i>Canada:</i> Andrews & Friesen 1987 [2]	NORTH AMERICA <i>United States:</i> Hogan & Mookherjee 1981; Parrott & Strongman 1984; Keilitz & Dunivant 1986 PACIFIC <i>Australia:</i> Shaw & Scott 1991 [4]		NORTH AMERICA <i>Canada:</i> Currie et al. 1977; <i>United States:</i> Obitz et al. 1973; Carman 1977 [3]	
Not sign.				NORTH AMERICA <i>United States:</i> Valliant et al. 1983 [1]			NORTH AMERICA <i>United States:</i> Farley & Sewell 1976 PACIFIC <i>Australia:</i> Peiser & Heaven 1996 [2]			
Neg-										

ative										
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**Table 8.33. Results from studies of the relationship between liberal attitudes toward deviance and non-conformity and criminal/antisocial behavior. (Consistency score for overall deviance= 93.3%; established correlate) (Overall consistency score for drug-use deviance = 93.8%; established correlate) (Overall consistency score for political deviance = 100%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions		
	Official Statistics						Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use			
Gender	Positive				NORTH AMERICA <i>Canada:</i> Bogaert & Rushton 1989 [1]	PACIFIC <i>New Zealand:</i> Krueger et al. 1994 [1]		EUROPE <i>England:</i> Reicher & Emler 1985; <i>Netherlands:</i> Junger-Tas 1992 NORTH AMERICA <i>United States:</i> Hogan & Mookherjee 1981:54; Agnew 1991; Empey & Stafford 1991; Thornberry et al. 1991; Jensen & Rojek 1992 [7]	NORTH AMERICA <i>United States:</i> Suchman 1968; Blum 1970; Jessor & Jessor 1977; Ginsberg & Greenley 1978; Sellers et al. 1993 [5]		
	Not sign.						NORTH AMERICA <i>Canada:</i> Mills & Kroner 1997 [1]				
	Negative										
Usage	Positive						NORTH AMERICA <i>United States:</i> Thornberry et al. 1994; Zhang et al. 1997 [2]	NORTH AMERICA <i>United States:</i> Martino & Truss 1973; Cockerham 1977; Kohn et al. 1979; Wingard et al. 1979; Fors & Rojek 1983:214; Krohn et al. 1984; Winfree & Griffiths 1985; Burkett & Warren 1987; Blau et al. 1988; Brook et al. 1988:151; O'Donnell et al. 1995:534; Rienzi et al. 1996:343 [12]			
	Not sign.						EUROPE <i>England:</i> West & Farrington 1973:52 [1]				
	Negative										
Political	Positive							NORTH AMERICA <i>United States:</i> Gergen et al. 1972; Gordon 1972; Ritter 1972; Johnson 1973; Kohn et al. 1985 [5]			
	Not sign.										
	Negative										

**Table 8.34. Results from studies of the relationship between negative affect and criminal/antisocial behavior. (Overall consistency score = 85.7%; established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Positive				NORTH AMERICA <i>United States</i> : Conger & Miller 1966:144 [1]	PACIFIC <i>New Zealand</i> : Krueger et al. 1994 [1]		NORTH AMERICA <i>United States</i> : Stice & Gonzales 1998:21 [1]	NORTH AMERICA <i>United States</i> : Lerner & Vicary 1984; Labouvie et al. 1990; Caspi et al. 1994:185; Rothbart et al. 1994 PACIFIC <i>Australia</i> : Heaven 1994:451(females); Krueger et al. 1996 [7]	NORTH AMERICA <i>United States</i> : Cameron 1978; Maziade et al. 1990; Carlo et al. 1998 [3]	
Not sign.								NORTH AMERICA <i>United States</i> : Stice & Gonzales 1998:21 PACIFIC <i>Australia</i> : Heaven 1994:451(males) [2]		
Negative										

**Table 8.35. Results from studies of the relationship between a commitment to education and criminal/antisocial behavior. (Overall consistency score = 95.7%; well established correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality
	Violent Offen.	Property Offen.	Drug Offen.	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Negative				ASIA <i>China</i> : Zhang & Messner 1996 EUROPE <i>England</i> : Mitchell & Shepherd 1967; Wadsworth 1979; <i>Sweden</i> : Jonsson 1967:204 NORTH AMERICA <i>United States</i> : Healy & Bronner 1936:62; Merrill 1947:105; Polk & Halferty 1966; Rhodes & Reiss 1969; Sampson & Laub 1993:111; Marshall & Webb 1994:334; Ward & Tittle 1994 [11]			EUROPE <i>Switzerland</i> : Vazsonyi 1997:92 NORTH AMERICA <i>United States</i> : Pine 1965; Epps 1967; Jensen 1969; Bachman et al. 1971; Kelly & Balch 1971; Elliott & Voss 1974; Figueira-McDonough 1983; LaGrange & White 1985; Figueira-McDonough 1986; Rowe 1986:523; Simcha-Fagan & Schwartz 1986:691; White et al. 1987:729; Wiatrowski & Anderson 1987; Grande 1988; Hawkins et al. 1988:263; Levine & Singer 1988:392; Gardner & Shoemaker 1989:490; DC Gottfredson et al. 1991:213; Agnew & White 1992:486; Joseph 1996; Katimas et al. 1996 [23]	NORTH AMERICA <i>United States</i> : Kelly & Balch 1971; Burkett & Jensen 1975; Finnell & Jones 1975; Smith & Fogg 1978; Krohn et al. 1984; Johnston et al. 1986:29; Hawkins et al. 1988:263; McBride et al. 1991; Agnew & White 1992:486; Free 1994 [10]	EUROPE <i>Sweden</i> : Stattin & Magnusson 1996:621 [1]	
Not sign.								NORTH AMERICA <i>United States</i> : Ginsberg & Greenley 1978; Goe & Bachtel 1985 [2]		
Positive										

**Table 8.36. Results from studies of the relationship between empathy and altruism and criminal/antisocial behavior. ( Overall consistency score = 95.7%; well established correlate) All studies were of empathy, unless followed by an A.)**

Nature of the Relationship		Type and Seriousness of Offenses							Antisocial Clinical Conditions		
		Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
		Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug Use
Empathy	Negative				EUROPE <i>England</i> : Eysenck & McGurk 1980 NORTH AMERICA <i>United States</i> : Hogan 1969; Mehrabian & Epstein 1972; Rotenberg 1974; Alekscic 1976; PL Ellis 1982; Kaplan & Arbuthnot 1984; Lee & Prentice 1988(E); Chandler & Moran 1990 [9]	NORTH AMERICA <i>United States</i> : Turner 1948(A); Riley 1986 [2]		ASIA <i>Hong Kong</i> : Ma & Leung 1991(A) EUROPE <i>Spain</i> : Luengo et al. 1994b NORTH AMERICA <i>United States</i> : Hogan 1969; Hogan & Jones 1983:17 [4]	EUROPE <i>Spain</i> : Luengo et al. 1994b:32 [1]	EUROPE <i>England</i> : Tranah et al. 1998:743(E) NORTH AMERICA <i>United States</i> : Feshbach 1975; MacQuiddy et al. 1987(E); Zahn-Waxler et al. 1995; D Cohen & Strayer 1996(E); Krueger et al. 1996:125 [6]	
	Not sign.				NORTH AMERICA <i>United States</i> : Kendall et al. 1977 [1]						
	Positive										

**Table 8.37. Results from studies of the relationship between role taking/role playing and criminal/antisocial behavior. (Overall consistency score = 81.3%; established correlate)**

Nature of the Relationship		Type and Seriousness of Offenses							Antisocial Clinical Conditions		
		Official Statistics					Self-Reported Offenses		Childhood Conduct Disorders	Antisocial Personality	
		Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending			Illegal Drug & Alcohol Use
	Negative				NORTH AMERICA <i>United States</i> : Kurtines & Hogan 1972; Chandler 1973; Rotenberg 1974; Jurkovic & Prentice 1977; Little & Kendall 1979; Ollendick & Hensen 1979; Kaplan & Arbuthnot 1985 [7]	NORTH AMERICA <i>United States</i> : Kurtines 1972; Hogan 1973; Hartnett & Shumate 1980 [4]		NORTH AMERICA <i>United States</i> : Chandler 1973 [1]		NORTH AMERICA <i>United States</i> : Jurkovic & Prentice 1977 [1]	
	Not sign.				EUROPE <i>England</i> : Emler et al. 1978 NORTH AMERICA <i>United States</i> : Kaplan & Arbuthnot 1984 [2]	NORTH AMERICA <i>United States</i> : Griffiore & Samuels 1978 [1]					
	Positive										

**Table 8.38. Results from studies of the relationship between level of moral reasoning and criminal/antisocial behavior. (Overall consistency score = 75.9%; probable correlate)**

Nature of the Relationship	Type and Seriousness of Offenses								Antisocial Clinical Conditions	
	Official Statistics					Self-Reported Offenses			Childhood Conduct Disorders	Antisocial Personality
	Violent Offenses	Property Offenses	Drug Offenses	Delinquency	General & Unspecified Offenses	Recidivism	Victimful & Overall Offending	Illegal Drug Use		
Negative				EUROPE <i>England</i> : Eshel et al. 1968; <i>Scotland</i> : Emler et al. 1978 MIDDLE EAST <i>Israel</i> : Sagi & Eisikovits 1981; Addad & Leslau 1990 NORTH AMERICA <i>Canada</i> : Trevethan & Walker 1989; <i>United States</i> : Betke 1944; Kohlberg 1958; Rest et al. 1969; Fodor 1972; Hickey 1972; Hudgins & Prentice 1973; Hawk & Peterson 1974; McColgan 1976; McColgan 1976; Jurkovic & Prentice 1977; Hains & Miller 1980; Gavaghan et al. 1983; Hains 1984; Hanson & Mullis 1984; Basinger & Gibbs 1987; Lee & Prentice 1988; Chandler & Moran 1990 [22]	MIDDLE EAST <i>Israel</i> : Addad & Leslau 1990 NORTH AMERICA <i>Canada</i> : Parlett et al. 1975; <i>United States</i> : Ravitch 1973; Deardorff & Finch 1975; Parlett et al. 1975; Kantner 1976; Griffiore & Samuels 1978; Hartnett & Shumate 1980; Craig & Truitt 1996 [9]	NORTH AMERICA <i>United States</i> : Jennings et al. 1983 [1]	EUROPE <i>England</i> : Renwick & Emler 1984; Palmer & Hollin 1996:180 NORTH AMERICA <i>United States</i> : Lanza-Kaduce et al. 1983:453 [3]		NORTH AMERICA <i>United States</i> : Campagna & Harter 1975; Bear & Richards 1981; McColgan et al. 1983 [3]	NORTH AMERICA <i>Canada</i> : Trevethan & Walker 1989; <i>United States</i> : Fodor 1973; Campagna & Harter 1975; Kegan 1986; O'Kane et al. 1996 [6]
Not Sign.				NORTH AMERICA <i>United States</i> : Weber 1926; Ruma 1967; Hudgins & Prentice 1973; Miller et al. 1974; Haviland 1977; Schmidlin 1977; Hains & Ryan 1983:1540 [7]		NORTH AMERICA <i>United States</i> : Petronio 1980 [1]	EUROPE <i>Scotland</i> : Emler et al. 1978; Renwick & Emler 1984 [2]	NORTH AMERICA <i>United States</i> : Haier 1976 [1]	NORTH AMERICA <i>United States</i> : Richards et al. 1992 [1]	
Positive								NORTH AMERICA <i>United States</i> : Lanza-Kaduce et al. 1983:450 [1]		