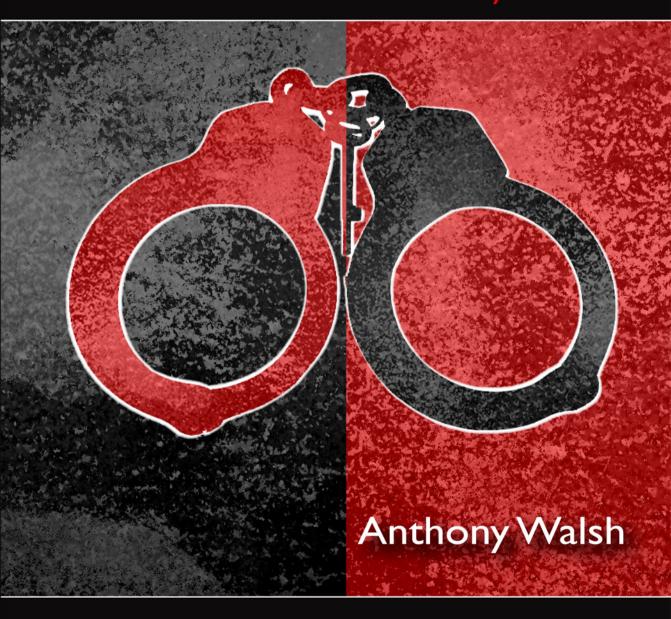
RACE AND CRIME

A Biosocial Analysis





RACE AND CRIME

A BIOSOCIAL ANALYSIS

No part of this digital document may be reproduced, stored in a retrieval system or transmitted in any form or by any means. The publisher has taken reasonable care in the preparation of this digital document, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained herein. This digital document is sold with the clear understanding that the publisher is not engaged in rendering legal, medical or any other professional services.

RACE AND CRIME

A BIOSOCIAL ANALYSIS

ANTHONY WALSH

Nova Science Publishers, Inc.

New York

Copyright © 2009 by Nova Science Publishers, Inc.

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transmitted in any form or by any means: electronic, electrostatic, magnetic, tape, mechanical photocopying, recording or otherwise without the written permission of the Publisher.

For permission to use material from this book please contact us:

Telephone 631-231-7269; Fax 631-231-8175 Web Site: http://www.novapublishers.com

NOTICE TO THE READER

The Publisher has taken reasonable care in the preparation of this book, but makes no expressed or implied warranty of any kind and assumes no responsibility for any errors or omissions. No liability is assumed for incidental or consequential damages in connection with or arising out of information contained in this book. The Publisher shall not be liable for any special, consequential, or exemplary damages resulting, in whole or in part, from the readers' use of, or reliance upon, this material. Any parts of this book based on government reports are so indicated and copyright is claimed for those parts to the extent applicable to compilations of such works.

Independent verification should be sought for any data, advice or recommendations contained in this book. In addition, no responsibility is assumed by the publisher for any injury and/or damage to persons or property arising from any methods, products, instructions, ideas or otherwise contained in this publication.

This publication is designed to provide accurate and authoritative information with regard to the subject matter covered herein. It is sold with the clear understanding that the Publisher is not engaged in rendering legal or any other professional services. If legal or any other expert assistance is required, the services of a competent person should be sought. FROM A DECLARATION OF PARTICIPANTS JOINTLY ADOPTED BY A COMMITTEE OF THE AMERICAN BAR ASSOCIATION AND A COMMITTEE OF PUBLISHERS.

Library of Congress Cataloging-in-Publication Data

Walsh, Anthony, 1941-

Race and crime: a biosocial analysis / Anthony Walsh.

p. cm.

ISBN 978-1-61728-572-1 (E-Book)

1. Crime and race--United States. 2. Sociobiology--United States. 3. United States--Social conditions. I. Title.

HV6791.W35 2008

364.2'56--dc22

2008015727

CONTENTS

Preface		ix
	Outline of the Book	xi
Chapter 1	The Race Concept	1
	The Social Construction of Race	1
	Is Race a Socially Dangerous Idea?	3
	Race and Genetic Distance	4
	Mapping a Behavior-influencing Gene Subject to Natural Selection	8
	Gene Counting, Within and Between	9
	Rushton's Life History Theory	11
	Conclusion	13
	Endnotes	14
Chapter 2	Racial Differences in Criminal Behavior	15
	African American Crime	16
	Race Based Crime Data	17
	Race, Homicide, and Rape	18
	Black Crime Rates Outside the United States	19
	The Issue of Bias in Official Statistics	21
	Are Racial Comparisons Based on Disproportionality Valid?	23
	Crime Among other Racial/Ethnic Groups in the United States	25
	Conclusion	27
	Endnotes	28
Chapter 3	Race and "Extra-Ordinary" Crime	29
	Multiple Murder	29
	Hate Crimes	33
	White-Collar Crime	36
	Organized Crime	37
	Why So Little Coverage of Extra-ordinary African American	
	Crime?	39
	Conclusion	41
	Endnotes	42

vi Contents

Chapter 4	Racism: A Distant But Powerful Cause of Crime	43
	Racism: Old and New	44
	Racism and Other Minority Groups	48
	Slavery, Racism, and the Formation of a Black Subculture of	
	Violence	50
	The Formation of an Oppositional Culture	51
	How Past Racism Contributes to Present Crime	54
	Conclusion	55
	Endnotes	56
Chapter 5	Race, Poverty, and Crime	57
-	The Poverty/Crime Nexus	57
	Poverty and Race/Ethnicity	59
	Working for a Living	62
	Single-Parent Families and Poverty	62
	Education and Poverty	63
	Individual and Subcultural Explanations	65
	The Environment and IQ	66
	Merit and Occupational Success	68
	Education and the Black Community	69
	Conclusion	70
	Endnotes	71
Chapter 6	Parenting Effort Versus Mating Effort: Sexuality, the Family,	
•	and Crime	73
	Sexuality and the Evolution of Antisocial Behavior	73
	Evolutionary Theories of Criminal Behavior	74
	The Family	76
	The Effect of Slavery on the African American Family	77
	The Sex Ratio	80
	The Sex Ratio and Misogyny	81
	The Sex Ratio and Illegitimacy	83
	Illegitimacy and Crime	83
	Conclusion	86
	Endnotes	86
Chapter 7	Competition and Chemistry in Honor Subcultures	89
•	Human Ecology and Social Disorganization	89
	The Inner City	90
	Individual Characteristics and Neighborhood Characteristics	91
	Honor Subcultures	92
	Gangs, Self-Esteem, and Protest Masculinity	94
	Testosterone and Serotonin in Honor Subcultures	96
	Child Abuse and Neglect and the Developing Brain	99
	Abuse/Neglect and MAOA	101
	Conclusion	102
	Endnotes	103

('ontents	3711
Contents	V11

Chapter 8	Evolutionary Explanations for Racial Behavioral Variation	105			
	Behavior and Evolution	105			
	Jared Diamond's Sexual Selection and Environmental Theories	107			
	r/K Selection	109			
	The Evolutionary Theories of J. Philippe Rushton and Edward				
	Miller	109			
	The Issue of Evolutionary Time and Racial Divergence	112			
	Genetic Drift and Flow	113			
	Time is of the Essence	115			
	Conclusion	117			
	Endnotes	118			
References		119			
Index		141			

PREFACE

This is a book about race and crime. More specifically, it is a book exploring the extraordinary high rate of crime, particularly violent crime, among African Americans. While I make no excuses in this book for black crime (thus perhaps angering liberals), I do trace many of the problems that beset the African American community to the odious practice of slavery and to the Jim Crow racism that haunted blacks for 100 years after emancipation (thus perhaps angering conservatives). It is not my intention of course to anger anyone, but rather to attempt to tie diverse explanations together in what I hope is a coherent pattern. The legacy of slavery and Jim Crow racism is far from the only explanation for the high rates of black crime, and, of course, most blacks do not commit crimes.

Also writing about racial differences in various behaviors, African American sociologist Orlando Patterson (1998:ix) claims that liberals and conservatives "play tiresome and obfuscating games" when they focus on a single area of the causal net. According to Patterson, conservatives believe that only "the proximate internal cultural and behavioral factors are important ('So stop whining and pull up your socks, man!')," and "liberals and mechanistic radicals" believe that "only the proximate and external factors are worth considering ('Stop blaming the victim, racist'!)." Patterson's observation is reminiscent of the ancient Indian parable of the blind men feeling the elephant, each man accurately describing the elephant according to the part of its anatomy he had felt, but failing to appreciate and integrate the views of the others who felt different parts. Because of this failure, the men fell into dispute and departed in anger, each convinced of the utter stupidity, and perhaps even malevolence, of the others. Likewise, if we only concentrate on "feeling" the individual or only the individual's environment, we will continue to confuse the parts with the whole and continue to engage in rancorous debates.

I aim to present as balanced a view of the whole elephant as possible in this book. But let us be honest, none of us can cast off our ideological predilections when writing about an emotionally charged topic such as race and crime. I therefore confess to being more of a "pull your socks up" conservative than a "Stop blaming the victim" liberal. Admitting one's ideological biases and striving to confront them will hopefully produce a more balanced account than pretending that one can be entirely neutral.

Most of the work I have engaged in over my career has involved working within a biosocial framework, a framework which demands that researchers take full account of both internal (heritable traits and other biological characteristics) and external (physical and

sociocultural environments) factors. In concert with an inherited suite of genes, environments make people what they are as surely as people make their environments. To ask if genes or environments are more important to human behavior is like asking whether hydrogen or oxygen is more important to water, or length or width to area. Internal and external factors have the same relationship to human behavior as hydrogen and oxygen have to water and length and width have to area, each meaningless without their complement in terms of the wholes they describe. David Lykken (1995:85) once colorfully wrote that without the environment, "your genome would have created nothing more than a damp spot on the carpet." Nature and nurture can be statistically disaggregated for analytical purposes, but in reality they are so inextricably linked that we cannot meaningfully speak of one without the other.

Unfortunately, most criminologists in the past dismissed any explanation of criminal behavior smacking of biology as racist, classist, sexist, fascist, deterministic, or simply illiberal. This dismissive and chilling attitude has been slowly changing as criminologists have been increasingly confronted by the sheer power of the theories, concepts, methodologies, and findings relevant to human behavior emanating from behavior genetics, evolutionary psychology, and the neurosciences. A large number of former strict environmentalist social scientists of considerable professional stature have joined the biosocial camp, with many of them using presidential addresses (e.g., Alice Rossi, Richard Udry, Sandra Scarr, Charles Wellford, Margaret Zahn) to urge their members to integrate relevant insights from biology into their work (see Walsh, 2002, Chapter 1, for a review). Another presidential address has been added to the list recently with Douglas Massey's address to the American Sociological Association in which he observed that: "most sociologists are woefully ignorant of even the most elementary precepts of biological science" and called for rectification of the matter (2002:1).

Most biosocial scientists are converts from strict environmentalism. I know of no biosocial scientist who has renounced this approach for a purely environmental one. I have a standing offer among my colleagues of \$100 for anyone who can point to one such apostate; few people in any discipline reverse course once they have moved forward. Speaking of moving forward, a recent statement by prominent sociologist/criminologist Francis T. Cullen, a card-carrying "Stop blaming the victim" liberal, a man truly dedicated to justice, and perhaps a nascent biosocial scientist, is most gratifying. In his discussion of "uncomfortable ideas," Cullen states that:

...as a sociologist, I have never been fond of research on "individual differences," but now their role in human behavior, including crime, is indisputable. Indeed, such individual differences are sufficiently powerful to question C. Wright Mill's famous admonition that scholars inappropriately attribute structural problems to personal problems (or individual pathology). It may be that structural problems in communities are "compositional," due in substantial part to the "flocking together" of people with personal problems that predispose them to crime (2003:xi).

Perhaps the discomfort many criminologists feel about delving into individual differences is that it leads to blaming criminals for their crimes-- really a radical idea for those who blame everything and everybody for crime except those who commit it. Or perhaps it is that popular boo word among social scientists—reductionism—that leads them away from focusing on

Preface xi

anything but what they consider to be the irreducible "whole." Reductionism, however, is nothing more sinister than looking at a complex problem at a more elementary, and therefore more accessible, level. Writing of reductionism in biology, physiologist George Bartholomew asserted that each level of analysis contains problems and insights, and that "each level finds its *explanations* of the mechanism in the levels below, and its *significance* in the levels above" (cited in Feder, Bennett, & Huey, 2000:315, emphasis added). Propositions about biological entities such as genes, hormones, and neurons do not contain terms that define the most important aspects of the human condition at their most meaningful level. As Bartholomew points out, these things find their significance in more holistic territory. However, it is in reductionist territory where the mechanisms undergirding them are to be found. Thus, I climb up and down the reductionist ladder in this book as the need arises.

The point I am striving to make is that there is nothing wicked or illiberal in acknowledging the role of individual differences in determining behavior, and that criminologists who believe that there is can benefit themselves and their discipline by removing their blinders and learning something about the biosocial perspective. Criminologists cannot bolster their arguments against bigotry by claiming that humans are biologically indistinguishable; bioegalitarianism is simply an idea that will not wash. Human nature is what it is regardless of what we think or believe about it. When we condemn racism and other forms of bigotry we must condemn such practices on moral grounds by pointing out that individuals should not be judged on the basis of the average traits of the groups to which they belong, but purely on their own merits and not on the notion that meaningful differences among individuals and groups do not exist. If only we learn to stop conflating statements of empirical fact with moral evaluations of them, fewer of us will be bothered by "uncomfortable ideas."

There is something profoundly liberating about a biosocial view that maintains that individuals are not blank slates pushed around like autumn leaves by impersonal social forces. Just one introductory course in human genetics would dispel the "sinister juggernaut-like reputation" (Dawkins, 1982:13) genes have among social scientists. A determinism (and as criminologists we are all determinists, aren't we?) that includes biology is more respectful of human dignity and diversity than the kinds of structural and cultural determinism favored by the enemies of biosocial science. After all, our genes are *our* genes, and they are activated according to *our* needs as we are confronted by environmental challenges. Genetic factors, like environmental factors, influence rather than compel our choices. Be assured that no biosocial scientist talks about genes "for" crime. There is no such thing, but there are genes that lead to traits that in conjunction with other biological and environments factors increase the probability of criminal behavior.

OUTLINE OF THE BOOK

Chapter 1 addresses the concept of race, with the assumption that if I am to write about it I should at least attempt to defend the concept. It is frequently asserted today that race does not exist except as a social construction, or if it does, it is a dangerous concept that should be purged from our lexicon and our consciousness. I examine various lines of evidence (primarily population genetics and, from more recent research, single nucleotide

polymorphisms—SNPs) to show that race does exist. I also defend the concept on pragmatic grounds, arguing that it is a useful predictive tool for criminologists trying to understand crime in the United States and around the world. As the group most effected by crime, no group would benefit more from an honest appraisal of it than African Americans.

Chapter 2 compares African American crime rates presented in the Uniform Crime Reports and victimization surveys with the rates of other racial/ethnic groups. Compared to other racial/ethnic groups, especially Asians, blacks commit an astoundingly disproportionate amount of crime, both in the United States and in other countries. Various arguments relating to the validity of this assertion such as official vs. self-report data and police bias are addressed.

Chapter 3 looks at what I call "extra-ordinary" crimes such as mass, spree, and serial killing, hate crime, white-collar crime, and organized crime. Many textbooks give the impression that while it is true that African Americans commit a disproportionate amount of street crime, they are underrepresented in these types of crime. In fact, African Americans may be also overrepresented among those who commit at least some of these types of crimes, although not by the wide margin that they are in crimes of a more conventional nature. I examine possible reasons for why we (the public, as well as many professional criminologists) are ignorant of black involvement in these areas, and possible reasons why the media are loath to publicize it.

Chapter 4 addresses the role of racism in explaining black crime. The horrendous experience of slavery and Jim Crow laws that blacks have had to uniquely endure in this country bred a violent culture in the African American community that is opposed to much of what mainstream America values. Although most African Americans no longer subscribe to such a culture, it survives in our inner cities. The behaviors and attitudes evident in inner city culture were understandable and functional responses to the conditions forced upon blacks by whites in former times, but now they are nothing but dysfunctional and destructive.

Chapter 5 examines the role of poverty in explaining black crime, beginning with the assumption that crime causes poverty more surely than the other way around. While most African Americans are not poor, about one-fifth (more than twice the white rate) remain mired in poverty. A number of reasons for why this "underclass" remains despite numerous social programs aimed at ameliorating it are explored, with primary focus on the rate of out-of-wedlock births and a devaluation of education in the inner cities.

Chapter 6 addresses possible mechanisms driving the high rate of illegitimate births in the inner cities of America using evolutionary theories. These theories all rest on the assumption that a number of individual traits and characteristics evolved to support different reproductive strategies (parenting versus mating effort), and that those that support mating over parenting effort also facilitate criminal behavior. The role of slavery in forging modern African American attitudes about marriage and gender relationships is discussed, as well as the extreme sex ratio evidenced in the black community. The sex ratio (the ratio of men to women in a population) is perhaps the best demographic predictor of both out-of-wedlock births and crime rates that we have.

Chapter 7 examines the ecology of the inner city. America's inner cities are violent and socially disorganized places that cannot fail to influence the behavior of those growing up in them. Children must live in the environments their parents provide for them, and those environments will have a huge impact on their futures, although individual differences will channel the environmental affects in varying directions. Inner cites tend to breed

Preface xiii

hypermasculine males with bloated self-images for which they constantly seek validation from others. Many of the young individuals who are caught up in these conditions were victims of abuse and neglect as children, and such treatment can leave a permanent *physical* imprint on the brain. The chapter also examines the role of serotonin, testosterone, and MAO, which are implicated in a variety of aggressive, violent, and dominance/status-seeking behaviors.

Chapter 8 explores the contentious issue of the evolutionary origins of behavioral differences among races utilizing the theories of Jared Diamond, Phil Rushton, and Edward Miller. Behavior is as subject (perhaps more so) to natural and sexual selection as are physiological and morphological traits, and while this statement is uncontroversial where other species are concerned, it is strongly resisted when applied to humans. Racial differences take time to evolve and require relatively isolated populations. I address the issues of time, population size, genetic drift, and genetic flow. I conclude from this examination that given the 100,000 years or so since the "out-of-Africa" dispersion, the small sizes of the groups that left Africa, and the allele fixing and eliminating process of genetic drift in small groups, mean differences in group behavior *had* to have evolved.

THE RACE CONCEPT

THE SOCIAL CONSTRUCTION OF RACE

Criminologist John Crank notes that many of the questions we ask about race, such as "Is the criminal justice system racist?" and "Are the intellectual capacities of races different?" are derivative. By this, Crank means that the questions are derived from the assumption that there is such a thing as race. "They [race researchers] do not ask the important question—Do races exist? And this is the unaddressed question that should be asked first" (2003:223). Given the inflammatory nature of so many racial issues, Crank's counsel that a discussion of the existence and meaning of race should precede any discussion of other issues associated with that concept is judicious.

The concept of race has been under attack for at least the last 50 years as an arbitrary social construct lacking any kind of defensible empirical basis independent of the social meanings attached to it. According to its attackers, the term *race* expresses coherent ideas and contains many connotations, but these ideas and connotations are built on shaky scaffolding lacking concrete support. The idea of *race* is viewed as being akin to social fictions such as unicorns, witches, and vampires. Those who view the race concept in this way have been busy trying to deconstruct it, and having done that to their satisfaction, to try to bury it. This chapter is an attempt to swim against the tide and argue that there is a reality to race that transcends the socially constructed meanings applied to it. At a minimum, I wish to convince the reader that race is a useful concept for criminologists trying to understand group variation in crime and criminality.

I agree that race is socially constructed. I even agree that at one level *everything* is socially constructed; because nature does not reveal itself to us ready sorted and labeled, humans must do it for her. *Social construction* means nothing more than the fact that humans have perceived a phenomenon, named it, and categorized it according to some (also socially constructed) taxonomical rule that takes note of similarities and differences among the things being classified. Just because something is *necessarily* socially constructed in this sense, it does not mean that the process of categorization is arbitrary and without empirical referents and meaning. Things are classified to impose some sort of order on nature's diversity and to arrive at some coherent pattern, regardless of whether or not we all agree on just how coherent these patterns are.

Classification does have its problems, of course, and the biggest problem is how fine a line we wish to draw between categories. Different anthropologists have presented us with as few as three, and as many as 100 races (Cavalli-Sforza, 2000), a fact that social constructionists have jumped on to underline their argument. Taxonomical fissioning and fusing, however, occur in every field of human inquiry without anyone doubting the underlying reality of that which is categorized. Linguists, for instance, have multiple classificatory schemes that range from a handful of language families (e.g., Indo-European, Afro-Asiatic) to thousands of local dialects. The value of a particular language classification (or any other classification) depends on its purpose. The common practice of putting "race" in scare quotes could be applied to almost any concept in any field outside mathematics, for few concepts are defined and understood in such a way as to make every application of their descriptors unproblematic.

A related problem lies in the terms we use to define what it is we are categorizing. Snyder (1962:19) defines race out of existence when he remarks that: "The people of the world have become so intermingled biologically that there can be no possibility of an absolutely pure race anywhere." In other words, there is no such thing as a race gene, present in all members of one population and absent in all members of other populations. If this is what those who deny the reality of the race concept mean by race, they are fighting a battle won long ago, for it is universally acknowledged in science that *Homo Sapiens* constitutes a single taxonomic biological unit. Those who believe that the race concept has real and useful denotative and connotative properties know that it is true that all human alleles are present in all human groups, albeit in different frequencies.

Snyder's statement is also a bit of a semantic cheat. If by race we mean a "pure" race, we face a Manichean choice—either "pure race" or "no race," making it easy to trash the term without regard for other conceptions of it. There are no "pure" languages either. All languages have evolved from a few proto-languages, and all have intermingled promiscuously, yet this does not detract from the concept of language, or from naming the various languages according to their regions of origin. The region of origin of peoples—their ancestry or lineage—is how race is defined, not by its genetic purity. Using purity as the defining criterion of race enables the definer to correctly state that there is no such thing, and on that basis, to conclude that the concept lacks any scientific merit. This argument destroys a straw man, for, as already acknowledged, we are all aware that there is no human population gene pool unadulterated by genes from another pool. It is patently obvious that there are no pure, biologically defined races, if there were, we would call them species. Snyder's remark is thus a red herring that serves only to confuse. Let us see how its critics have further confused racial categorization.

In a special issue of *Discover* devoted to race, Jared Diamond sought to show the arbitrariness of the tradition racial classifications based on ancestry, skin color, and morphology. He points out that if we use anti-malarial genes (or their absence), Swedes would be grouped with Xhosas, but not with Greeks and Italians; if we use lactose tolerance, Swedes belong with the Fulani in a "lactase-positive race," while most other blacks would be grouped with Japanese and American Indians as a "lactase-negative race" (1994:86). If we classify by fingerprints, he continued, we would probably have the world classified into three races: Europeans/Africans, Jews/Indonesians, and Australian aboriginals (1994:87). Diamond also says that the same classificatory issues would arise about nonhuman species, although

"debates would remain polite and would never attract attention outside the halls of academia" (1994:84).

Diamond is correct; most academics shy away from the topics of race and race differences, but if the topics come up the debates are anything but polite, which indicates that there is more than issue of taxonomical accuracy attached to the term *race*. Whatever else the "no-races" argument has evolved into, it clearly began as an ideological argument. The official *Statement on "Race"* issued by the American Anthropological Association (AAA) stated that human racial groupings "differ from one another only in about 6% of their genes," and this small percentage implies the non-existence of race. As Klein and Takahata (2002:389) point out, however, such a difference can be enormously significant: "Sewell Wright, who can hardly be taken for a dilettante in the question of population genetics, has stated emphatically that if differences of this magnitude were observed in any other species, the groups they distinguish would be called subspecies."

Nevertheless, the AAA argued that even if race exists it is a socially dangerous concept, and should be dropped (1997:4). Similarly, Yee and his colleagues (1993:1132) inform us that: "Mindful of World War II, UNESCO worked to debunk the idea of race as a biological fact so that it could never again be used to support aggression and genocide. The 1950 statement recommended that the concept of *ethnic group* replace *race*."

IS RACE A SOCIALLY DANGEROUS IDEA?

According to Yee and his colleagues, if we could eliminate the concept of race, we would be eliminating a major support for aggression and genocide. If there were any evidence that denying the usefulness of the race concept would help prevent aggression, hatred, and genocide, and war, I too would forcefully deny it, even if the evidence made my denial unsupportable, and I was fully aware of that evidence. But of course, it would not, as the bloody history of the world attests. Was it not *ethnic* cleansing that supposedly motivated the slaughters in the former Yugoslavia and in Rwanda, as well as a thousand other conflicts throughout human history? Jonahan Marks makes the same point when he notes that: "If biologically diverse peoples had no biological differences but were marked simply on the basis of language, religion, or behavior, the same problems would still exist" (1996:131). Substituting *ethnic* for *racial* does nothing but replace one term with another, it does not shift the reality underlying them, nor do "official" professional fiats such as the one issued by the AAA.

I propose that the term *race* has more sinister undertones than *ethnic* for many social scientists because the former carries biological connotation while the latter does not. Any sort of biological explanation seems more mysterious, powerful, and threatening, than environmental explanations by those with limited knowledge of human biology. The horrors of Nazism are endlessly evoked as examples of the dangers of biological theories, but the nightmares of racial purity and ethnic cleansing that have bedeviled us throughout human history did not wait for Gregor Mendel or Charles Darwin to sanctify them. Nazi theories of racial superiority did not rest on any kind of reputable science, but rather on a quasi-mystical nationalism that hypnotized the German people. While the Nazis tapped ancient biological underpinnings of tribalism and xenophobia to mobilize the German people to their purpose,

the mechanisms allowing them the access these traits were social and psychological. The Nazis had control of the media and all social institutions, and they staged frighteningly magnificent rallies that cemented the cult of the *Füehrer*, fed nationalism, and awaked the snake of hatred.

History is a sad catalogue of inquisitions, gulags, pogroms, genocides, and wars fought in the name of religious and secular ideologies far removed from any whiff of the demon biology. The communist terror was both longer-lived and quantitatively more heinous than the Nazi terror. The various programs of extermination carried out in the Soviet Union, China, Cambodia, and other "worker's paradises" were based squarely on a well-articulated theory of causation which was, of course, purely environmental. The Marxist terror did not rest on myths of racial superiority, but on myths of egalitarianism. All people are equal; and if they are not, by God we will make them so! The blank slate view of human nature implied by such theories is a view that modern evolutionary biology and neuroscience inform us is quite impossible (Quartz & Sejnowski, 1997). In addition to being scientifically untenable, the *tabula rasa* view is disrespectful of human dignity in that it views us as mere pawns of the environment, waiting to be molded into any shape our cultures might desire, which is precisely why so many have called the *tabula rasa* view a dictator's dream. In light of this tragic history, it is puzzling to see biology held up as the bad guy of human rights and human progress by many well meaning but biologically ill informed social scientists.

RACE AND GENETIC DISTANCE

I argue for the traditional classification of racial groups (call them ethnic groups, populations, ancestries, lineages, or anything else you might like; nothing is lost but a name) on pragmatic grounds. Ernst Mayr, the doyen of evolutionary population genetics, defines them likewise when he writes: "A human race consists of the descendants of a once-isolated geographical population primarily adapted for the environmental conditions of their original country" (2002:91). He further states that those who subscribe to the position that there are no human races "are obviously ignorant of modern biology" (2002:89). Although I do not believe that the latter statement is necessarily true in all cases, I lack Mayr's eminent credentials to contest the point with him.

What, if any, advantage does the traditional classification system have over Diamond's imaginative alternatives discussed earlier? The answer is its predictive ability. What possible behavioral predictions could we make by "racial" groupings defined by fingerprint patterns, lactose tolerance, or the presence or absence of anti-malarial genes? Race is defined by common ancestry, not by one or two traits that have evolved in response to similar environmental pressures in otherwise different genetic populations (Andreasen, 2000). It is true that we lack a "scientific" or universally agreed upon definition of race, but the usefulness of a concept lies in its predictive capabilities, not on universal agreement about its "real" meaning. We also argue about what intelligence (another "socially dangerous" concept that some would like to deconstruct) is, whether we should call it something else, and whether it is a unitary or multiple phenomenon (Garlick, 2001). These arguments, however, do not stop the more pragmatic from using its operational definition (IQ scores) to make useful predictions about all sorts of life outcomes (Gordon, 1997; Gottfredson, 1997).

This is again not to deny that racial boundaries are ambiguous and shifting; relative and dynamic rather than absolute and static. It is also true that it may be more fruitful in some circumstance to think in terms of clines (a graded series of physiological and morphological changes along lines of geographical transition) rather than races; it all depends on the degree of "lumping" or "splitting" required by the research issue. Cummings (2000:457) jumps on the cline concept to discount the race concept: "[If] humans are to be divided into racial groups, large-scale genetic differences should occur along sharp boundaries." Cummings has concocted another Snyder-like objection by positing an impossible ideal as a base from which he can wriggle away from the race concept. As Cummings is well aware (he is a geneticist), we do not observe "large-scale genetic differences along sharp boundaries" even between species (and no one questions the species concept). Red and ultraviolet are discernible colors on the color spectrum regardless of the lack of sharp boundaries between the intermediate colors that separate them, just as Norwegians and Zulus are discernibly different despite the relative smoothness of the clinal spectrum separating them. Likewise, sociologists sometimes conceptualize social class as a continuous variable, and at other times they impose sharp boundaries on it (e.g., bourgeoisie/proletariat, low/middle/high). Is social class is a useless concept because of its cline-like tendency to merge smoothly from case to case across the distribution, or because its discrete categories are determined by researchers according to their research purposes, and are definitely not "pure"?

The geographic maps of human gene frequencies presented by Cavalli-Sforza, Menozzi, and Piazza in their *The History and Geography of Human Genes* (HGHG) (1994) make it clear that all populations and population clusters overlap clinally. All scientists who have studied the evidence, regardless of their position on the existence of race, readily agree that genetic differentiation does not place the peoples of the earth into neat discrete piles, they are messy piles, but discernible piles nevertheless. If science has taught us anything about coming to grips with the messiness of the world, however, it is "simplify, simplify, simplify!" (The corollary injunction to distrust our simplifications is also a useful scientific lesson). If we want to come to grips with the messiness of group variation in criminal behavior, there is nothing remiss in simplifying racial categories.

Cavalli-Sforza, Menozzi, and Piazza's work has been widely cited as providing definitive proof that races do not exist. The citation is doubtless the result of the researchers' own assertion that "The classification into races has proved to be a futile exercise" (1994:19). However, the remainder of their 1,000-page book belies their denial, although they never label the groups they identify as races, instead they prefer the term *populations*. This huge volume (a more readable synopsis of the work is *Genes, Peoples, and Languages*, by Calavalli-Sforza [2000]) is filled by colored maps of different populations based on gene frequencies, which when aggregated are often referred to in the book by their traditional anthropological racial classifications of Caucasoid, Mongoloid, and Negroid.

This contradiction did not escape two left-leaning critics, who observed that HGHG's message is anything but that of "race does not exist," and that their work "can be summarized in widely publicized color-coded maps in which Africans are yellow, Australians red [Mongoloids blue], and Caucasoids green" (Harry & Marks, 1999:304). (The map referred to is on the dust jacket and on page 545 in HGHG). Harry and Marks appear to be implying that the "no races" statement is a genuflection to political correctness in an attempt to gain acceptance of Cavalli-Sforza's Human Genetic Diversity Program, which Harry and Marks, and a number of other left-leaning scientists, oppose as a sort of genetic imperialism. Right-

leaning Edward Miller (1994a) also comments on the apparent contradiction (stating that race does not exist and then proceeding to offer extensive evidence that it does) in his review of the book. Cavalli-Sforza, Menozzi, and Piazza make it clear, however, that it is racial *purity* that does not exist, not race as defined by common ancestry (Cavelli-Sforza, 2000:49). In other words, they have provided extremely strong evidence for a sort of cladistic (branching) definition of race (Andreasen, 2000), which is the definition that I accept.

HGHG contains genetic data (120 markers from 49 loci) obtained from blood samples from 42 populations from around the world. The book tells us a lot about the world-wide distribution of a variety of genes, none of which include genes coding for the characteristics most lay persons use to define race (skin color, body morphology, etc.), and none of which are of interest to behavioral scientists, such as the genes underlying various, cognitive, temperamental, and behavioral traits. Genes underlying these traits are subject to natural selection, and are thus not very useful in assessing population genealogies, which is the goal of HGHG, because they change in frequency under selection pressures. For instance, two populations (African Bantus and native Australians) have evolved similar skin color via natural selection presumably in response to similar climates, but Bantus and native Australians are two of the most widely separated populations in terms of the relatively selection-neutral genes used in HGHG.

Genes underlying group differences arise from selection pressures experienced during the evolution of groups in their ecological niches (including both the physical and socio-cultural environment). The genes underlying behaviors and traits most favoring survival and reproductive success were preserved and proliferated—that is how evolution works over the generations. Two groups from the same parental line thrust into quite different niches (say, a resource-rich area in the tropics versus a cold, resource-poor area) will over time diverge from each other quite extensively with regard to selection relevant genes. Genetic distance studies using these genetic markers may fail to recognize the common ancestry of the two groups if they had split, say, as little as 50,000 years ago. On the other hand, the neutral or near-neutral genetic markers used in the HGHG study, not being subject to natural selection, are passed down through the generations relatively unaltered except for drift and minor mutations, and are thus useful for assessing group genealogies. Such genes are not helpful, however, for assessing group differences in the kinds of characteristics that are important to behavioral scientists.

Nevertheless, the data presented in HGHG are practical for assessing the issue of the existence of race, based on genetic distance. Genetic distance measures are quantifications of the relative isolation of breeding populations from one another—the greater the genetic distance, the greater the isolation. The text presents a series of genetic analyses using "trees" (dendograms) and principal component analyses. The first tree derived from a mathematical technique known as Nei distances, shows the major genetic split among the world populations is between Africans and non-Africans, as did a similar tree calculated by a technique known as F_{st} distances (1994:79). Principal component factor analyses complement the dendograms in HGHG. These analyses cohere very well with traditional racial classifications, with African groups clustered in the lower right quadrant, Europeans in the upper right quadrant, and the remaining two quadrants containing Asian and other populations (1994:82).

Cavalli-Sforza, Menozzi, and Piazza also present matrices of genetic distance for each of 42 populations (pp. 75-76). As mentioned earlier, Bantus and native Australians are genetically very far apart, despite having similar physical features resulting from adaptations

to similar physical environments. These two groups have a genetic distance measured by the F_{st} method of 3272, meaning that Bantus have 32.72 percent of their genes (at least the relatively neutral genes used in the study) different from native Australians. The genetic difference between the Bantus and the English is 2288 (22.88%), and between the English and the Danes it is 21 (0.21%). The English are thus 109 times more genetically similar to the Danes than they are to the Bantus using the F_{st} method. The Japanese, despite their greater geographic distance from the English than from the sub-Saharan Bantus, are genetically closer to the English that the Bantus are (F_{st} = 1244). The data presented thus support both a clinal and a racial interpretation, depending on whether the research issue requires gross "lumping" into a few discrete trees, or fine "splitting," into a veritable clinal forest. For instance, geneticist Peter Smouse states that it would be difficult to distinguish a Scott from a Welshman (very fine clinal splitting) by their DNA: "But ask me if someone is from Norway or Taiwan [gross racial lumping], sure, I could do that" (cited in Shreeve, 1994:57).

Another worldwide study genetic variation using autosomal chromosomes, mitochondrial (DNA from mitochondria that are embedded in a cell and transmitted via the maternal line only) and Y-chromosome polymorphisms (alleles that differ in the number of "repeats" they contain) came to a similar conclusion. The authors of this study (Jorde, et al., 2000:985) concluded that their findings support: "the current practice of grouping reference populations into broad ethnic categories." Between-population (African, Asian, European) variation (F_{st} values) were significantly different at < .0001 for all DNA analyses (Jord, et al., Table 4: 982). In yet another worldwide study, researchers were able to correctly assign 99 to 100 percent of individuals to their continent of origin using markers from only 100 genetic loci (Bamshad, et al., 2003). In perhaps the most convincing of these studies, Tang and his colleagues (2005) used data from 326 genetic polymorphisms to identify races. Blind to the phenotypes of their subjects and using cluster analysis, only 5 out of a total of 3,636 (0.14%) subjects were not correctly classified according to their self-identified race. To correctly classify something that supposedly does not exist with a relatively small number of genetic markers with 99.86% accuracy belies those consider race to be a social fiction.

Other evidence for reality underlying racial categories includes the fact that forensic anthropologists have little difficulty placing skeletal remains into them. It is estimated that between 85 and 90 percent of skeletal remains can be racially identified by skull morphology alone (Sauer, 1992). Despite this ability, almost one-half of physical anthropologists say that they do not believe that biological races exist (Shreeve, 1994). A significant minority of physical anthropologists thus function within a classificatory system they allegedly do not believe in, although this should be put in the context of the "official" position of the AAA on race that claims it to be a socially dangerous concept, and of the professional consequences of voicing a contrary opinion. Note, however, that if they define "biological race" in terms of purity, they can have their cake and eat it too. That is, they can say with a straight face that biological race (pairs of individuals without, or with reduced capacity, to mate) does not exist, and at the same time use race as defined by common ancestry in their work to identify human remains.

MAPPING A BEHAVIOR-INFLUENCING GENE SUBJECT TO NATURAL SELECTION

Because Cavalli-Sforza, Menozzi, and Piazza's genetic data are based on neutral or near neutral genes, they are not useful for criminologists exploring group differences in criminal behavior. If genes subject to natural selection had been included, genetic differences would have been larger and show sharper boundaries between populations (Harpending & Cochran, 2002, Miller, 1994a). Evolution in different ecological niches leads to selection for different traits and characteristics that "fit" individuals to them. The longer a breeding population has occupied a particular niche, the more fixed those characteristics and traits (or rather the genes underlying them) become in that population. We can thus expect many differences across breeding populations that have evolved in different geographical regions relatively isolated from other breeding populations.

One such example of a gene that varies systematically across cultures around the world is the DRD4 receptor gene. International surveys of allele frequencies of the DRD4 receptor gene show striking differences among groups that are much greater than group differences in selection-neutral genes (Chen, et al., 1999; Ding, et al., 2002). The DRD4 gene is of interest to criminologists because it is the gene coding for the dopamine receptor protein. To grossly simplify, dopamine is a "motivating" neurotransmitter that is implicated in a number of syndromes associated with antisocial behavior, such as ADHD, impulsiveness, and sensation seeking (Swanson, et al., 2000).

The DRD4 gene is one of the most polymorphic genes known, coming in "long" and "short" forms of 48 bases that repeat between two and 11 times (Ding, et al., 2002). The shorter the repeat, the more responsive the brain is to dopamine; the longer the repeat, the less responsive the brain is to dopamine. Worldwide population frequencies of the various forms of the DRD4 gene find that 65.1 percent of individuals have the 4 repeat allele, 19.2% the 7 repeat, 8.8% the 2 repeat, and the remaining 6.9 percent having one of the other seven rare repeats (Ding, et al., 1999). Individuals with two or three repeats tend to be over stimulated, or superoptimally aroused by events that most people (the 4-repeat individuals) find optimally stimulating and thus they seek to withdraw from, or tone them down. On the other hand, those with 5 or more repeats (especially those with seven or more) are suboptimally aroused by those same events. Suboptimal arousal is subjectively experienced as boredom, and bored people seek raise the level of stimuli to alleviate it, which sometimes results in criminal or other forms of antisocial behavior.

The criminogenic consequences of suboptimal arousal are well known (reviewed by Ellis, 1996) and are not reviewed here. The point I want to make is that the alleles of underlying traits conducive to antisocial behavior and under selection pressure are not distributed evenly across different breeding populations. Chen et al's (1999) work is based on data from 2,320 individuals from 39 different racial/ethnic groups and shows that the percentage of 7-repeat alleles ranged from zero for sedentary populations (populations which have remained essentially in the same location over the past 30,000 years) such as the Han Chinese, Yemeni Jews, and the San bushmen, to an average of 63 percent for six migratory populations of South American Indians. The correlation between the percentage of 7-repeat alleles in the population and the distance for the original parent population is an impressive 0.85.

We would expect individuals in groups that decides to migrate from the parent population and explore the greater world to exhibit, on average, a greater need for excitement (to be suboptimally aroused) than the average person in the parent population. To the extent that the need is a function of the DRD4 gene, the 7-repeat allele should be well represented among groups with a reputation for boldness, irritableness, boredom-proneness, and fierceness. Commenting on the DRD4 literature, Harpending and Cochran (2002:12) state: "It is probably no accident that two of the best known ethnographies of the twentieth century are titled 'The Harmless People,' about the !Kung who have few or no 7R alleles, and the 'Fierce People,' about the Yanomamo with a high frequency of 7R."

GENE COUNTING, WITHIN AND BETWEEN

As well as being used to assert differences among human groups, "gene counting" has been used to affirm human similarity across populations. Arguments against the existence of race almost invariably invoke the AAA (1997) statement to the effect that there is more genetic variation within races than there is between them; that is, the between-groups variation component is not large enough to support the race concept. The statement is repeated endlessly as though it were the profound *coup de grace* to the race concept.² It is a rather meaningless argument, however, meant to convey the message that human groups cannot be different (or not *too* different, anyway) since most of the genetic variance in the species is within racial categories.

To see why this argument conveys no such thing, let us suppose we lump all genes from all primate species together such that the pool contains 100 percent of the genetic variation in the primate order. Regardless of what two primate species we compare, the genetic variation within each is *necessarily* greater than the genetic variation between them. We share 97% of our genes with gorillas, as do chimpanzees, with which we share about 99 percent, which make us genetically more like chimps than chimps are like gorillas. Does this mean that there are no meaningful differences between gorillas and chimps, or between chimps and humans? The differences are obvious, so in order to understand them we can ignore the genes we share with chimps and concentrate on those we do not. Every animal shares the vast majority of their genes with every other animal because they share the same evolutionary goals of survival and reproduction and thus need the same basic equipment. All animal organisms must perform the same tasks that make those goals possible, and thus all require the same DNA. Even the genes that differentiate between species are not qualitatively different, but rather variations on a common theme. It is changes in the regulation of genes (switching them on and off) that differentiate species, subspecies, and individual organisms. Nature is parsimonious in that it preserves the genes underlying biological processes common to all animals because they work; natural selection does not create an entirely new genome when species branch off from the parental line anymore than authors create new words when they write different books.

For any continuous variable (height, weight, IQ, strength levels, SAT scores, GPA, income, etc.) broken down by various groupings (gender, race/ethnicity, class, etc) the variability within groups will be greater than the mean difference between the groups. For a very simple illustration, human height, let us say, ranges between three feet and eight feet, but

the average between-gender difference is only about four or five inches. We would not think it particularly profound if someone announced that within-gender variation in height is greater than between-gender variation in height, and that somehow this means that the gender height difference is only a social construction. I am contrasting the mean between difference with the full within range rather than with the mean within difference, but it seems that this is exactly what those who keep repeating the mantra are doing. When one divides the mean square between by the mean squares within, we find many interesting statistically significant differences. Nevertheless, from an evolutionary point of view, trying to explain the small between-gender difference in height is a more interesting exercise than trying to explain why individuals within each gender vary so much more in height among themselves. The "within/between" argument boils down to a banal truism, and it is just as fallacious as the "no race gene" truism because both arguments dethrone straw men.

Surely, it is the small number of genes that make us different from chimpanzees that is most interesting, rather than those we have in common. Only a tiny fraction of DNA is responsible for many of the observed differences between and among individuals and races (Crow, 2002). Two human groups may be quite genetically different from one another by virtue of only 0.01 percent of the base pairs (the nucleotides TA, CG, AT, etc are base pairs) in a cell, but that small fraction is still six million different base pairs per cell. Thus, races could be 99.99 percent genetically identical and there would still be plenty of variation left to produce racial differences. These base pairs, or single nucleotide polymorphisms (SNPs), are "highly variable between different regions of the genome and in different ethnic groups" (Plomin, 2003:195).³

We often get caught up in thinking of genetic differences as qualitative, but even major differences between species are more quantitative (the *amount* of gene products) than qualitative (different gene products). Both human and chimps have genes that build hair and brains, but chimps have more hair than humans, and humans have more brains than chimps (Crow, 2002). The difference in hairiness may be of little import, but in the difference in brain mass between humans and chimps contains the difference between the ability to travel to the moon and not being able to build even the most rudimentary shelter to protect oneself from the rain. In other words, extremely small differences at the molecular level (SNPs) can result in extremely large differences at the organism level.

The best example of a single gene (not just a base pair difference, but an identified *gene*) difference between groups is the SRY (*sex determining region of the Y*) gene on the Y chromosome that determines the sex of an embryo. The "default" option for all mammals is to develop as females. The SRY gene turns on a cascade of other genes leading to the formation of the testes. The testes then start producing androgens, which masculinize the genitals and the brain, and Mullerian inhibiting substance, which atrophies the Mullerian (female) internal organs. The SRY gene thus sets a series of events in motion that will result in the birth of a male rather than a female infant, despite the fact that that the within-group genetic variance (all the genes shared by both sexes) is vastly greater than the between-group variance, the single SRY gene. Every mammalian female has all that it takes to make a male except for this one gene, and but for the SRY gene, all males would develop as females. Human males and females share all their genes except the SRY, but no one asserts (I hope) that genders or gender differences do not really exist outside of their social construction. I want to make clear, however, that while the SRY gene *is* a gene absent in all members of one group of

humans and present in all member of another group, their is no such gene that differentiates human races.

RUSHTON'S LIFE HISTORY THEORY

We can use the methods of HGHG in a thought experiment that would include genes subject to natural selection. Suppose we obtain a wide variety of heritable physiological (e.g., morphology, maturation rate, gamete production, hormonal levels), trait (e.g., various temperamental and cognitive measures), and behavioral (e.g., criminal and sexual behavior, conscientiousness) measures from many subjects of African, Asian, and European ancestry. We assume that these measures constitute discriminating variables measuring characteristics on which the "lumped" groups are hypothesized to differ. We then perform a discriminant analysis, the success of which depends on the mean values of the predictor variables being different among the groups. If these measures vary randomly across the criterion groups, then the analysis will fail, and we conclude that the groupings (races) are not scientifically meaningful or useful in that we cannot make any useful predictions based on them. If the measures vary systematically, it will succeed, and we can conclude that the groupings are scientifically meaningful, and that we can make predictions based on them.

How many of those who believe that race does not exist (or that it is not a useful concept) would bet on the failure of the analysis? How many would believe that a similar analysis based on Diamond's ad hoc taxonomy would bet on its success? I concede that there would be much overlap in the group distributions on all the variables, and thus that the groups would not be "pure" in any sense. However, if complete statistical independence is the criterion for the usefulness of any taxonomical concept, then we will probably have to trash all such concepts and find another line of work. Whether we acknowledge it or not, we all *know* that the "big three" races can be distinguished from one another on a variety of measures that cluster together in non-random ways.

The closest that anyone has come to performing such an analysis is Canadian psychologist J. Philippe Rushton (1989; 1997). Rushton ranks the three traditional anthropological groups on a large number of physical, cognitive, and behavioral factors such as those mentioned above, based on many hundreds of studies. Rushton finds that these rankings cohere with the r/K theory of population biology, which is an ecological theory representing the range of reproductive strategies that exist among and within species. An r-selected strategy is one in which resources are concentrated on mating effort, and a K-selected strategy emphasizes parental care. These strategies have a hydraulic relationship with one another; i.e., the more an organism invests in one strategy the less that can be invested in the other.

As with taxonomical arguments, arguments about where human mating populations may fall on the r/K continuum are anything but polite. The controversy surrounding Rushton is largely based on his assertion that racial populations aggregate at different points along the intra-species continuum. He maintains that Asians are more K-selected than whites, who are more K-selected than blacks, and that the strategies followed by the different groups covary with many heritable traits helpful in the maintenance of the utilized strategy.

If this is so, mean differences on r or K traits should fall into predictable patterns. Rushton subsumes 60 traits under five higher-order concepts: intelligence, maturation rate, personality/temperament, social organization, and reproductive effort. Included are traits in which socialization is heavily involved, such as achievement, sexuality, and social organization, and traits such as morphology, speed of physical maturation, and gamete production, in which social variables are involved minimally, if at all. He then examines the literature on racial differences relating to these variables. If racial differences are random with respect to r/K indicators, most research results will be null, and the remainder will be about equally split between negative and positive results. Reviews of the literature have shown this has not been the case across the hundreds of studies that have examined these variables in a variety of contexts and for a variety of research purposes. There have been a few null results, but the great majority have been positive (Ellis, 1987; Lynn, 1990; Rushton, 1997).

Rushton notes that r/K theory is not a "biological" theory, but rather a "mixed evolutionary/environmental" one that "fits the data better than any currently available purely genetic or purely environmental alternative" (1991:126). Such a statement, of course, would be taken as an obvious truism and hardly worth mentioning if the animal in question was any other than human. It is also important to note that population differences on these indicators are not large, and there is considerable overlap, but they are demonstrably there. Working under the rubric of gene-based evolutionary theory, Rushton has woven a network of meaning joining diverse phenomena and their correlates that orders the empirical data in ways consistent with it. Theories able to incorporate phenomena not previously thought to be related into a coherent explanatory scheme are generally welcomed and much admired in science, but Rushton's work has been demonized as racist and viciously attacked (e.g., Leslie, 1990; Roberts & Gabor, 1990; Zuckerman & Brody, 1988).

Not all Rushton's critics stoop to this level, and some even admit that although they are opposed to his work on ideological grounds, it is difficult to criticize on scientific grounds. For instance, Daniel Freedman, states that the assemblage of data on race collected by Rushton is "not readily dismissible, although many have tried" (1997:61). Freedman then goes on to state that the major problem with Rushton's work is not with his data, "but with the emotionally distant nature of [Rushton's] scientific presentations" (1997:61). Thus Rushton is merely "emotionally distant" (isn't this what science is supposed to be?) rather than racist. Another of Rushton's critics also admits that "[It] would take a variety of environmental factors to explain all of the racial differences [that Rushton's theory] parsimoniously accounts for" (Lynn, 1989:5). Yet another writes: "All in all, I find the pattern that Rushton presents interesting and worth pursuing" (Mealey, 1990:387). These critics reveal true scientific spirit by giving work that does not conform to their ideology its proper scientific due. Whatever one thinks of the merits of Rushton's works, it remains true that none of his critics have supplied aggregate data indicating anything other than the racial gradient he identifies. It is almost impossible to imagine what strictly environmental factors could account for the systematic alignment of the three racial groups on such a wide variety of traits consistently documented across cultures. This is the crux of the matter, and whether or not Rushton has a racist agenda is irrelevant to the substance of his scientific work.

There is no doubt that works such as Rushton's do not consider the sensitivities of those who may take offense with it. However, science, the journals that published it, and the universities in which it is taught, are not in the business (or shouldn't be) of assuring all people that their sensibilities will never be disturbed. The pursuit of knowledge about human

nature and about our place in the universe has never been confined to polite chatter. From Copernicus, to Darwin, to Freud, to Rushton, people have been hurt and even outraged, but that is the price we pay for furthering our understanding of ourselves. What a dark hole of ignorance we would find ourselves in if all the politically incorrect "bad guys" in the history of science had been intimidated into silence. If the attitude prevailed that all pronouncements about humanity must be exquisitely sensitive to everyone's feelings, never offensive or hurtful to anyone, we would still hold the belief that we are at the center of the universe, and that we are more like angels created in God's image rather than animals created by nature. While such a belief is comforting and cozy, it does not match what the cold stare of science reveals.

No amount of analysis of data such as Rushton supplies would satisfy some social scientists, who would probably morph into postmodernists to evade confronting it. If the results of our discriminant analysis support the traditional racial categories, they would be viewed as just another example of a story constructed by a particular discourse. All variables in the analysis, including the purely physical, would be dismissed as arbitrary social constructs, as would the mathematical foundation of the statistical analysis.⁴

CONCLUSION

The main point of this chapter is to argue for the usefulness of the race concept in the criminology. It is not to excoriate postmodernism as academic silliness practiced by marginalized intellectuals. Postmodernism has a valuable role to play in making us all pay attention to our underlying assumptions and to power relations. I only wish to point out that the *social construct* argument can be carried to the point of absurdity, and that perhaps the "no race" position is an example of it (although if race deniers really believe that their denial will lessen racism, it is a noble gesture). For non-postmodernists, the argument about race seems largely semantic (e.g., the UNESCO manifesto), suggesting that we need an alternative vocabulary for the biologically infused term, *race* (see Gannett [2001] for an interesting discussion of the evolution of the concept and the term).

Many commentators have suggested that the relativistic and dynamic term *population* replace race. Nothing would be lost except a word if we did, but race is a term so embedded in colloquial usage that it almost seems perversely obscurantist to purge it from the lexicon. Scientists today have a different picture in their heads when they hear race than they did in previous generations, and the term *population* carries other entrenched meanings on its back already. The term *population* in as used in population genetics does not mean what it does in common usage, such as, say, the population of Toledo, Ohio, but rather to hereditary populations, which is a roundabout and pedantic way of saying race. Thus, I will continue to use the term race to refer to populations of common ancestry throughout this book. In the final analysis, however, the status of race as a biologically meaningful category is an important issue only for someone unwise enough to try to formulate a strictly biological or essentialist theory of group differences in criminal behavior (or anything else). For those of us seeking biosocial explanations; that is, explanations in terms of group variations in gene frequencies interacting with the social, cultural, and physical environment, arguments about the race concept is of no real importance. Criminologists need the concept of race if they are to understand the crime problem in this and other multiracial societies, for as LaFree and Russell have pointed out, "All roads in American criminology eventually lead to issues of race" (1993:273).

ENDNOTES

¹ The F_{st} or "fixation" statistic, involves measuring heterozygosity, a measure of allele variance in a population. The isolation of breeding populations increases homozygosity (the "fixation" of an allele in a breeding population), and gene flow between different breeding populations increases heterozygosity within population but decreases it between populations. Thus, F_{st} can also be considered an index of population isolation. F_{st} is calculated in the same way that the coefficient of determination (r²) calculated using the sum of squares approach: thus, F_{st} = (Ht – Hs)/Ht. Ht is the genetic variation within the entire sample (the species) and Hs is the genetic variation within subsamples (racial or ethnic groups). According to fairly well accepted quantitative guidelines, F_{st} values of .15 to .25 are indicative of "great genetic differentiation," and F_{st} values greater than .25 "indicate very great differentiation" (Hartle & Clark, 1989:118). F_{st} values differentiating populations will vary according to which components of the genome are examined.

The role of ideology in UNESCO's statements can be seen by contrasting the 1950 statement with the 1951 statement. In the 1951 statement, the UNESCO committee retreated from the earlier statement and defended the validity of the race concept. Graves (2001:151) saw the change as the result of the 1951 committee being composed of more politically conservative members "who might have believed that liberal 'political' concerns had compromised the scientific integrity of the first statement." Thus, the "truth" that emerged from these two committees appears to have depended more on their ideological composition than on the data available to them. Of course, relative to what we know today, both the 1950 and 1951 statements were made in almost total ignorance of genetics.

Polymorphisms are differences between genetic sequences of the nucleotide bases. Most of the DNA sequence of any gene is the same for all individuals, but when segments between individuals or between group averages differ, the segments are called polymorphisms. SNPs ("snips") are one type of polymorphism in which the replacement of a single nucleotide by another occurs. About 85% of the genetic causes of most disorders have been attributed to SNPs (Plomin, et al., 2001).

⁴ If this is considered too extreme a statement, consider physicist Alan Sokal's famous hoax published in the journal *Social Text* (1996) as a serious piece of work. Sokal parodied postmodernism in his article, which he purposely riddled with falsehoods, non sequiturs, and pure nonsense, and in which he claimed to deconstruct many of the established concepts of physics by describing no less than a "transformative hermeneutics of quantum gravity." It was accepted by the editors, reviewers, and readers of *Social Text* because it not only fit their quasi-solipsistic epistemology, but also doubtless because they were flattered by the ideological companionship of a "real scientist" who was apparently joining them in doubting many aspects of physical reality.

RACIAL DIFFERENCES IN CRIMINAL BEHAVIOR

Even if we refuse to accept the position that races exist and that the concept has predictive utility, we can still explore "socially constructed" group differences in criminal behavior—or can we? Darnell Hawkins has pointed out that any discussion of crime in a racial context, "has always been an ideological and political mine field" (1995:40). Hawkins is right, particularly as it pertains to such discussions in the United States. As is the case with the concept of race, one way to avoid stepping into the minefield is to claim that crime and criminality, like race, are also only arbitrary social constructs, as Hawkins himself does, arguing that "we cannot discover what *real* crime is, or who the *real* criminals are" (1995:41, emphasis original).

The idea underlying the argument that crime is a social construction is that certain acts are arbitrarily labeled criminal by people with the power to do so, and that these acts have no meaning apart from the definitions applied to them. Social constructionists presumably recognize that the reality of the harm caused by criminals is independent of social labeling of the offenses they commit, but many consumers of their literature have taken the arguments too literally. Many years ago as a graduate student, I was informed by my professor that crime would not exist if the acts they denote had not been labeled criminal and punishments applied to them. On this basis, he labeled himself a "legal anarchist," and argued that acts labeled as crimes committed by the underclass are justifiable revolutionary acts of the powerless committed against an oppressive racist, classist, and capitalist society. Being a serving law enforcement officer at the time, I did not know whether to laugh or cry at this man's naiveté.

Unlike my old professor, there are those who admit that the agenda of much of social science is ideological, not scientific, and who even think that this is the way it should be. Anthropologist Charles Leslie is one such person: "Non social scientists generally recognize the fact that the social sciences are mostly ideological. ... Our claim to scientific is one of the main academic scandals of the academic world, though most of us live comfortably with our shame." He goes on to reveal what he believes that social science should be: "By and large, we believe in, *and our social science was meant to promote*, pluralism and democracy (1990:896, emphasis added). I always thought that social science, as with all science, was meant to seek truth, and nothing else. We can all agree that the promoters and advocates of pluralism and democracy are great people, and that they hold the moral high ground, but we should not confuse such promotion and advocacy with science. Science is not antithetical to moral goals, however, for such goals cannot be achieved on a foundation of ignorance, half-

truths, and delusions. Science reveals many unpleasant truths, but ignoring those truths is not a recommended strategy for dealing with the issues they pose.

Let me repeat myself: everything is socially constructed at some level, but to deny the reality of the harm underlying criminal acts (whatever we call them) is to catapult the social constructionist idea to absurdity. Many criminalized acts are indeed arbitrary and culturally and/or temporally bound. We call such acts mala prohibita crimes for precisely this reason, but to use them as exemplars of all crime is verbal legerdemain. Many people welcome being "victimized" by mala prohibita crimes (drugs, prostitution, gambling, etc.). The criminal acts that most concern us are universally condemned and are inherently evil (mala in se), the litmus test for which is that no one wants to be victimized by them. Mala in se crimes such a murder, rape, and theft of resources, are crimes that militate against the evolutionary imperatives to survive and reproduce, and against which all humans have evolved strong emotional reactions. Mala in se are, contra Hawkins, real in a materialist sense in that they evoke palpable physiological mechanisms that lead to the affective states we call emotions (anger, helplessness, sadness, and a desire for vengeance) among victims in all cultures (Walsh, 2000b).

Another way to avoid the minefield of racial comparisons is to deny or downplay group differences. Such a tactic results in ambivalence among academics who deny or downplay differences lest they reinforce negative stereotypes on one hand, while on the other commending racial and ethic cultural diversity to us as a positive thing. It often escapes notice that distinctive and diverse cultures not only produce behaviors to be celebrated, they also produce behaviors to be condemned. Condemnation of the cultural practices of groups other than our own is itself condemned by cultural relativists, but surely if one talks of positive cultural practices we have to ask "relative to what?" The answer is relative to other cultural practices we deem less worthy of celebration. We cannot make only positive judgments about diverse cultural practices and ignore negative aspects of those cultures if we are to be forthright (Felson, 2001). Criminal behavior is surely something to be condemned, but we must try to do so without condemning the group or groups in which crime is most prevalent. As Martin Luther King reminded us, we should judge individuals not by the color of their skin (i.e., the group to which they belong) but on the content of their character. It is easy to forget King's admonition when discussing group differences, which merely reflect group averages, and not anything about any particular member of those groups. Let us now walk into Hawkins's minefield with King's admonition uppermost in mind.

AFRICAN AMERICAN CRIME

When Americans speak of race and crime in the same sentence they are almost invariably thinking of African American crime. No one doubts that crime is rampant in America's inner cities, which are largely populated by African Americans. It is probably for this reason more than any other that social science has issued a bad housekeeping stamp of disapproval on any explanation of racial differences in criminal behavior that do not locate the causes in circumstances external to the group. As liberal African American sociologist William J. Wilson, has written, social scientists have tended either to ignore "the tangle of pathology in the inner city," or to address it in "circumspect ways" (1987:22). We should certainly spike

our observations about group differences with a healthy helping of prudence, but to insist that they must only be examined and interpreted from one perspective is unnecessarily constraining and represents what amounts to a unspoken professional gag order.¹

Many criminologists shy away from dealing forthrightly with matters of race as is pertains to criminal behavior because of the disagreeable tendency among other criminologists to label those who do as racists. Never mind that such name-calling cuts off any meaningful discourse to the disadvantage of labeler and labelee alike, and never mind if ad hominem arguments have no place in science. Racism is certainly a pernicious social disease, but honestly reporting research findings in "sensitive" areas should never be considered one of its symptoms, although unfortunately it all too often is. The racist label is applied so promiscuously these days that all stable meaning has been washed out of it. Nevertheless, and regardless of the diverse circumstances under which it is applied, the label retains its power to severely burn a career, for it sticks to its victim like hot tar.

It is not only the fearful who are loath to be forthright about race, however. Some researchers practice self-censorship out of a genuine concern that already disadvantaged groups will be further stigmatized if findings are discussed too forthrightly. Whatever the reason for its neglect, it has resulted in "an unproductive mix of controversy and silence" (Sampson & Wilson, 2000:149). We must come to terms with the fact that not only do individuals differ, but that groups of individuals who share different cultures, lineages, and evolutionary histories also evidence average differences. If we are to understand mean group differences in traits and behaviors, we are obliged to compare them. Indeed, cannot avoid making comparisons, however ideologically undesirable or unpleasant it may be for some to contrast the behavior of different racial and ethnic groups.

There are those who argue that the crime/race connection should be studied honestly because the racial or ethnic groups who commit the most crime also suffer the most victims. Black males are over six times more likely to become a homicide victim than white males, and black females are over three times more likely to be a victim of homicide than white females (Rolinson & Kieth, 1995), and a1991 Gallup poll found that 91 percent of African Americans identified crime as the most urgent problem facing their community (D'Sousa, 1995a). If follows that African Americans stand to benefit more than any other group from a candid examination of crime, criminality, and its causes.

RACE BASED CRIME DATA

It is undeniable that in contrast to all other racial and ethnic groups in the United States, African American crime rates are disproportionately high. According to the 2000 Census, African Americans constitute 12.8 percent of the U. S. population, thus arrest rates for African Americans would fluctuate randomly around that percentage if race were irrelevant to predicting the probability of criminal behavior. However, according to 2002 Uniform Crime Report (UCR), the percentages of blacks arrested for each Part I index crime in 2001 were: murder (48.8%), rape (34.3%), Robbery (52.5%), aggravated assault (33.3%), burglary (29.9%), larceny/theft (32.6%), motor vehicle theft (39.3%), and arson (24.9%). African Americans are thus overrepresented by large margins in each of the eight most serious crimes. The pattern of black over-representation in crime, particularly violent crime, has been

consistently observed as long as crime statistics have been collected in the United States (Barak, 1998).

By way of contrast, whites are underrepresented relative to their proportion of the population. Whites constituted 82.2 percent of the American population in 1999 (U.S. Bureau of the Census, 2000), with arrest rates for murder (48.9%), rape (63.1%), robbery (46.0%), aggravated assault (64.4%), burglary (68.1%), larceny/theft (64.9%), motor vehicle theft (58.0%), and arson (72.4%). It should be noted that the "white" category in the UCR includes non-black Hispanics, and the "black" category includes black Hispanics. Non-Hispanic whites ("Anglos") constituted 71.3 percent of the United States population according to the 2000 census (U.S. Bureau of the Census, 2000). We will be examining crimes such as serial murder, white-collar crime, and hate crime, the commission of which is often incorrectly considered the almost exclusive domain of whites, in the next chapter.

RACE, HOMICIDE, AND RAPE

The homicide and rape data reveal particularly interesting facts about racial differentials in criminal behavior. Data from the period encompassing 1976 through 1998 reveal that African Americans committed 51.5 percent of the recorded homicides in the United States (Fox & Levin, 20001:39). Fox and Levin (2001:39) list ten different types of contextual homicide (family, infanticide, sex-related, etc.) and find that blacks were overrepresented in every category, ranging from 66.7 percent of drug related homicides to 27.2 percent of workplace homicides. Between 1946 and 1990, inclusive, homicide rates among black males have ranged from 6.56 times the white male rate in 1984 to 15.78 times the white male rate in 1952 (LaFree, 1996). Perhaps even more interesting, *black female* homicide rates have been higher than *white male* homicide rates reported in the UCR ever since its first edition in 1930 (Barak, 1998:43). Many of these homicides take place in a domestic violence context, as indicated by the fact that the African American spousal homicide rate is nine times higher than the white rate (Clarke, 1998:289). FBI data for the year 2000 (UCR, 2001:18) show that 94 percent of black homicide victims were killed by other blacks, and 87.3 percent of white victims were killed by other whites. Homicide is thus overwhelmingly an intraracial crime.

LaFree's rape data for the 45-year period mentioned earlier revealed that African Americans were arrested for rape an average of 6.52 times more often than whites. More interesting than the black/white ratio of rape arrests is the fact that although the great majority of homicides are *intraracial*, because of the frequency with which blacks choose white victims (up to 55 percent according to some accounts), it has been suggested that rape could be considered an *interracial* crime (LaFree, 1982; O'Brien, 1987).

South and Felson's (1990) study of rape based on victimization surveys in 26 U.S. cities found that blacks chose white victims 41.3 percent of the time. The number of white offender/black victim rapes was too small (approximately 1%) to be included in the analysis, which is typically the case in other studies of interracial rape (e.g., LaFree, 1982; Walsh, 1987). South and Felson's (1990) study found that black/white rapes tend more than other racial offender/victim dyads to be committed by multiple young offenders who were strangers to their victims, and which tended to result in physical injury. They also found that African American rapists in cities with populations that are about 90 percent white are over eight

times more likely to choose a white rather than a black victim. In cities that are about 50 percent black, a white women is 2.4 times more likely to be raped by a black man than by a white man.

South and Felson (1990) dismiss explanations of this phenomenon that emphasize black rage, the thrill of violating a strong taboo, or calculated responses to economic and political oppression. Instead, they favor a "macrostructural opportunity model," which boils down to saying that the size of the "available pool" of either offenders or victims, and the opportunities for interpersonal contact between them, explain the observed data. That is, given equal availability and access to women of either race, blacks would show no preference for one over the other.

This is a difficult argument to defend given that the same demographics obtain for homicide, and no one that I am aware of has tried to explain interracial homicide rates by appealing to available pools of potential victims, which, of course, would coincide with the available pool of rape victims. Given the degree of residential segregation in the cities South and Felson studied, black rapists would have had far more interpersonal contact with black females than with white females, and black females would thus have constituted a more "available pool" for them. South and Felson's own datum that in cities with a roughly 50/50 split in racial composition (and thus also a 50/50 split in the "available pool" of rape victims) white women were still 2.4 times more likely to be raped by a black than by a white belie their position.

BLACK CRIME RATES OUTSIDE THE UNITED STATES

Explaining racial disparities in crime would be a lot easier if we were only looking at the United States, but the same racial patterns in criminal activity are observed in other nations also. Homicide data from the 1970's in Canada indicated that while blacks constituted a mere 0.2 percent of the Canadian population they constituted 2.4 percent of murder convictions (Nettler, 1984:136), thus blacks were over-represented by a factor of 12 in homicide convictions in Canada during that period. Canada no longer collects crime data broken down by race, which obviously makes racial comparisons very difficult. However, according to an Ontario government report (1996), black Canadians are committed to prison at a rate per 1000,000 more than five times greater than white Canadians and more than eight times the rate of Asian Canadians. The imprisonment rate for the three groups probably provides a rough proxy of their respective involvement in criminal behavior in Canada.

Although crime statistics broken down by race are reported in government documents in Great Britain, there still exists a kind of self-imposed taboo against making the numbers known to the general public. Paul Condon, the former Commissioner of the London Metropolitan Police, broke that taboo when he reported to the *Daily Telegraph* in 1995 that blacks committed 80 percent of the violent streets crimes in London (Darbyshire, 1995). This figure is particularly alarming in light of the fact that blacks constitute only 7.5 percent of London's population (British Home Office, 2000). Condon also related that previous commissioners had been afraid to release such figures for fear of being branded racist. An earlier high-ranking police officer, Superintendent Bill Ganley, was branded a racist and forced out of his job for revealing similar information in 1987. Ganley naively protested that

he was only being honest, but being honest on matters pertaining to race is exactly the thing that is suicidal for public figures in many western societies (Darbyshire, 1995).

Condon related that he released the findings of the study to try to get the black community involved in crime prevention, and opined that too much racial sensitivity leads to inertia and negligence. Rather than getting the black community involved in crime prevention, what Condon got was a steady stream of criticism from those who prefer to ignore the truth. He had broken the taboo against revealing information of a "sensitive racial nature," and it brought widespread condemnation from British academics and politicians alike, although no one disputed the factual status of his revelation (Darbyshire, 1995:4). Efforts at "damage control" by various academics ranged from outright falsehoods to the absurd. Criminologist Simon Holdaway, for instance, noting that Gordon's figures were based on victimization surveys, attacked "the dubious reliability of victims' perceptions of [the race of] their attackers" (1997:384). This is a strange statement, particularly given the fact that victimization data are generally considered more reliable than arrest statistics by most criminologists. Holdaway may be certain that race does not exist, and thus may be confused about what his eyes behold, but surely less politically correct victims know a black person from a white person when they see one (or are attacked by one). Had the figures been based on police arrests, Holdaway would doubtless have claimed police bias as an explanation for the skewed figures. Such an appeal, of course, implies that unlike crime victims, the police are fully capable of perceiving the race of those whom they are about to "oppress."

British crime data outside of London show similar racial disparities in criminal behavior. In the two-and-one-half year period encompassing 1997 to the first six months of 2000, there were 1,686 homicides in England and Wales in which the race (or "ethnic appearance," to use the British term) of the offender was known (British Home Office, 2000). Blacks, who constitute 1.8 of the total population of England and Wales, were identified as offenders in 9.7 percent of the homicides. British blacks therefore commit over five times more homicides than expected based on their proportion in the population. As is the case in the United States, British blacks were over-represented in every other criminal category listed in the British crime statistics. These crimes are: violence against the person (7.2%), sexual offenses (9.0%), robbery (28%), burglary (6.0%), theft and handling (6.4%), fraud and forgery (12.4%), criminal damage (4.8%), drugs (9.2%), and "other" (6.7%). Black over-representation in these crimes thus ranged from a low of about three times for criminal damage to about 14 times for robbery (British Home Office, 2000).

British prison data also reveal large racial differences. In 1997, there were 61,467 persons in the British prison system, 55,849 of who were British nationals (White & Woodbridge, 1998). Among the British nationals, 86 percent were white, 11 percent black, 2 percent south Asian (Indians and Pakistanis), and 1 percent "Chinese and other." In the same year, the British population was 95 percent white, 1.5 percent black, 3 percent South Asian, and 1 percent "Chinese and other ethnic groups" (White & Woodbridge, 1998:10). Chinese and other ethnic groups are thus imprisoned roughly proportionately to their percentage of the general British population. South Asians are imprisoned less often than their proportion in the general population, and blacks are imprisoned over seven times more often than expected given their proportion of the general population (this is true for both males and females) (White & Woodbridge, 1998:5).

International data from the International Criminal Police Organization (INTERPOL) reveal similar findings across many nations. Rushton (1990) carried out an analysis of the

INTERPOL data for the years 1984 and 1986, using only violent crimes (murder, rape, and serious assault) in order to reduce reporting and other biases as much as possible. Rushton divided the various countries according to the identification of the majority of their inhabitants as originating and/or living in Africa, Europe, or Asia. The 1984 data contained nine "Mongoloid," 40 "Caucasoid," and 22 "Negroid" countries; the corresponding numbers for 1986 were 12, 48, and 28. Rushton then summed violent crime rates per 100,000 for these grouped countries and found rates of 50.3, 72.5, and 139.3 for "Mongoloid," "Caucasoid," and "Negroid" countries, respectively. In 1986, he found rates of 42.7, 95.4, and 223.8, respectively. In a separate study based on 1989/1990 data, Rushton (1997) found the same Asian/white/black pattern, with rates of 32, 75, and 240, respectively, and based on 1993-1996 data, Rushton & Whitney (2002) found rates of 92, 80, and 267, respectively (note that Asian and European rates exchanged positions in the 2002 study).

There were exceptions within the broad racial categories Rushton examines, however, with the Philippines (Asia) reporting one of the highest violent crime rates in the world, and Togo (Africa) reporting the lowest crime rate in the world. We also have to consider the varying quality of the data from different countries, especially the data from developing and undeveloped countries. Although the data cannot be considered very reliable given the variety of cultural idiosyncrasies doubtless embedded in them, they are the only data available to us for making international comparisons. The racial patterning of criminal activity across nations, states, cities, and time periods appears to be invariable, for as Eysenck and Gudjonsson (1989:139) have pointed out: "No societies were found for which this pattern has not been reported." This apparent invariance is one of the most remarkable facts in criminology, and should incite far more interest than it does among criminologists of all political persuasions.

THE ISSUE OF BIAS IN OFFICIAL STATISTICS

The same pattern of racial crime disparities consistently emerges in academic research publications. Ellis and Walsh (2000) reviewed 174 studies from five different countries comparing black/white differences in criminal behavior based on official statistics. Only one, for property offenses in Canada, found black offending to be lower than white offending. The remaining 173 studies found blacks to be significantly more criminally involved than whites, particularly for violent offenses. Ellis and Walsh's examination of 83 self-report studies, however, revealed an almost equal number of significant and non-significant results, and even some for which the black rate was lower than the white rate. The data obtained from self-report studies suggest to some that studies based on official statistics could be the result of systemic bias in criminal justice system against blacks rather than real differences in criminal behavior between the races. There are at least six reasons for doubting such a conclusion.

First, self-report studies rely heavily on reports of trivial offenses (smoking, stealing something worth \$2, fighting, experimenting with alcohol and drugs, truancy, and so forth) which almost everyone has been guilty of at sometime or another. When serious criminal offenses are included in self-report studies, they are typically dropped from the analysis due to extremely low, and often totally absent, responses (Nettler, 1984). Such studies also often ask for offending history with the question "Have you *ever*..." thereby conflating the

distinction between one-time and frequent offenders. Additionally, there is "evidence that black males' self-reports of delinquency are less valid than the reports of other groups: Black males underreport involvement at every level of delinquency, especially at the high end of the continuum" (Cernkovich, Giordano, & Rudolph, 2000:143). Even if this were not true, self-report data are generally collected from high schools and colleges, which are not places where one expects to find many seriously involved criminal individuals. There may indeed be no significant differences between the races as far as the trivial offenses cataloged in self-report questionnaires are concerned, but it is really nothing less than a bait-and-switch tactic to use self-reports of minor peccadilloes to make a point about serious criminal behavior. Statistical tests require adequate variability in the variables under scrutiny, but the range of offenses and their seriousness and frequency, as well as the range of subjects, are seriously truncated in the typical self-report study.

Second, most crime is intraracial, and unless we believe that the high rate of victimization in the black community is the results of whites going into black neighborhoods to victimize blacks, we have to acknowledge the reality of racial differences in criminal behavior. For instance, domestic violence is a much more frequent and serious occurrence in the black community than in other racial/ethnic communities (Mann, 1990; Rasche, 1995). Partly as a response to this, and as indicated earlier, African American females have had a higher rate of homicide than white males since at least 1930 (Barak, 1998). Their victims, who are typically killed in acts of self-defense, are overwhelmingly boyfriends and spouses, a fact that makes it very hard to attribute the arrest of these women to racism and police bias (Mann, 1990). Indeed, *not* to arrest would be racist in that it would signify a devaluation of black victims.

Third, studies comparing official arrest data from the UCR with National Crime Victimization Survey (NCVS) data find that these victimization studies yield essentially the same racial differentials as do official statistics (LaFree, 1996; Wilbanks, 1987). For example, about 60 percent of robbery victims describe their assailants as black, and about 60 percent of the suspects arrested for robbery are black (O'Brien, 2001; Wilson & Herrnstein, 1985). The victimization data also consistently show that they fit the official arrest data much better than the self-report data do (Harris & Shaw, 2001). Unless the American victims represented in the NCVS data were as myopic in their perceptions of the race of their attackers as Holdaway (1997) claimed that British victims were, we have to conclude that the arrest statistics accurately reflect actual participation differentials across racial lines. As African American criminologist Becky Tatum (1996:33) has concluded: "The overrepresentation of African-Americans in crime and delinquency is reaffirmed by victimization and self-report data." The consensus among criminologists specializing in the area is that the black/white arrest ratio is primarily (perhaps entirely) due to actual black/white differences in crime participation (Blumstein & Cohen, 1987; Harris & Shaw, 2001; LaFree, 1996).

Fourth, police have no discretionary power to arrest or not to arrest for Part 1 Index offenses, nor for most Part II offenses. The offense for which police arguably have the most discretion, and therefore the greatest opportunity to exercise any biases they may have, is driving under the influence (a Part II Index crime). Yet, this is the only Index offense for which African Americans are consistently *under-represented* in the arrest data, which I interpret as less involvement in drunken driving among African Americans. Additionally, the vast proportion of police activity is reactive rather than proactive. That is, they respond to reports of crimes by citizens rather than initiate arrests proactively, which again restricts them from exercising any biases they may harbor.

D'Alessio and Stolzenberg (2003) brought National Incident-Based Reporting System (NIBRS) data, which combines the best features of the UCR and NCVS, to bear on the issue, using data from 17 states and 335,619 arrests for rape, robbery, and aggravated and simple assault. Blacks were indeed arrested in far greater numbers than their proportion in the population, but less often than their proportion of *offenses* they commit would lead us to expect. For those crimes in which the race of then perpetrator was known, 30.8% of the white robbers were arrested versus 21.4% of black robbers, and the same was found for aggravated assault (53.1% versus 42.5%) and simple assault (46.8% versus 36.8%), but no significant race difference was found for rape (27.2% versus 28.1%). D'Alessio and Stolzenberg conclude that the disproportionately high black arrest rate is attributable to their disproportionately higher involvement in crime. Pope and Snyder (2003), also using NIBRS data, analyzed 102,905 incidents of violent crime committed by juveniles and found essentially the same thing; i.e., white youths were more likely to be arrested than black youths despite the greater overall seriousness of the crimes committed by black youths.

Fifth, if the police and courts are biased against blacks, we should expect this bias to be most evident in cities with small black populations and few blacks in politically powerful positions. Conversely, it should be least in evidence in cities with large black populations in which blacks are in positions of authority (mayors, council persons, police chiefs, and largely black police forces). Comparisons between such cities would constitute a definitive test of the criminal justice bias hypothesis. There is no evidence, however, that black overrepresentation in arrests and convictions in black dominated cities such as Washington, DC, Detroit, Atlanta, or Baltimore is any less than in Milwaukee, San Diego, Phoenix, or Los Angeles. In fact the black arrest rates in these black dominated cities are greater than they are in white dominated cities (Thernstrom & Therstrom, 1997). This is powerful evidence against charges of criminal justice bias against blacks.

Finally, many African American notables are themselves fully aware of the reality of the extent of black criminal behavior. For instance, Jesse Jackson affirmed the reality of black crime when he stated that: "There is nothing more painful for me than to walk down the street and hear footsteps and start to think about robbery, and then see it's somebody white and feel relieved" (cited in D'Sousa, 1995:261). Under pressure from other "civil rights" figures, Jackson later "clarified" his statement, saying that he did not mean what he said, although we were never told what he did mean, or why he says things he does not mean. Dinesh D'Sousa provides many similar statements regarding the reality of black crime and the fear of such by other blacks, by prominent African Americans from Booker T. Washington to Johnnetta Cole. Such statements would of course be soundly condemned as racist if uttered by whites.

ARE RACIAL COMPARISONS BASED ON DISPROPORTIONALITY VALID?

Some black scholars, while not denying that blacks are overrepresented in criminal activity, deny the theoretical importance of disproportionality. Young and Sulton (1996:4) argue that "[t]he concept of 'disproportionality,' as employed by many white criminolo0gists, is based on the groundless assumption that the contribution of African-Americans to the total population should somehow influence their contribution in other areas." In other words,

rejecting the null hypothesis that the races commit crimes at a rate equal to their proportion of the population is invalid methodology. Whatever way you look at it, this is a very strange argument. I doubt that Young and Sulton would agree with someone making the same point in an argument attacking affirmative action, which is designed to address the underrepresentation of blacks in higher education and elsewhere.

Researchers in many fields use disproportionality as the first step in assessing all sorts of problems. For instance, African Americans suffer from prostate cancer at a rate about twice that of European Americans, and about four times that of Asian Americans (Lin, 2001; Lynn, 1990). This is a vital piece of information for medical researchers, telling them where to concentrate their research and preventative efforts, just as race-specific crime rates alert criminologists to where there research and preventative efforts should be concentrated. The prostate cancer rate among blacks "should" be proportionate to the percentage of black males in society. This is not a "groundless assumption," but a vital one. Since the observed number of blacks with prostate cancer is greater than expected based on their percentage in the population, the conclusion is that there must be something about the physiology of African American males that accounts for their overrepresentation among prostate cancer patients. Lynn (1990) believes it to be testosterone levels (high testosterone is a major cause of prostate cancer), which follow the same black>white>Asian pattern that prostate cancer does.

Young and Sulton (1996:5) also indicate that many black criminologists reject the notion that African Americans are overrepresented anyway, and that once the effects of "poverty, unemployment, illiteracy, and a host of other social ills" are controlled for, racial differences would disappear. "Controlling" for possible confounding variables cannot make the reality of differential crime rates "disappear." They are still there regardless of any statistical massaging of the data. Young and Sulton's position is akin to saying that differences in grade distributions among students would disappear if we controlled for such things as IQ, motivation, and time spent studying, or the difference between cooked and uncooked eggs would disappear if we controlled for heat. These variables certainly explain differential outcomes, but students still get the grades they earned, eggs still get cooked or remain raw, and blacks still commit more crimes than other racial groups. We are not searching for possible causes (which is implied by the phrase "controlling for") when discussing crime rates; that comes only after rates have been established.

Nevertheless, Young and Sulton's point (1996) can be addressed by looking for demographic correlates of crime rates to see if racial differentials do "disappear" when such correlates are held constant. Rural versus urban location is one of the most powerful demographic correlates of crime. Assessing "serious personal" crime rates among blacks and whites in urban and rural areas, Laub (1983) found higher rates of offending in urban than in rural areas among both blacks and whites, with urban/rural ratios of 2.06 and 1.81 for blacks and whites, respectively. The race effect was much larger, however, with the black rate in urban areas 4.23 times greater than the white rate, and 3.71 times greater in rural areas 3.71. Laub concludes that "race appears to be a key variable in accounting for variation in urban and rural crime rates as well as crime rates across various place size categories" (1983:193).

Other researchers have controlled for the various "confounding" variables that Young and Sulton believe will make the black/white difference disappear. Bryne's (1986) sample of 910 U.S. cities controlled for a host of characteristics, such as city density and housing type, income, and education found that the best predictor of robbery rates was percentage of black residents (standardized beta $[\beta] = 0.46$). Sampson's (1985) study of homicide rates in the 55

largest U. S. cities found that "percentage black" ($\beta = 0.55$) had more than twice the explanatory power of other variables in the regression such as population size, poverty, racial income inequality, and unemployment. Finally, Chilton's (1986) study of the 125 largest standardized metropolitan statistical areas (SMSAs) controlled for a wide variety of variables in a number of different regression models. In all cases, percentage of black residents emerged as the best predictor of murder ($\beta = 0.55$) and assault ($\beta = 0.22$) rates, although population size was a better predictor of rape (0.17) and robbery (0.62). Thus, even though crime rates are the first epidemiological step in the search for causes, and even though it is irrelevant to analyzing rates whether or not other variables may make them "disappear," no set of control variables has been shown to do so.

CRIME AMONG OTHER RACIAL/ETHNIC GROUPS IN THE UNITED STATES

Asian Americans

It is instructive to compare the crime rates of other large racial/ethnic groups in the United States to those of African Americans. Asian Americans (particularly East Asians such as the Japanese and Chinese) have long been considered America's "model minority." In the heyday of ecological theory, which favored "kinds of places" over "kinds of people" explanations for criminal behavior, research in city after city showed that Asian Americans living in high crime areas had lower crime rates than any other racial/ethnic group living in the same areas (Shaw & McKay, 1972). Wilson and Herrnstein (1985:473) point out that although a Chinese neighborhood in San Francisco in the 1960's had the highest rate of poverty and unemployment, the greatest percentage of substandard housing, as well as other disabilities, only five Chinese Americans were committed to prison in 1965 in the whole state of California. Asian Americans no longer suffer the numerous disabilities Wilson and Herrnstein catalog above, and even tend to report significantly greater family income than any other group except Jewish Americans, despite a history in this country of considerable discrimination (Jencks, 1992).

Americans of East Asian origin remain something of a model minority. They are almost as underrepresented in the crime statistics as African Americans are overrepresented. In 1999, Asians (including Pacific Islanders) constituted 4.1 percent of the American population (U.S. Bureau of the Census, 2000), but were arrested for only 1.3 percent of all violent crimes and 1.3 percent of all property crimes in 2001 (FBI, 2002). Asians were only over-represented for gambling offenses (an arrest rate of 5.3 percent rather than the expected rate of 4.6 based on this group's proportion of the population). Note that in the Canadian and British data discussed above that East Asians were criminally underrepresented in those countries also.

Although East Asian/white comparisons are less often made than black/white comparisons, Ellis and Walsh's (2000) review of 24 studies based on official statistics conducted in England and the United States, found that East Asians committed fewer crimes than whites in all cases. In 14 self-report studies, whites reported more offenses in 11 studies, with the remaining three being nonsignificant. These studies reported on East Asians only, and did not include Pacific Islanders in the same category, as the UCR does. The inclusion of

Pacific Islanders in the same category as Asians leads to an over-estimation of the involvement of East Asians in criminal activity since Pacific Islanders typically have crime rates higher than their proportion of the population would lead us to expect (Ellis & Walsh, 2000:119). The underrepresentation of Asian Americans in official crime statistics is likely to be an accurate indicator of their actual involvement in crime. It is doubtful whether those who want to ascribe higher arrest rates to anti-minority bias where African Americans and Hispanics are concerned would likewise ascribe low Asian arrest rates to pro-Asian bias.

Figure 2.1 illustrates the wide gap between the three major races on UCR Part I Index crimes for the year 2000. The data are rendered as rate ratios with the Asian rate for each crime set at one, and the white and black rates rendered as multiples of the Asian rate. For instance, in 2000 the Asian, white, and black murder rates were 1.7, 2.83, and 18.18 per 100,000, respectively. Thus, the white rate is 1.66 times the Asian rate, and the black rate is 10.7 times the Asian rate. The black murder rate in 2000 was 6.42 times the white rate, which is considerably less than the approximate 10 times the white rate recorded in previous years. The largest difference is found for robbery, with blacks having a rate 14 times higher than Asians and 7.8 times higher than whites.

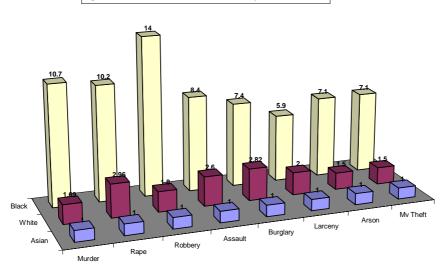


Figure 2.1 Part I Index Crime Rate Ratios by Race: 2000 Data*

*White and Black Rates are Multiples of Asian Rates: Asian Rates set at 1

Hispanic Americans

Hispanic Americans are now the most populous minority group in the United States. Unfortunately, the FBI ceased to report arrest data broken down by Hispanic/Non-Hispanic categories after the 1986 edition of the UCR, which makes it difficult to assess the present degree of Hispanic criminal involvement based on national statistics. Hispanic offenders are now classified in the UCR as either "Hispanic-black" (about 6%), and placed in the "black" category with African Americans, or "Hispanic-white" (about 91%), and placed in the "white" category, or "other" (3%). The present data thus refer to 1986, when Hispanics constituted only 6.9 percent of the American population. The percentages of Hispanics

arrested for all Part I Index crimes for that year were: murder (15.7%), rape (11.5%), robbery (13.9%), aggravated assault (15.3%), burglary (14.7%), larceny/theft (12.0%), motor vehicle theft (16.3%), and arson (7.8%). Thus, in the last year for which national statistics are available for comparing Hispanics and non-Hispanics, Hispanics were arrested about twice as often as their percentage in the population would lead us to predict on the assumption that ethnicity is irrelevant to predicting criminal behavior.

Ellis and Walsh's (2000) review of 31 studies based on official statistics comparing Hispanics with Anglos found Hispanic offending to be higher in 30 studies, with one study finding no significant difference. Self-report studies included 12 in which Hispanic rates were higher than Anglo rates, 11 that found no significant difference, and five that found Anglo rates to be higher.

American Indian/Alaskan Native

Ironically, Native Americans are one of the North American continent's smallest major minorities, constituting only 0.9 percent of the American population in 1999 (U.S. Bureau of the Census, 2000). Native Americans/Alaskan Natives were arrested for 1.1 percent of all Index Part I violent crimes and 1.1 percent of all property crimes. This group is thus slightly overrepresented in arrest rates. Native Americans/Alaskan Natives are particularly overrepresented in alcohol-related offenses and vagrancy (Part II offenses).

Studies comparing North American Indians and whites have been conducted in both Canada and the United States. Ellis and Walsh's (2000) examination of these studies found that Native American involvement in crime was higher than that for whites in 43 of 45 studies, with one being non-significant, and the other showing whites involvement greater for property crimes. In terms of self-report studies, 27 of 29 studies showed Native Americans more involved in drug and alcohol abuse offenses than whites, and in two studies of "overall offending," one found that Native American involvement was higher and the other was nonsignificant.

CONCLUSION

The purpose of this chapter was to document the large difference in criminal behavior between African Americans and members of other racial groups. We saw that racial differences are evident wherever we are able to obtain crime data broken down by race, with the pattern almost invariably being Asians committing the least amount of crime and Africans the most, with Europeans intermediate. Differences among the races are particularly large in terms of violent crime.

Arguments that these figures represent anything and everything except actual differential rate of participation among the races were addressed and dismissed as highly unlikely. The argument that current criminal justice system bias is responsible for the disproportionate number of African Americans arrested and imprisoned is a red herring. No one makes the same argument to account for the hugely disproportionate number of males of all races arrested relative to females is the result of anti-male bias, or that the hugely disproportionate

numbers of young males arrested relative to older males is the result of age bias. Males and the young are overrepresented among arrestees simply because they commit far more crimes than females and older males; African Americans arrestees are likewise overrepresented for the same reason.

ENDNOTES

¹ African American commentator Armstrong Williams had it right when he wrote: "In America in 2003 [and way before that], black people can talk openly about race. They can admit to identifying with black cultural icons. They can admit to having black pride. They can even drop the N-bomb." He went on to say that whites cannot, and that "The result is a racial double standard that threatens our ability to talk openly about the very serious topic of race relations" (2003:2).

There are many scholars in the social sciences who warn of the professional consequences of writing about "protected groups" in ways that may be evenly remotely construed as casting them in a negative light (e.g., Ellis, 2003; Felson, 2001). Such violation of politically correct standards can deny one jobs, promotion, tenure, cordial relations with one's colleagues, and publication.

RACE AND "EXTRA-ORDINARY" CRIME

This chapter examines race and "extra-ordinary" crime. *Extra-ordinary crime* is an umbrella term I have chosen to encompass all criminal activity that goes beyond the kind of common garden-variety crimes reported in the Uniform Crime Reports (UCR). I include multiple murder (mass, spree, and serial murder), hate crime, white collar crime, and organized crime in my discussion of extraordinary crime. Of course, a murder is a murder, theft is theft, assault is assault, and a fraud a fraud, and assuming the alleged perpetrator is arrested, will be recorded in the UCR as a murder, robbery, assault, fraud, and so on. What differentiates what I am calling extra-ordinary crime from analogous run-of-the-mill criminal acts are one or more of the following: (1) The form that they take (e.g., ongoing organized crime versus individual and ad hoc crime), (2) the motivation underlying them (e.g., instrumental versus expressive assault or homicide), and (3) the context in which the crimes take place (e.g., street versus suite crime).

MULTIPLE MURDER

The concept of multiple murder in criminology encompasses spree, mass, and serial murder. Spree murder is the killing of several people at different locations over a relatively brief period (days or weeks), and mass murder is the killing of several people at one location in an episode often lasting only minutes or hours. Spree and mass murderers show little concern about their own fate, either remaining at the scene until police kill them or they commit suicide in the case of mass murderers, or in the case of spree killers, apparently making little effort to avoid detection or hide their activities. Serial killers typically kill their victims one at a time with "cooling off" periods in between kills, with their activities typically spanning many years. Unlike spree and mass murderers, serial killers usually prefer "hands on" contact with their victims, use weapons other than guns, and take great pains to avoid apprehension.

Looking at all kinds of multiple murder that took place in the United States up until the early1980's, Levin and Fox (1985:51) found that African American perpetrators accounted for 20 percent of such crimes, which is less than half the black proportion of "ordinary" homicides. More recent data presented by the same authors for the years 1976 through 1998, found black representation among murderers with multiple victims (serial, mass, and spree

combined) to have increased to 38.2 percent of all such offenders (Fox & Levin, 2001:39), which is more than three times the rate expected on the basis of the black proportion of the U.S. population. Much of the increase in black multiple murder over the period reflects instrumental rather than expressive crime; that is, attributable to gang- and felony-related killings in pursuit of some tangible goal rather than to homicidal rages brought on by real or imagined wrongs (Petee, Padgett, & York, 1997).

Mass and Spree Murder

Two examples of African American multiple murders are Marx Essex (mass murderer) and Alton Coleman (spree murderer). Mark Essex, raised in a hard working two-parent family in Emporia, Kansas, by all accounts enjoyed a normal and happy childhood. It was not until he joined the navy and suffered racial insults that Essex gave any indication of violent proclivities. While in New Orleans, he joined a Black Muslim militant group and received training in urban guerrilla warfare. On January 7, 1973, Essex drove to the Howard Johnson Motor Lodge in New Orleans, shot several of the guests, started a number of fires, and shot at responding fire fighters and police officers. Essex's shooting spree lasted for twelve hours, during which time he accumulated a "cheering section" of young blacks chanting, "Kill the pigs, kill the pigs" (Leyton, 1986:247). Before being gunned down, Essex had killed nine people, five of them police officers, and wounded 19 others.

The Mark Essex incident is reminiscent of white mass murderer Charles Whitman's killings from the tower of the University of Texas at Austin on August 1, 1966. As with Essex, Whitman grew up devoted to his family and gave no indication that he may commit the horrible crime that he did. He was, also like Essex, an expert marksman. Whitman's spree began with the kniffing of his wife, after which he drove the university tower and began shooting. Before being shot by the police, 16 people were dead and 30 wounded (Beard, 2001). An autopsy revealed that Whitman had a brain tumor in an area connected with violent behavior.

Alton Coleman serves as an example of a black spree killer. Unlike Essex, Coleman was raised in poverty and began his criminal career very early in life, running with street gangs and committing a variety of crimes. After a series of arrests for mostly sex crimes (he was a "polymorphous pervert," being sexually attracted to men, women and children), Coleman began his spree of rapes, kidnappings, and murders. In the company of his female accomplice, Debra Brown, the spree began with the rape and murder of a nine-year-old girl late in May 1984. The Coleman/Brown crime spree in the Midwest ended with their capture on July 20th of the same year. During their seven-week spree the couple killed at least seven people and committed a number of other crimes including kidnapping, attempted murder and rape (Heise, 1990).

The white counterparts of the Coleman/Brown team were the Charles Starkweather and Caril Fugate team. Starkweather, like Coleman, was raised in impoverished conditions, and was an angry and alienated young man. The Starkweather/Fugate spree began with the murder or Caril's mother, stepfather, and young half sister on January 21, 1958 (Starkweather had committed his first murder in a robbery early in December of the previous year). Before they were captured just eight days later, Starkweather and Fugate had killed 11 people (Leyton, 1986).

The most recent black spree killer team is the apparently homosexual team of 44-year-old John Muhammad and his supposed "stepson," 17-year-old Lee Malvo, a sniper team that killed 13 random individuals and wounding six others in the Washington, DC area and are suspected of killings and other crimes in Alabama, Georgia, and Louisiana. Although the team killed both whites and blacks, Muhammad belonged to the black separatist group, the Nation of Islam, which may have provided ideological impetus to this vicious spree.

The white counterparts of Muhammad and Malvo were the serial killer (not spree killer) team of Dean Corll and his young "protégé" and often victim procurer Elmer Henly. This team sexually assaulted and killed 27 young males in the Houston, Texas area in the early 1970's. Corll was shot and killed by Henley in 1973 (Hickey, 1991).

Serial Murder

As is the case with mass and spree murder, it is so often repeated that the typical serial killer is a white male that the casual reader may be forgiven for believing that only white males commit serial murder, and that African Americans never do. "In reality," writes Philip Jenkins, the preeminent historian of serial killing in the United States, "African-Americans make up a significant number of recorded serial killers, far above what might be expected from public perceptions and recollections" (1998:20). While it is true that most serial killers are white males, white (Anglo) males are actually slightly underrepresented in the serial killer ranks in terms of their proportion of the general male population. Conversely, a disproportionate number of blacks appear among known serial killers operating in the United States in the Twentieth Century. A study of 337 serial killers operating since 1825 found that 22 percent were African American (Hickey, 1997:136), and Walsh (2005) found that black have been overrepresented among serial killer since 1945 by a factor of two. The black-white ratio seems to be widening even further. Hickey (2006:143) claims that blacks constituted 44 percent of known serial killers from 1995 to 2004. Whatever the true proportion may have been, it is greater than the proportion of African Americans in the general population, which ranged between 8 and 12.8 percent during the Twentieth Century.

Despite these figures, few African American serial killers are known to the public (or apparently to many criminologists given the infrequency with which they are mentioned in scholarly discussions of serial killers). Pre WWII black serial killers such as Jarvis Catoe, Jake Bird, and Clarence Hill were among those claiming the largest number of victims (Jenkins, 1998), especially Bird, whose 44 victims closely matches white killer Gary Ridgeway's (the Green River killer) record of 48 verified victims.

Coral Watts and Milton Johnson are two of the most notorious examples of black serial killers of post WWII years. Watts, known as the "Sunday Morning Slasher," confessed to 13 murders and was linked to at least eight others between 1978 and 1983, and Milton Johnson was responsible for at least 17 murders in the1980's. More contemporary black serial killers include Henry Louis Wallace, who raped and strangled at least nine women from 1993 until his capture in 1996 (Powell, 1996) and Kendall Francois, who was indicted in 1999 for the murders of 16 women, all but one of whom was white (Gado, 2001). The most recent black serial killer at the time of writing is Derrick Todd Lee, arrested in Atlanta in 2003 for the murder of five women in Louisiana and suspect in many other murders, rapes, and assaults going back to 1992. In light of our discussion about the debate over the existence of race in

Chapter 1, it is interesting to note that the police only focused on Lee after they received genetic evidence that the man they were looking for was of African heritage (bioforensics.com, 2003).

The sibling team of Anthony and Nathaniel Cook, who also only targeted whites, is another recent example. Both men pled guilty in 2000 in Lucas County, Ohio, of eight murders, and were suspected of committing others outside Lucas County's jurisdiction. Anthony Cook was already in prison for another murder committed in 1982 (*Toledo Blade*, 2000). Reginald and Jonathon Carr is another black sibling team who only sought white victims. They killed two women (a third woman survived a gunshot to her head) and three men in Wichita, Kansas in 2001, making victims perform sexual acts on each other before killing them. As black news columnist Armstrong Williams observed, these crimes received little national media attention, "largely because the victims were white," which meant "no Jesse Jackson screaming into his megaphone" (2002:1).

The number of victims attributed to Watts, Johnson, Wallace, Francois, and the Cook and Carr brothers fall short of the number attributed to white killers such as Ted Bundy or John Wayne Gacy, although they exceed the number attributed to many more publicized white killers such as David Berkowitz, Albert DeSalvo, and Ed Gein. A group of black serial killers called the *Death Angels* may have killed more people in the early- to mid-seventies than all the other serial killers operating during that period combined (Lubinskas, 2001). In Clark Howard's (1979:34) book-length study of these killing (dubbed the "zebra killings" by the police, apparently because the perpetrators were black and the victims white), he identifies 270 alleged victims, although a different source (Newton & Newton, 1991:594-597) indicated that the police believed them to have killed about 80. Whatever the true number is, convictions were obtained for only 23 of the murders. Death Angel killings often involved long torture sessions. Five Black Muslims, poisoned by the same racist propaganda that sent Marx Essex on his shooting spree, carried out the majority of the killings attributed to this group, believing it their Islamic duty to rid the world of "white devils."

The extensive media coverage of white serial killers such as Bundy, Gacy, DeSalvo, and Berkowitz have made these individuals almost household names (all have had movies made about them and their crimes), but Watts, Johnson, Wallace, the Death Angels, and many other black serial killers are practically unknown, despite having operated within the same general time frame. Wayne Williams (the Atlanta child murders) is the only African-American serial killer to gain a modicum of the notoriety attached to his white counterparts. Williams' notoriety may have a lot to do with the publicity the murders generated prior to his arrest. Most black leaders were initially convinced that the killer or killers of black children in Atlanta in 1980-1981 were white, because, as one of them put it, "Black people don't kill their children" (cited in Jenkins, 1994:163). When it began to look like the killer was black, Jesse Jackson, calling on his own peculiar brand of race-baiting logic, still declared that: "the killings were racially motivated, no matter what race the killer might turn out to be" (cited in Jenkins, 1994:163).

In stark contrast to African Americans, Asian Americans are greatly underrepresented among the ranks of serial killers. The only *known* Asian American serial killer operating in the United States this century is Charles Ng (Jenkins, 1995, personal communication). Ng and his Caucasian partner, Leonard Lake, tortured and killed at least nineteen people in the early 1980s. If there have been other Asian-American serial killers, and if like African-Americans they largely killed within their own communities, they may also have been shielded from

exposure by lower levels of public and police concern for non-white victims characteristic of earlier times.

These short accounts of black multiple murderers and their roughly similar white counterparts highlight the poverty of information attending the black killers and the richness of information attending the white killers. Anyone with even minimal interest in the history of American crime is doubtless aware of Whitman, the Starkweather/Fugate team, and most of the white serial killers mentioned here. There have been numerous books, articles, television shows, and movies featuring these white killers, but one has difficultly finding the names of any of the African American killers mentioned here even in the indexes of scholarly works devoted to multiple murder. The only African American mass/spree murderer any of my colleagues in the criminal justice department in which I teach could name prior to the 2002 sniper attacks of John Muhammad and Lee Malvo was Colin Ferguson, the 1993 Long Island train killer, and the only serial killer named was Wayne Williams. The dearth of information about African American multiple murderers is the reason that so many people consider such activities to be almost the exclusive domain of white men.

HATE CRIMES

A crime is classified as a hate crime when the primary motive is determined to be hatred of the victim based on his or her race, religion, national origin, gender, disability, or sexual orientation. Since bias against the victim's status is the motivation behind a hate crime, the victim is usually chosen at random as a representative of the group to which he or she belongs. It is this randomness, and the greater brutality often attending a hate crime, that garners it the additional opprobrium with which we view it, as well as the greater legal penalties attached to it relative to those attached to analogous non-hate crimes. Although hate crimes include crimes motivated by hatred for others on the basis statuses other than race, this section deals only with those crimes that are apparently motivated by racial hatred.

Without doubt, the most egregious hate crimes in American history have been perpetrated against African Americans by whites in the era of the lynch mob. Beck and Tolnay (1995) estimate that at least 3,000 blacks were murdered by white lynch mobs between 1882 and 1930. The story today is different, however. Media accounts of modern hate crimes lead the consumer of news to believe that hate crimes are "white only" affairs. Although whites still commit the majority of hate crimes, African Americans are disproportionately represented among the perpetrators of such crimes.

The 1995 UCR reported that there were 7,244 hate crimes committed by either blacks or whites in 1994 (not necessarily against each other), with whites committing 4,991 (69%), and blacks committing 2,253 (31%). Under the assumption that the probability of committing a hate crime and race are independent of one another, blacks should have committed 12 percent (the black proportion of the population in 1994) of the hate crimes, or 869 (7,244 x .12 = 869) rather than the 2,253 we observed. Whites (Hispanic-whites, and Anglos) constituted 83.9 percent of the U.S. population during the same year, and thus would have been expected them to commit 7,244 x .893 = 6078 of the hate crimes reported that year. Blacks thus committed 259 percent more hate crimes than expected, and whites committed 82 percent of the number expected based on the white percentage of the population. The ratio of these two figures

(2.59/0.82 = 3.15) indicates that in 1995 an African American chosen at random would have been approximately three times more likely to have committed a hate crime than a white chosen at random.¹

Similar calculations based on 1991 data found that blacks were 2.95 times more likely to have committed a hate crime than whites that year (Kitano & Daniels, 1995). The UCR's (2001) 2000 data revealed a smaller ratio between the races, however. Of the 6,346 recorded racially motivated hate crimes committed by either blacks or whites in 2000, whites committed 77.3 percent and blacks committed 22.7percent. Calculating as above, blacks committed 177 percent more hate crimes than predicted by the 2000 black population percentage (12.8%), and whites committed 92 percent of the hate crimes expected based on their percentage of the population (82.2%). The ratio of the two rates is 1.92, meaning that in the year 2000, blacks were not quite twice as likely as whites to have committed a crime reported as a racially motivated hate crime.

Because the UCR includes Hispanic whites in the same category as Anglos, we are presented with some curious hate crime statistics. Hispanics are listed in the UCR as *Hispanics* when they are victims of hate crimes, but as *whites* as perpetrators. Thus, if a Hispanic assaults an Anglo (or vice versa) for reasons deemed to fit the hate crime criteria, both the victim and perpetrator are recorded as white, and if a Hispanic assaults a black, the hate crime will go into the record as a white-on-black crime. This curiosity inflates the number of hate crimes attributable to "whites." Such reporting anomalies seriously undermine efforts attempting to get a clearer picture of the nature of hate crimes as they relate to racial differentials, and particularly deceptive in light of the findings of a three-year study of hate crimes in Los Angeles County, in which Hispanics were coded separately from Anglos. This study found that 47 percent of race bias crimes were inter-minority (Hispanic-on-black or black-on-Hispanic) incidents (Umemoto & Mikami, 2000). An unknown number of white-offender/black-victim hate crimes are actually Hispanic-offender/black-victim crimes, but black-offender/white(Anglo)-victim crimes are accurately described.

When assessing racial differences in hate crimes, the apparent reluctance of police and prosecutors to record black-on-white crimes as hate crimes versus recording a white-on-black crime as a hate crime should be considered. As Perazzo (2001) points out, the Bureau of Justice Statistics estimates that there were approximately 657,008 black-on-white violent crimes and approximately 91,051 white-on-black violent crimes in 1999. Despite the fact that blacks offended against whites 7.2 more often than the reverse in absolute terms or about 42 times more often in proportional terms, white-on-black violence was about 28 times more likely to be labeled a hate crime (about 1 in 45 incidents) than black-on-white violence (about 1 in 1,254 incidents). Similar statistics based on National Crime Victim Surveys found that white were victims of 56 percent of the violent crimes committed by blacks while only 2.6 percent of the violent crimes committed by whites were against blacks (Williams, 1999).

Homicide based on hatred of a person's group identity is the most insidious form of hate crime. Happily, there are very few such crimes. These crimes are monitored closely by the Southern Poverty Law Center, an ultra liberal group devoted to tolerance, justice and equality. In 1992, the Center reported 17 black on white racially inspired murders and 13 white on black. Taking hate-motivated murders against all racial groups (not just black/white or white/black) into consideration, the center reported that almost 50 percent were committed by African Americans (D'Sousa, 1995:404). Despite figures such as these, few individuals have

any inkling of any other than white hate crimes. Hate crimes committed by non-whites are rarely given the attention that white-perpetrated hate crime is.

The media's handling of two particularly heinous interracial murders in which racial hatred was the apparent motive illustrates this reluctance to dwell on African American hate crimes perpetrated against whites. In 1998, the dragging death of James Byrd by two white racists in Jasper, Texas, received massive nationwide coverage in the print and electronic media. Accounts of this monstrous event were replete with passages describing the perpetrators in strongly negative terms. Just two months after the Byrd murder, an almost identical crime occurred in Streator, Illinois. Christopher Coleman, an African American, abducted a 46-year-old white nurse named Patricia Stansfield, tied her to the bumper of his stolen car and dragged her to death on the highway. Anyone who is anyone in American politics (even President Clinton) commented on the murder of James Byrd; I have yet to hear of any politician comment on the murder of Patricia Stansfield, or see any mention of her horrible death in the national media, despite the similarity of the method employed and despite the temporal proximity of the two crimes.

The murders of Yusef Hawkins and Mark Belmore provide further evidence. Hawkins, an African American, was beaten and shot by a gang of white youths, and Belmore, a white man, was beaten and stabbed to death by a gang of black youths. Both murders were apparently motivated by racial hatred. Hawkins' death resulted in riots in the streets, brought condemnation from black and white leaders alike, and received a tremendous amount of media coverage; Belmore's murder was largely ignored by the national media and totally ignored by both black and white luminaries..

Consider also the cases of Tawana Brawley and Melissa McLoughlin. Brawley, a young black woman, initially claimed that she had been kidnapped, beaten, and raped by four white males. The national media swarmed around the case, as did the usual coterie of race baiters, led by Jesse Jackson and Al Sharpton. The Brawley case turned out to be an admitted hoax, but the anti-white furor it evoked played out for years after it was exposed. McLoughlin a white women, was abducted by a group of seven black males, raped, tortured by being immersed in a bathtub of bleach, shot five times, and left to die on a lonely road. Although her killers admitted that their motives were racial, the national press all-but ignored the case (Perazzo, 1999). A false report of the rape of a black woman by white males apparently warrants hugely more coverage in the media than the actual rape, torture, and murder of a white woman by black males.

There are numerous other examples of the racial double standard to be found if one takes the time to look, making it difficult to disagree with criminologist Cecil Greek's (2001:6) assessment that: "hate crimes which involve white perpetrators and black victims are more likely to receive significant media coverage than the latter." Similarly, John Perazzo states that: "When it is black victimizing white, skin color is regarded as no more significant than eye color. When it is white victimizing black, skin color is the story" (1999:68, emphasis original).

WHITE-COLLAR CRIME

In its *Administration Improvement Act* of 1979, the U. S. Congress defined white-collar crime as "an illegal act or series of illegal acts committed by non-physical means and by concealment or guile, to obtain money or property, or to obtain business or personal advantage" (Weisburd, et al., 1991). This definition focuses on the characteristics of the offense rather than of the offender. Sociology has traditionally focused on the social characteristics of the offender (typically viewed as a high status person) when discussing white-collar crime rather than the offense, and has tended to view white-collar crime solely in terms of corporate crime.

For instance, Harris and Shaw (2001:155) prefer to reserve the term *white-collar* for "the offenses of middle-and upper-middle-level managers and executives who work in offices and suites." They go on to say that the UCR white-collar crimes--embezzlement, fraud, and forgery--are "not occupationally related," and not "committed by individuals working as legitimate employees in legitimate firms." However, UCR's white-collar crimes *are* often occupationally related (embezzlement is, almost by definition), but Harris and Shaw only have that sub-category of the genre called *corporate crime* in mind when they talk about white-collar crime. Why we should confine ourselves only to corporate crime, and what we should call the other forms of crime outlined in the *Administration Improvement Act* if not white-collar, is not addressed.

The crimes of corporate CEO's, highly damaging though they are, hardly exhausts the characteristic profiles of all persons who engage in the activities outlined in the *Administration Improvement Act*. White-collar crimes include (1) crimes committed on behalf of the corporation for corporate gain (e.g., the Ford Pinto case, anti-trust violations, and the Enron scam), (2) crimes committed against the corporation for personal gain (e.g., embezzlement and employee theft), and (3) crimes committed for personal gain by victimizing individuals or businesses the perpetrator does not work for (e.g., various telemarketing scams and insurance fraud).

The use of the term white-collar to exclude all but acts of high status individuals acting on behalf of his or her corporation is doubtless the reason why white-collar crime is another area in which whites are considered the almost exclusively culpable. Crimes such as the S & L scandal in the 1980's and the Ford Pinto case in the 1970's were all-white upper-class affairs, and more devastating in their consequences than any amount of street crime. The S & L scandal cost the U.S. taxpayer more that \$470 *billion*, which is more than all the conventional bank robberies in U. S. history (Calavita & Pontell, 1994), and the Ford Pinto case cost the lives of over 700 people (Mokiber, 1988), more than all the victims of serial murderers combined in the 1970's. We cannot lose sight of the fact, however, that non-corporate forms of white-collar crime are also very costly to society, costing many lives and many billions of dollars (McCaghy & Capron, 1994).

In terms of absolute numbers, whites commit most white-collar crimes of all sorts, but African Americans are arrested at rates approximately three times greater than whites for Part I Index white-collar crimes listed in the UCR (embezzlement, forgery, and fraud). A study of 22,580 persons convicted of federal white-collar crimes found the percentage of "non-whites" convicted of lending and credit fraud (19%), wire fraud (31%), "other" fraud (38%), embezzlement (32%), forgery (48%), and counterfeiting (24%) exceeding the percentage of

non-whites in the population (Barak, 1998:59). Non-whites were underrepresented in tax fraud (7%), and regulatory offenses (10%). Unfortunately, this study lumped non-whites into a single category, although Hispanics were listed as a separate category. We therefore cannot accurately judge what percentage of these offenders was African American. However, because Asian Americans/Pacific Islanders and Native Americans are underrepresented in the three UCR white-collar crimes, it is reasonable to suppose that these groups are also underrepresented among federal white-collar criminals. Similarly, because African Americans are overrepresented in the UCR, it also seems reasonable to assume that the large majority of non-white offenders were black.

If we look at white-collar crimes that require high status occupations for their commission, we do find a different racial story. An analysis of 1,094 white-collar criminals processed through the federal courts in the 1980s found that the demographic characteristics of the typical high-status white-collar offender differed radically from those of street criminals. Anti-trust offenders were 99.1 percent white, and securities fraud offenders were 99.6 percent white. Nonwhites were overrepresented in other federal crime categories (tax, credit, mail fraud, bribery, and false claims), however (Weisburd, et al., 1991).

To properly evaluate racial differences in this type of crime we need data about rates, not just absolute numbers. It is often overlooked that anyone is eligible to commit a street crime or lower-level white-collar crime, but only a very few are eligible to commit upper-level corporate crime. Only physicians and hospital administrators can commit medical fraud, securities fraud can only be perpetrated by stockbrokers, and only owners of factories and mills can commit massive environmental pollution. White-collar crime, whether high- or low-status, probably differs from common street crime only in that it is committed by people in a position to do so. Using this line of reasoning, Hirschi and Gottfredson (1987:967) conclude that: "When opportunity is taken into account, demographic differences in white collar crime are the same as demographic differences in ordinary crime."

ORGANIZED CRIME

Organized crime has been succinctly defined as "a continuing criminal enterprise that works rationally to profit from illicit activities that are often in great public demand. Its continuing existence is maintained through the use of force, threats, and/or corruption of public officials" (Albanese & Pursley, 1993:58). Documenting the extent of African American involvement in this type of activity is more difficult than documenting African American involvement in multiple murder, white-collar crimes, and hate crimes, both because of the secretive nature of organized crime and because of the relative dearth of information about black organized crime. The 1986 President's Commission on Organized Crime, for instance, paid scant attention to black organized crime, although it was otherwise comprehensive in listing the range of organized crime groups in the United States (Schatzburg & Kelly, 1996). Perhaps part of why black organized crime is poorly documented is the relative lack of police interest regarding the behavior of blacks within their own communities until relatively recently. There is also evidence that law enforcement officials and the research community have tended to believe blacks to be incapable of creating La Cosa Nostra-style criminal enterprises (Martens, 1990). The New Jersey State

Commission of Investigation into black organized crime stated this quite explicitly: "Law enforcement has long been reluctant to accept the existence of Afro-lineal organized crime, based primarily on the opinion that such ethnic groups were incapable of structuring syndicates of any consequence" (Clark et al., n.d.:1).

Contrary to this somewhat denigrating belief, powerful black organized crime groups have had a presence in the United States since at least the 1920's (Martens, 1990; Adamson, 2000). These groups have not been: "...as large or as powerful as Cosa Nostra families, and often forced to submit to them, it takes numerous forms in response to community conditions and demands, from policy rackets and gambling enterprises to drug trafficking in modern inner-city communities" (Schatzberg & Kelly, 1996:21). According to Schatzberg and Kelly (1996), black organized crime began with the policy syndicates in Harlem in the 1920's. These black organizations in New York, Chicago, and other cities were either muscled out of business or "acquired" by white gangsters in the 1930's. African Americans organized crime gained its independence from its white masters during the Viet Nam war when it was able to establish connections with Asian drug dealers. Much of the heroin on the streets of American cities during this period had been smuggled from Viet Nam in the bodies of dead servicemen (Clark, et al., n.d.). The Viet Nam war was to African American organized crime what Prohibition was to white organized crime. It gave birth to such notorious gangs as the Crips and Bloods, as well as the kinds of inter-and intra-gang warfare that characterized Prohibition-era white gangs (Adamson, 2000).

It is not only law enforcement officials who have doubted the ability of African Americans to form stable organized crime groups. There has also been much disagreement among criminologists about whether African American criminal gangs have or can reach the level of sophistication that until recently characterized the Italian-dominated La Cosa Nostra. Chicago's El Rukns (formerly the Black P Stone Nation), under the initial leadership of Jeff Fort, was certainly sophisticated enough to have active political ties to Libya's Moammar Gadhafi while at the same time garnering millions of dollars in "neighborhood opportunity" grants from the Office of Economic Opportunity (Schatzberg & Kelly, 1996:201). The Gangster Disciples, the original nemesis of the El Rukns, perhaps comes closest to matching La Cosa Nostra in scope and sophistication. The Chicago Gangster Disciples is a formal, hierarchical, and authoritarian organization with a constitution, and it has "alliances" with other black groups such as the Crips (Knox & Fuller, 1995).

Despite this level of organization, Adamson (2000:289) disputes their status as a "black mafia," stating that: "it would stretch the meaning of the term to suggest that black street gangs in Chicago or other American cities have become a mafia. At best, they are a protomafia." Adamson goes on to opine that black gangs "lack the organizational structure, leadership and discipline needed to operate highly sophisticated illegal drug manufacturing and selling business" (2000:290). Yet, many blacks are engaged in drug manufacturing and distribution, regardless of how sophisticated their operations may or may not be. The New Jersey commission on Afro-lineal organized crime names many such organizations in that state alone, and intimates that it is precisely the lack of sophistication that makes such groups more violent and dangerous than traditional white organized crime groups (Clark, et al., nd.).

Other theorists point out that the strong intra-and inter-family ties and sense of belonging that glued Italian organized crime together are missing among African American gangs. The obvious question is why a crime group cannot be called "organized" because it does not fit the Mafia prototype. Ianni (1998:125) avers that: "Instead of family or kinship...the blacks may

be able to use black militancy as their organizing principle." Ianni (1998) further points out that blacks are recruited into organized crime networks from youth gangs and prisons. These experiences lay down strong foundations for disrespect of the law and a sense of "specialness" and belonging, which organized crime groups depend on to maintain discipline and loyalty. Schattzberg and Kelly (1996:252) add the strong oppositional black culture as a huge reservoir of potential recruits for any criminal organization with the ability to take advantage of it.

In short, black organized crime exists, and has done so for a long time. Despite this presence, we have seen that the President's Commission on Organized Crime ignored it, the police in the past have tended to believe that it is not likely, and that the academic community has seriously neglected the topic. Schatzberg and Kelly (1996:21) opine that the primary reason for the academic community's neglect is that anyone interested in the topic has to "consider the question of race and [accusations of] racism." Likewise, Martens (1990:43) opines that "[It] is one topic that dare not be discussed, for fear of racism being attributed to the discussants." To the extent that this is true, it is a sad commentary on the intellectual courage of those otherwise inclined to study such topics, and on the lack of respect for free inquiry and intellectual integrity among those who would try to intimidate them.

WHY SO LITTLE COVERAGE OF EXTRA-ORDINARY AFRICAN AMERICAN CRIME?

In many ways, we have already answered this question as it relates to academics. Fear of being smeared by allegations of racism for pointing out black overrepresentation in crimes viewed as almost exclusively the domain of whites must be considered the foremost reason, as has been pointed out by others cited in this chapter. But why is the print and electronic news media so reluctant to deal forthrightly with the full extent of African American crime? The news media certainly plays a very large part in the public's ignorance of black involvement in extraordinary crime. The media are gatekeepers of what we are entitled to know about, and they have tended to avoid more than minimal coverage of heinous crimes committed by blacks at the same time as they extensively publicize the same kinds of crimes if committed by whites.

The differential coverage of the trial of the white police officers who beat Rodney King in Los Angeles and the trial of members of the Yahweh cult in Miami starkly confirm this. Almost everyone is aware of the first trial because we were bombarded daily with images of the King beating, the riots, and the trial itself, but how many of us have heard of the second trail, which took place *concurrently* with the police officers' trial? The Miami Yahweh cult, led by Hulon Mitchell, was similar to the San Francisco Death Angels in that it members were instructed to kill "white devils" and to bring back various body parts as proof (Taylor, 1992). Which crime is more heinous, the beating of a person who happened to be black and who would not comply with police officer commands after a long vehicle pursuit, or the killing and mutilation of random strangers who did nothing but have the misfortune to be born white? The media evidently thought the former was, for coverage of the Yahweh cult trial was minimal outside Miami. If a group of whites were on trial for hunting down and

killing "black devils," the media would have kicked up such a din that we would still hear the echoes today.²

Writing about serial killers, Philip Jenkins (1994) suggests three reasons why black serial killers do not attain the notoriety of their white counterparts. First is the media's perception that books and movies featuring black characters are not likely to appeal to mass audiences. Second, the language often used to describe serial killers (e.g., "primitive," "monsters," "animals") would be deemed racist if applied to blacks by a mostly white media, but acceptable if applied to whites. When an official of Nassau County, New York, for instance, called Colin Ferguson (the black man who killed six and wounded 17 others on a commuter train in 1993) an "animal," he was soundly rebuked by many "civil rights" leaders, none of whom have ever been heard to complain when such terms are applied to white killers. Third, until recently, law enforcement agencies were less likely to take black crimes seriously unless the victims were white. Given this relative lack of interest, Jenkins is of the opinion that black serial killers may have been more "hidden" from the mainstream culture, and thus more prevalent, than the record indicates, especially during earlier periods of the 20th century. The notorious white serial killer Albert Fish, for example, preyed exclusively on black children during the early part of the 20th century and was not caught until he crossed the race line and killed a white child. Black serial killers operating exclusively in the black community may have likewise escaped notice by the police, and thus are not known to us today.

It would be difficult to imagine a more perfect example to illustrate the media's reluctance to highlight heinous crimes committed by blacks than that of two very similar serial murder cases that occurred in Philadelphia in 1987 (Jenkins, 1994). One involved white killer Gary Heidnik, and the other a black killer named Harrison Graham. Both men kidnapped and kept a number of women imprisoned in their basements where they, raped, tortured, and sometimes killed them. Heidnik and Graham lived only three miles apart and both were arrested only five months apart. Gary Heidnik received widespread national attention, became the subject of books and television shows, and served as a model for the fictitious Buffalo Bill in *Silence of the Lambs*. Harrison Graham received virtually no media attention outside of Philadelphia, despite having been convicted of four more murders than Heidnik (seven versus three), and despite the obvious public interest such attention would generate given the almost uncanny coincidences involved.

The Heidnik case was sufficiently interesting to have Heidnik compared to another serial killer; not to Graham, but to Jeffrey Dahmer, in a History Channel episode of *Crimes and Trials* called *Heidnik and Dahmer*. Given that Dahmer's crimes occurred in another city in another decade, that his *modus operandi* was very different from Heidnik's, and that his victims were male rather than female, it is difficult to see why Dahmer was chosen over Graham to "co-star" with Heidnik except that he too was white. A more appropriate counterpart to Jeffrey Dahmer would have been African American Marc Sappington ("The Kansas City Vampire"). Sappington's killing career lasted only about a month (March/April, 2001), and thus might be considered more a spree killer rather than a serial killer. Before his capture, the 21-year-old Sappington killed four young males and partially ate or drank the blood of three of them (McGraw, 2002).

CONCLUSION

African Americans commit the kinds of crimes featured in this chapter in numbers greater than their percentage in the population predicts. Nevertheless, very few individuals, even professional criminologists, are fully aware of the fact. If they are aware of it, many apparently observe a self-imposed censorship while others may actively discourage colleagues from researching this area. Why this is so is an interesting socio-political issue.

It may be conjectured that given the hugely discrepant media coverage of cases involving black versus white victims, we may assume that the media gatekeepers share the same concerns that academics do. They are keenly aware that the racist label can stick to them too, and unlike tenured professors, individuals can be fired and owners have their newspapers or television stations boycotted if they do or say anything construed as racist by the Jesse Jacksons and Al Sharptons of the world (remember Jimmy the Greek and Rush Limbaugh?). Even the most conservative media types will be exquisitely sensitive to potential charges of racism under such threats, and will maintain their "conspiracy of silence" about such matters. Although both academics and journalists supposedly share the same principles of respect for and pursuit of truth, it is apparently honored more in the breach than in the practice when it come to matters involving race.

Commenting on a press conference on interracial crime to which approximately 400 members of the print and electronic media were invited, African American economics professor Walter Williams notes that only two—the *Washington Times* and C-Span—reported on it. One reporter indicated that he would have liked to write the story but doubted that his paper would run it. Williams added that: "If the facts were the other way around, everybody from the *New York Times* and President Clinton to the NAACP, Jesse Jackson and the Congressional Black Caucus would be shouting about it and demanding that something be done" (1999:1). This is a sad reflection on the much-lauded "objectivity" of the American media (see endnotes below).

Apart from the fears shared by academics and journalists relating to their careers, we cannot ignore the fact that the majority of people who enter journalism are liberal, and thus share liberal perceptions and concerns for social justice and minority rights. Among the Washington elite press corps, 89 percent voted for Bill Clinton (as did I) in the 1992 presidential election as opposed to only 7 percent for George Bush. These are "landslide numbers" wrote Bernard Goldberg (2002:123), who added that: "The only politicians who get numbers like that are called Fidel Castro or Saddam Hussein." A 1979 poll of news reporters showed that 70 percent voted for ultra liberal George McGovern in the 1972 presidential elections (Goldberg, 2002). Goldberg (2002) and Murray, Schwartz, and Lichter (2001) offer many other examples taken from polls of media workers, as well as statements from top media executives, that leave little doubt that the media is a liberal institution, at least where matters of race are concerned. Liberals in the media may thus also share liberal academia's concern that they not further stigmatize an already stigmatized group by covering the "extraordinary" crimes of blacks with the same zealous "nose for a story" they exhibit when the same crimes are committed by whites.

ENDNOTES

A three-hour PBS television special on hate crime in 2000 totally ignored black-perpetrated hate crime. Interviews with audience members were aired between segments illustrating hate crimes. When a man in the audience stood and complained that all examples presented were of white perpetrators and commented that blacks were actually three times more likely than whites to commit such a crime, the interviewer simply walked away from him without addressing the point at all. This was the only audience member to be rudely treated, but then, he was the only audience member to make a politically incorrect point.

On the topic of criminal trials, the Death Angels trial of 1975 was the longest in California history at one year and six days (Howard, 1979:395). Despite the obvious interest attending such an organization as the Death Angels, the lack of media coverage outside of San Francisco is instructive. For a number of years, the European American Issues Forum holds its Zebra Victims Memorial Service on the steps of San Francisco's City Hall and invites the mayor, the NAACP, and local political dignitaries to attend. None have ever done so, nor has the press deemed it newsworthy (Lubinskas, 2001:4). If there were an African American Issues Forum that held a memorial service each year for a similar number of black victims killed by a white group analogous to the Death Angels, who doubts that politicians would be falling all over each other to attend?

RACISM: A DISTANT BUT POWERFUL CAUSE OF CRIME

Examining the issue of differential racial involvement in criminal behavior would be a much less controversial enterprise if science did not demand that we attempt to find causes. It is the explanation rather than the description of group differences that lead to the often nasty debates that criminologists get into. Nevertheless, we have a smorgasbord of reasons for why race differentiated crime rates exist. Some theories focus on cultural and structural factors, others on subcultural and situational factors, and still others on individual factors. No theory can claim a definitive explanation, all have at least something to offer, and all of them combined do not exhaust all possible explanations.

Surveys of American criminologists find that their favored explanations of criminal behavior tend to depend more heavily on ideology than on the reasoned evaluation of all pertinent evidence (Walsh & Ellis, 1999). We criminologists are like the blind men in the ancient Indian parable feeling the elephant, staunchly committed to the part we have felt. Like those blind men, we get into rancorous debates because we refuse to feel the parts of the elephant that others have felt. Only when we feel all parts of the criminological elephant, even on the parts we may deem repugnant, can a coherent image of the beast emerge. We cannot understand criminal behavior by focusing on a single cause or level of analysis, and we should never accept or reject explanations simply because they do or do not correspond with our ideological images of the world.

I intend to examine the most common explanations for racial variation in criminal behavior favored by criminologists, giving roughly equal attention to sociology's "external" factors and biology's "internal" factors. I begin in this chapter with racism; subsequent chapters will look at poverty, child abuse and neglect, out-of-wedlock births, and the ecology of the inner city examined from a biosocial perspective. I address racism first because of my belief that the cultural roots of the horrific rates of antisocial behavior in the inner cities lie in slavery, the racism slavery generated, and the oppositional subculture that arose in the African American community in response to it.

RACISM: OLD AND NEW

Racism has long been one of criminology's most popular explanations for high crime rate among African Americans. Indeed, it has been considered the prime mover behind so many of the problems in the black community from self-esteem issues to spousal homicide. I will argue that racism does have a powerful effect on criminal behavior in the black community, but that its effects are indirect and distal, not direct and proximate as many others have argued.

Racism is a more insidious form of bigotry than other forms such as xenophobia and ethnocentrism. Xenophobia and ethnocentrism expound a philosophy of in-group superiority and fear and dislike of out-groups, but may be alleviated by contact and assimilation, just as religious bigotry is assuaged by the conversion. Racism is not alleviated by contact and assimilation because its victims are not despised and persecuted because their persecutors have had little contact with them, but usually because they have had substantial contact with them. American *Jim Crow* racism was a virulent social ideology that claimed an essentialist inferiority of the black race at the same time as it claimed superiority of the white race. The "superior" race does not allow assimilation, and conversion is not an option because victims of racism are persecuted for what they are, not because of what they believe. Racism is a practice used to justify discrimination and oppression, as well as an ideology of inferiority/superiority. Jim Crow racism was thus a combination of *overt* bigotry, a belief in the innate inferiority of blacks, and support for legal and normative segregation of the races (Bobo & Kluegel, 1997).

A number of dehumanizing stereotypes supply the scaffolding for any racist ideology directed against any group, but such stereotypes about African Americans have been particularly nasty and numerous. Shelby Steele notes that not only have there been more stereotype of blacks than of other racial groups: "but these stereotypes are also more dehumanizing, more focused on the most despised human traits: stupidity, laziness, sexual immorality, dirtiness, and so on. In America's racial and ethnic hierarchy, blacks have clearly been relegated to the lowest level—have been burdened with an ambiguous, animalistic humanity"(1991:134).¹

How prevalent these old-fashioned Jim Crow racial attitudes are among the contemporary generation of whites is open to debate, but most commentators maintain that they are practically dead (Tuch & Martin, 1997). As Bobo and Kluegel (1997:93) put it: "Most whites now endorse integration in principle and reject discrimination, preferring instead equal treatment regardless of race. Most whites also deny that blacks are innately inferior to whites." Jim Crow racism may be dead, but those with a vested interest in keeping the concept of racism alive are busy trying to resurrect it by inventing knew forms with names like "symbolic racism" and "laissez-faire racism," which are supposedly expressed subconsciously. A research program in social psychology has arisen devoted to demonstrating the existence of these new racisms, expressions of which consist of the endorsement of traditional values (hard work, personal responsibility, marriage commitment, etc.), and resistance to racial preference policies such as affirmative action and government and business set-asides (Hughes, 1997). In this view, there can be no principled argument against race-based policies without proponents of such arguments being condemned as racists.

There is even a form of racism capable of capturing the most liberal of whites called "aversive racism." If liberal whites feel culturally advantaged, or if they feel "a mild discomfort, or fear around blacks," they are considered racist (Zuriff, 2002:121). Lumping opponents of racial preferences, supporters of traditional values, and people who are not very comfortable around members of another race together assures that just about every white person can be defined as a racist. This is a most satisfying state of affairs for those whose careers rest on finding racism everywhere they look, but there is real damage done to race relations in this country by conflating Jim Crow racism (which is what most people think of when they hear the term) with these new washed-out versions. The effect on blacks upon hearing from the classroom podium (doubtless from an aversive racist) that all whites are racist can be nothing but negative. It is difficult for blacks hearing such messages not to become angry and resentful against whites, and thus increasing their propensity to strike out at them.

Because it is an article of liberal faith that blacks cannot be racist, all subjects used to "discover" these diluted racisms are white (Zuriff, 2002). If black subjects were to be included in these studies, we would probably find that a majority of them would endorse traditional values, that a significant minority would express opposition to racial preference programs, and that at least some would be uncomfortable around their fellow blacks (recall Jesse Jackson's relief at discovering the footsteps he heard in the night belonged to whites). The same indicators of racism used in these studies to brand whites as racist would thus reveal a majority of blacks to be anti-black racists, an absurdity that reveals the absurdity of this line of research.

The final form of racism paraded before us is institutionalized racism. In this form of racism, it does not matter what attitudes and values whites hold, or whether or not they seek to harm minorities, because "The key issue" remarks Daniel Georges-Abeyi, "is *result, not intent*" (1990:28; emphasis original). In this view, even if we do not observe overt incidents of racism, it is permissible to infer that it exists from the failure of African Americans to achieve and succeed at levels commensurate with those of other racial and ethnic groups. Georges-Abeyi goes on to define institutionalized racism as:

...the result of overt racism, of *de facto* practices that often get codified, and thus sanctioned by *de jure* mechanisms. Examples of institutionalized racism include: the hiring of white guards and law enforcement officers; the election of white court officials; the implementation of "objective," Eurocentric testing procedures that select the most Eurocentric non-whites available; and the subsequent institutionalization of seniority procedures that penalize the historically excluded (1990:28).

Certainly, *de facto* practices used to be sanctioned by Jim Crow laws, but there has not been such legal mechanism of anti-black discrimination for almost half a century now. Blacks enjoy all the civil rights (the right to be treated equally before the law, the right to sue and be sued, to make contracts, to give evidence, to vote, to worship, to own property, to educated themselves, and to freely associate and travel) that all other groups in the United States enjoy. Georges-Abeyi does not give us a contemporary example of an anti-black practice legitimized by law, because no such examples exist. Rather than supplying examples, we are treated to a laundry list of alleged wrongs that supposedly thwart black ambitions. Evidently, we should

never hire or elect whites, use standardized tests to determine who merits what, or utilize the seniority system in the workforce.

Coramae Richey Mann (1995) also lists a series of problems in the black community that she attributes to institutionalized racism: housing, education, family, economics, and political power. However, far from the "system" throwing up barriers to prevent blacks competing with whites and other racial/ethnic groups in these areas, there is a plethora of programs that function to help blacks compete and to privilege them with advantages, advantages that they enjoy at the expense of other groups.

Hiring, Firing and Racism: Georges-Abeyi's first complaint is the hiring (presumably he means the disproportionate hiring) of whites in law enforcement. According to the Bureau of Justice Statistics, however, racial minorities constitute 38 percent of sworn law enforcement officers in cities with 250,000 residents or more, which means that non-Hispanic whites may be proportionately underrepresented in law enforcement agencies in our largest cities (Reaves & Hickman, 2002). African Americans are the group most overrepresented, constituting 20 percent of the sworn officers in these cities, with blacks being in the absolute majority among sworn officers in Detroit, Washington, DC, New Orleans, and Atlanta. Granted that these four cities have black majority populations, these figures are nevertheless hardly indicative of institutional racism. Indeed, police departments (along with other local, state, and federal agencies) have gone out of their way to hire and promote African Americans, even to the extent of using less stringent criteria than are applied to other groups in order to do so.

A document from the U.S. Office of Personnel Management released in 2000 showed that African Americans were massively overrepresented (sometimes as by as many as 5 times) in all 22 federal agencies and 16 of 17 federal executive departments (Roberts, 2002). Paul Roberts (2002) also shows that federal agencies provide their managers with "superbonuses" for hiring, training, and promoting non-whites over whites. Competition among universities for black and Hispanic professors is so great that even back in 1992 they were being offered an average of \$2,000 more per year than their similarly situated white counterparts (Gilder, 1993).

Numerous works by both black and white authors document in detail how blacks are given preferential treatment in college admissions, hiring in the public and private sectors, government contracts, testing procedures for admissions and promotions for a variety of jobs, and in many other areas of American life (e.g., Eastland, 1996; Loury, 1995; McWhorter, 2000; Perazzo, 1999; Roberts & Stratton, 1995; Taylor, 1992; Thernstrom & Thernstrom, 1997). Racial preference practices, that many people believe clearly violate commonly agreed upon standards of fairness and justice, are defended by appealing to white guilt and white fears of being labeled racist if they raise their voices against them. Whatever the merits or shortcomings of racial preference programs may be, they argue strongly against the existence of institutionalized racism.

Housing/Mortgages and Racism: Another of Mann's complaints used to bolster her claim of institutionalized racism is that banks and mortgage companies routinely discriminate against African Americans in lending decisions. The question is, however, do they discriminate on the basis of race or on the basis of risk? Money loaning institutions are in business to make money. American money is green no matter the color of the hand that holds it, and few people are willing to forgo profits in order to indulge any prejudices they may harbor. Mortgage companies and banks would not survive very long if they did not engage in

risk-based discrimination, and/or if they discriminated on the basis of race and turned away good potential customers.

Freddie Mac, one of the largest companies that purchase home loans in the United States, and a major benefactor of black colleges, released a study of race and home loans in 1999. The study found that 47 percent of African American home loan applicants had bad credit records compared to 27 percent of white applicants, and that the race gap existed in every income bracket (Singletary, 1999). In fact, whites earning \$25,000 or less had better credit ratings than blacks earning \$65,000 or more (Elder, 2002). We are all aware today of the extreme damage done to the economy in 2008 arising from the mortgage crisis caused by government pressure on banks to make bad loans. Even more damaging to the institutional racism argument, the University of California's Lusk Center for Real Estate found that black-owned banks were *more* likely than white-owned banks to deny a black loan application (Bostic, 2002). Under threat of federal sanctions, in 1994 white-owned banks agreed to make millions of dollars in loans they would not otherwise make to high-risk minorities (Macey, 1994), but black-owned banks, being free of the threat of racist labeling and of federal sanctions, are free to apply rational underwriting standards strictly on the basis of risk.

Politics and Racism: In her essay on institutional racism, Mann states that: "[I]t is doubtful that African Americans and other people of color are fully represented in the political process" (1995:270). She complains that "only" 16 percent of the delegates at the 1992 Democratic National Convention were African Americans, which means that black were actually overrepresented (by 25%) with respect to their proportion in the population. She also provides further examples of black overrepresentation or parity in state legislatures. She tells us that 60 percent of the Southern population is black, as are 68 percent of the legislators; four percent of the Western states is black, as are four percent of the legislators; 17 percent of the Midwestern region is black, as is 18 percent of the legislators. Only in the Northwestern region are blacks underrepresented (15 percent of the population; 10 percent of the legislators). One wonders how Mann can claim any kind of racism from the figures she herself supplies, unless she considers it racist that blacks are not in the absolute majority in all state legislatures.

Far from being politically impotent, African Americans probably constitute the most powerful voting block in America. Whereas white voters tend to split their votes between the two political parties, blacks tend to vote as a solid block for Democratic candidates. Every Democratic President of the United States since 1968 won their elections by virtue of the 80-plus percent of African American voters who voted for them; no Democratic president since 1964 has garnered a majority of the white vote (Barack Obama received 43% of the white vote in 2008; McCain received 5% of the black vote). Thernstrom and Thernstrom (1997) point out that between 1967 and 1993 blacks won mayoral races in 87 cities across the United States, and that in two-thirds of these cities blacks were a *minority* of the population. Many whites are therefore willing to cast their votes for blacks, although the reverse is far more rare. If institutionalized racism is the reality some claim it to be, blacks would be effectively excluded from political life, and we certainly would not find large numbers of whites willing to vote them into local, state, and national offices.

Testing and Racism: Georges-Abeyi's statement about "Eurocentric testing procedures that select the most Eurocentric non-whites available," is a slap in the face to blacks and other minorities that do well on standardized tests. Rather than applauding their ambition and ability, Georges-Abeyi appears to be calling such people "Uncle Toms." He

never tells us just what makes a test "Eurocentric," but it is not that only people of European origin can understand them or do well on them, because Asians do better than whites on many such tests. The fact that African Americans score lower than other racial/ethnic groups on every standardized test known constitutes *ipso facto* evidence for some that the tests are biased against blacks and thus another indicator of institutional racism. It is certainly conceivable that one or two standardized tests *may be* biased against blacks (but no one has been able to demonstrate how, and in what way, they are), but it stretches credulity to claim that they all are.

RACISM AND OTHER MINORITY GROUPS

None of this is to deny that African Americans have been the targets of virulent institutionalized racism in the past. The issue before us, however, is whether current high crime rates among African Americans can be adequately explained by the undeniably disabilities suffered by many previous generations of blacks. In his analysis of crime rates among blacks and other racial/ethnic minorities in America, Ronald Flowers' (1988:92) appears to think not:

Although it would to naive to suggest that slavery, racism, deprivation, and related factors American blacks have uniquely endured have not had at least some negative effect on behavior within this group, the fault of the theory is that it cannot adequately explain by blacks would be affected more by their victimization and injustice than other ethnic minorities, such as American Indians and Chinese-Americans, whose history in this country has also been one of considerable hardship.

Every minority group in America (and elsewhere) has a story of discrimination to tell, and the history of white malfeasance against American Indians is a least as horrific as that practiced against African Americans. Early European settlers tried to enslave members of native populations, but found it difficult to do so. American Indians were eventually subjugated by conquest in numerous wars waged to drive them from their lands. Native Americans are a colonized people today, their numbers severely denuded by wars, the introduction of "European" illnesses, and general mistreatment. "If we need an index of discrimination against Native Americans," write Aguirre and Turner (1998:105), "a tenfold drop [from their numbers prior to white expansion into their territories] in the size of the population is as good as any." Those that remained were accorded full American citizenship rights only in 1924, and many of them still reside on reservations "provided" to them by whites on lands whites did not want.

Stereotypes of American Indians have changed throughout American history from positive to negative and back again. Early white settlers greatly admired the Indians as "noble savages," with a "nobility of character...not naturally disposed to slavery" (D'Sousa, 1995:85). As white settlers moved west and encountered Indian opposition, the image of the "screaming, savage redman" emerged. Nonetheless, there has always been an undercurrent of grudging admiration of Native Americans among whites.

Despite all the injustices and indignities suffered by American Indians in the past, and despite many of them living in what some have called "third world conditions," they enjoy a

median family annual income greater than that of blacks (United State Census Bureau, 2000). We also saw in chapter 2 that although they are arrested for Part I Index crimes in numbers greater than expected based on their numbers in the population, their arrest rates are much lower than those of African Americans.

Asians, particularly the Chinese, have suffered a great deal of prejudice and discrimination in the United States. Although unlike blacks, Chinese immigrants came to the United States voluntarily, they were less than welcome. Immediately upon arrival they became the targets of legal and extralegal harassment. They were subjected to special taxes (the foreign miners tax), barred from holding land or citizenship, and beaten, lynched, and driven out of towns all across the West. The conditions of their employment (sometimes referred to as the "coolie trade") often amounted to what has been called "a new system of slavery" (Kitano & Daniels, 1995:22). The Chinese were also subjected to stereotypes not much different from those applied to blacks: "They were accused of living in filth, harboring disease, being heathens, and, worst of all, being less than human. Their sexual habits were compared to those of animals; questions of character and honesty were constantly raised" (Kitano & Daniels, 1995:183-184).

Despite these tremendous hardships, and despite the other negative stereotypes applied to them, the Chinese have never had a reputation for being criminally inclined. We saw in chapter 2 that Asians have lower crimes rates than their proportion of the American population would lead us to suspect. Since being afforded full access to educational and occupational opportunities (Chinese Americans were not allowed to vote in the United States until 1947), the Chinese and other Asian Americans have made great strides and now enjoy median family incomes in excess of that of white Americans (United States Census Bureau, 2000).

Although Flowers did not include Jews in his discussion, they warrant inclusion because they have been persecuted and discriminated against more persistently than any other group in history. While Jews in America have been labeled with some negative stereotypes, these have never included a penchant for criminal activity. Max Dimont writes of the appalling conditions suffered by the newly arrived Jewish immigrants to New York City in the early twentieth century: "The majority ...arrived penniless, all their worldly belongings wrapped in a bundle." He then describes Jewish slum on the Lower East Side of Manhattan, and states that: "Though it bred tuberculosis and rheumatism, it did not breed crime and venereal disease. It did not spawn illiteracy, illegitimate children, or deserted wives" (cited in Perazzo, 1996:181).

Despite their Meyer Lansky's, Bugsy Siegel's, and Arnold Rothstein's, Jewish crime rates in New York never exceeded, or even equaled, the proportion of Jews in the population. Jews were 25.4 percent of the population of New York County in 1915, but were only 15.9 percent of all criminally prosecuted persons (Joselit, 1983:32). Moreover, during the period between 1900 and 1915 only 12 percent of all felony charges against Jews involved violent offenses such as murder, rape, or robbery (Joselit, 1983:33). Furthermore, "[F]or New York Jews, crime was a one-generation phenomenon, a social and economic consequences of the immigrant experience. As they left the physical boundaries of that experience behind, second-generation Jews left as well its social pathologists [sic] and economic dislocations" (Joselit, 1983:159).

Two questions emerge from this brief discussion of other ethnic groups. Why do modern African American slum conditions that are less physically onerous than those suffered by the

immigrant Jews and Chinese, and still suffered by reservation Indians, breed such high levels of criminal activity among African Americans relative to these other groups? Why have Jews and East Asians been able to surpass the dominant Anglo-Saxon majority in median household income when blacks continue to linger at the bottom of the income ladder? I will argue that part of the answer lies in the damage wrought by slavery, a position forcefully argued by James Clarke in his comprehensive treatment of slavery and its aftermath in his book *Lineaments of Wrath* (1998).

SLAVERY, RACISM, AND THE FORMATION OF A BLACK SUBCULTURE OF VIOLENCE

In their study of violent crime in black areas of Philadelphia, Wolfgang and Feracutti (1967) brought the concept of subcultures of violence to the fore of American Criminology. Subcultures of violence are supported by a set of values and attitudes that favor the use of violence to settle differences in a variety of contexts, especially in situations that threaten the individual's status or reputation. Wolfgang and Feracutti reasoned that, "by identifying the groups with the highest rates of homicide, we should find in the most intense degree a subculture of violence" (1967:153). They found such a culture in Philadelphia in the mid 1950's where homicide rates for young black males were 27 times higher than for young white males, and black female rates were 23 times greater than white female rates (Wolfgang & Feracutti, 1967:152), which certainly made black neighborhoods "in the most intense degree a subculture of violence."

Wolfgang and Feracutti's work provided an excellent behavioral and attitudinal description of communities in which the subculture of violence pertained, but they never supplied a fully plausible explanation of how such a subculture developed in the first place. They did allude to the possibility that they could have begun as a "negative reaction [to middle-class culture] that turned into regularized, institutionalized patterns of prescription" (1967:162). I will argue that contemporary inner-city African Americans are mired in a subculture of violence, and that the culture is the product of negative reactions to values imposed on them by whites, and to the abysmal conditions they have historically suffered in this country.

The first African slaves landed in America in 1619, and by 1860 they numbered 4,441,830 according to the Census of that year (Clarke, 1998:17). The institution of slavery is as old as human history; it has been practiced around the world, and still is in some African countries (Perazzo, 1999). The practice of enslaving some people for the benefit of others has to be the most odious practice ever instituted by human beings. The cruelty, degradation, helplessness, humiliation, and the myriad of other psychological and physical pains suffered by slaves are difficult to comprehend. Even the most benign of descriptions of this despicable practice can sicken with its brutality. Although the claim made by some that American slaves were better off in terms of having their physical needs met than many European peasants or Southern whites may be true, it in no way compensates for the sheer degradation of slavery. African slaves were legally defined as chattel, were deprived of any kind of civil or personal rights, were subject to whippings and other tortures at their master's will. The odious and barbaric practice of slavery may have forever poisoned race relations in the United States.

African Americans fared little better after Emancipation, particularly in the South. Legally released from bondage by the Thirteenth Amendment, they left their former masters with nothing but the clothes on their backs and a few meager possessions. They were not educationally or culturally prepared to succeed in white society, even if they did not also have to face the overt hostility of whites. To be sure, the Thirteenth, Fourteenth, and Fifteenth Amendments gave blacks full citizenship by law, but Southern attitudes were too entrenched to make feeble federal enforcement efforts viable.

It did not take long for the newly freed blacks to be forced back into slave-like conditions under their former masters under the notorious Black Codes. Vagrancy laws supplied white enterprises with a plentiful supply of black laborers. Blacks arrested on any pretext had the "choice" of paying a fine or working for an employer who paid the fine and then worked the unfortunate "vagrant without compensation until he had repaid the debt to the employer's satisfaction" (Clarke, 1998:69). Justices of the peace and law enforcement officers literally made their living arresting and sentencing blacks, and those who paid their fines for them made handsome profits from their labor.

The Black Codes also placed a multitude of barriers in the way of black assimilation into mainstream American culture and led to two separate and unequal "nations" (Hacker, 1992). Blacks also suffered barriers to participation in the political system in the form of poll taxes (applicable to everyone, but far more of a burden to blacks) and literacy tests. If blacks could afford the tax and could pass the literacy test, they faced intimidation by groups such as the Ku Klux Klan if they dared try to exercise their right to vote. Jim Crow laws, given the seal of approval by the Supreme Court of the United States in *Plessy vs Ferguson* in 1896, served to keep the races as separate as possible. The practice of slavery and the Jim Crow laws that followed emancipation bred a racist ideology that served to justify those practices.

THE FORMATION OF AN OPPOSITIONAL CULTURE

Slavery and the circumstances created by the Black Codes constituted for blacks what penologists have called a *total institution* (Goffman, 1961) to describe prisons. A total institution is one in which large groups of people live together under tightly restricted and coercive circumstances under the control of others. In total institutions, the controllers and the controlled are socially and psychologically isolated from one another and are mutually hostile. In order to adjust themselves to life in prison, inmates (once considered "slaves of the state") develop an inmate code to guide their interactions with each other and with their controllers. This code is often directly contrary to the expressed code of the controllers. The inmate code includes injunctions against cooperating with "the man" at levels beyond that which is necessary to avoid trouble, against showing subservience, against being friendly with controllers unless you can use them for your own ends, and against ratting on another inmate (you must be a man and settle your own beefs). Acceptance of and compliance with this code is necessary to become a "good convict" and to be accepted by other inmates (Walsh, 2001:226-227).

Just as prison inmates develop oppositional subculture in response to their imprisonment, African Americans developed a subculture of their own in response to their predicament without much reference to what whites (their "jailers") considered acceptable behavior.

Slavery and Jim Crow laws are in the past, but the subculture born of them remains, just as the inmate code remains an integral part of the psychology of the long-term convict long after release. As the African American author Richard Wright argued long ago: "[T]he Negro's conduct, his personality, his culture, his entire life flow naturally and inevitably out of the conditions imposed upon him by white America" (cited in Thernstrom & Thernstrom, 1997:51). Similarly, Clarke (1996:50) traces the high rates of crime, domestic violence, illegitimacy, and child abuse and neglect in the black community today to an evolved system of cultural values born out of slavery and other grave injustices, and which now "accounts for the social and sexual chaos that reigns in America's inner cities."

Clarke (1998) points out that slaves did everything in their power to deceive and get back at their masters, and even considered it their "duty" to do so (shades of the inmate code again). They did not consider stealing from whites to be morally wrong. Rather, it was considered so satisfying and "smart" that black folklore is replete with stories and songs about smart slaves who outwitted their masters or white folks in general. Cultural norms developed that lauded thievery and deception and warned about the perfidious nature of whites. Such behaviors and attitudes were understandable adaptations to slavery, and may even be considered healthy and admirable forms of resistance.

What is adaptive in one setting, however, can be entirely maladaptive in another. After emancipation, black lawbreakers came to be widely viewed as heroic figures in the black community, especially if they had been committed to the penitentiary. The outlaw tradition of the "bad nigger" was born from this form of hero-worship.⁵ Once they became integral parts of the cultural tradition, the formerly adaptive attitudes and behaviors turned to bite the hand that bred them. Even though the vast majority of victims of black crime are other blacks, black criminals still tended to have their behavior excused by other blacks. The failure of blacks to condemn other blacks for their antisocial behavior was viewed by the great African American scholar, W.E.B. DuBois, (1903/1969) as a major factor in the high rates of blackon-black crime in the late 19th and early 20th centuries. This exculpatory ethic has now reached the dizzy heights of a fully-fledged legal philosophy seriously espoused by a number of intellectuals. For instance, Law professor Paul Butler (2002) has proposed that blacks serving as jurors refuse to convict black defendants, even those that they know are factually guilty, until such time as the black prison population reflects the proportion of blacks in the United States, and that the death penalty never be imposed in cases in which blacks kill whites. This invitation to anarchy, especially in the black community, since freed black criminals will return there, surely has Du Bois turning in his grave.

The lawless ways of the black community were reinforced by white indifference to black-on-black crime. Blacks who committed crimes against other blacks were granted leniency, particularly if perpetrators were employed by powerful whites. Characterizing the relationship between employer and black laborer as "feudal," John Dollard (1988:418) states that powerful white employers often actively protected their black employees from arrest and prosecution "under threat of electoral retaliation." Blacks who were valuable and submissive to whites secured immunity from punishments for assault, bigamy, adultery, polygyny, and a variety of other offenses for which whites would be prosecuted. This state of affairs, writes Dollard, led to many blacks having "extraordinary liberty to do violent things to other Negroes" (1988:201).

Of course, this liberty did not extend to crimes committed against whites. A police officer at the turn of the 20th century explains the attitude of the police to inter- and intra-racial

homicide: "If a nigger kills a white man, that's murder. If a white man kills a nigger, that's justifiable homicide. If a nigger kills another nigger, that's one less nigger" (in Clarke, 1998:132). This glaring double standard in the legal response to crime is open incitement to violence. An investigator in 1930 wrote that since blacks had no faith in the police to protect them, they often resorted to "the ready use of firearms in trivial matters." He further commented that:

Negroes are often allowed without interference from the police, to commit crimes on one another, which, when committed against white people, result in severe court sentences, if not death at the hands of a mob. Many Southern leaders, white and Negro feel strongly that the inadequate police protection provided within Negro communities virtually breeds crime (in Clarke, 1998:212).

Being left to their own devices in so many areas of social life, and building on a tradition of rule challenging, blacks did not look to white standards to determine their worth. Like convicts, African Americans were expected by their cultural code to settle matters "like a man," and to take care of their own beefs (don't involve the power structure). This "taking care of business" often involves violence in a subculture where it is not viewed as illicit. Under these circumstances, "the users [of violence] therefore do not have to deal with feelings of guilt about their aggression" (Wolfgang & Ferracuti, 1967:161). On the contrary, the successful application of aggression—both as a manifestation of subcultural values *and* as a disavowal of mainstream cultural values—is a source of pride. Kenneth Stampp's classical work on slavery similarly concluded that in the black community "[S]uccess, respectability, and morality were measured by *other* standards, and prestige was won in *other* ways" (1956:334, emphasis added).

A classic example of this "other ways" thesis is offered by Alvin Poussaint in his *Why Blacks kill Blacks* (1972). Poussaint argues that what whites call deviant behavior in the black subculture is really only *different* behavior, and explains that:

Reacting to the futility of his life, the [black] individual derives an ultimate sense of power when he holds the fate of another human being in his hands....Similarly, frustrated men may beat their wives and children in order to feel manly. Expectedly, these impulses are exaggerated in men who are hungry and without work. Violent acts often become an outlet for a desperate man struggling against feelings of inferiority (1972:52).

In Poussaint's view, black victims of black assailants are convenient substitute targets for the real source of frustration—white society. I doubt that those victimized by Poussaint's alienated thugs would agree that such behavior is excusably "just different" from the behavioral expectations of an "oppressive white society." Rhetoric such as this offers black murderers, rapists, robbers, and wife-beaters an excuse for their behavior at the expense of their (mostly) black victims, and serves as an example the failure of blacks to condemn the antisocial behavior of other blacks that DuBois (1903/1969) so soundly condemned. African American economist Glen Loury (1995) joins DuBois in condemning such exculpatory rhetoric, viewing it as a racial "loyalty trap" that does nothing except perpetuate and exacerbate the pathologies of the inner city.

HOW PAST RACISM CONTRIBUTES TO PRESENT CRIME

My criticism of Puissaint notwithstanding, the major thesis of this book is that historical racism has contributed to the current level of black antisocial behavior via its role in the formation of a black oppositional subculture. However, most authors who attribute the high level of African American crime to racism have *contemporary*, not historical, racism in mind. Yet, the increase of African American crime rates during the 40-year period of black political, legal, economic, and educational gain following the *Civil Rights Act* of 1964 renders it difficult to maintain the notion that any vestige of racism manifested today is the cause of black crime. But perhaps subjective factors that are difficult to measure intrude, even though objective measures may reveal little or no difference in the current conditions and treatment between blacks and whites.

According to LaFree, Drass, and O'Day (1992), increased education among African Americans may have led to stronger *perceptions* of blocked opportunities and racial discrimination than actually exists, giving rise to a sense of injustice. Blacks who attend college are exposed primarily to radical and liberal interpretations of race relations in the United States that provide them with a variety of theories that tend to place all the blame for inner city problems on the racism and the alleged conspiracies of white society. According to African American educator John McWhorter (2000), as a consequence of this kind of indoctrination, many blacks have succumbed to a "cult of victimology." Ironically, it is the most successful blacks are most likely to articulate the attitudes central to this cult. McWhorter considers this tendency to view themselves as victims sabotages the ethic of self-reliance among African Americans, and grants them permission to condone weakness and failure.

Although there is apparently an eager willingness throughout the black community to embrace anti-white conspiracy rumors, these rumors are more likely accepted by its more educated members. For instance, 67 percent of college educated blacks said it was "true" or "might be true" when asked if they thought that the government had deliberately introduced drugs into the black community. Only 42 percent of blacks that had not gone to college answered likewise. Similarly, 41 percent of college educated blacks versus 18 percent of noncollege educated blacks thought that it was true or might be true that the AIDS virus was a government plot (Hochschild, 1995). The relationship between education and acceptance of conspiratorial rumors among blacks is the reverse of the relationship among educated people in general (Gordon, 1997). This anomaly is probably attributable to the various radical/liberal interpretations of race relations they black college students hear from well meaning, albeit "aversive racist," professors. The circulation of such conspiracy rumors reinforce the tendency to attribute blameworthiness to outside factors for the troubles of the black community, thus assuring that very little will be done about them within the community.

Patricia Turner (1993), an academic folklorist, describes a number of other rumors that have circulated and been widely believed in the black community that include the adulteration of Church's chicken and the soft drink Tropical Fantasy in order to sterilize black males, and KKK sponsorship of a number of products (e.g., Kool cigarettes). Turner writes of the dysfunctional nature of such beliefs, but adds that they "often function as tools of resistance for many of the folk who share them" (1993:xvi). She adds that these beliefs are a response to

racism and inequality, and that despite their dysfunctional nature, they are "vital mechanisms" by which African Americans seek to protect themselves from more of the same (1992:220).

African Americans certainly had solid grounds for fearing white society in the past, and while a little paranoia may have served them well in former times, the current problem with conspiratorial rumors is not so much their falsity but in their role in perpetuating distrust between the races. Nevertheless, regardless of whether or not these conspiratorial perceptions are groundless, a person's perception of reality *is* that person's reality. The rumors, and the sense of injustice they must generate, may lead to "black rage" or "angry aggression" (Bernard, 1990) and to increased defiance of the "white man's" law. It is this rejection of the law that has forged a subculture that embraces violence and celebrates ignorance, and that is what is eating at the soul of black America.

CONCLUSION

The thesis of this chapter is that the violent nature of inner city African American culture represents an adaptation to the hostile environment that the white majority imposed on them in former times. Unfortunately, in the current environment the former adaptation is maladaptive. The eminent historian of African American history Eugene Genovese makes it clear that although it made sense to do as little work as possible under slavery, and that even extreme forms of violence to preserve dignity may have been adaptive, "what constituted strategies for survival under one set of circumstances have now emerged, in an entirely different context, as celebrations of self-indulgence and irresponsibility" (quoted in D'Sousa, 1995:36). Every effort at every level of American society is currently made to help blacks to succeed, and many have done so. Glen Loury has written that "[W]e are the most privileged, empowered people of African descent anywhere on the globe" (1995:200). Despite the undoubted truth of Loury's statement, many blacks continue to distrust white society and to blame it for black shortcomings.

The black experience in America has created a subculture that seems to be the embodiment of Murphy's Law (anything that can go wrong will eventually do so). In order for things (your health, automobile, house, social relations, job, and anything else) to "go right," they need to be highly ordered, for there are many more possible disordered than ordered states. This is the essence of the second law of thermodynamics, the "big brother" of Murphy's law. It is only by assiduous attention to the details that we can halt the natural descent into chaos and enjoy relatively well-ordered lives. If we are complacent and irresponsible about our health, social relations, and the upkeep of our possessions, they will surely deteriorate. Until African Americans recognize this simple truth, they will continue to suffer disordered states for generations to come. The first vital step is to realize their enemy is not without in white society, as it certainly once was, but rather within their own subculture and the values found there.

ENDNOTES

¹ Such stereotypes were not Western inventions. Lewis (1990) cites a number of Greek, Persian, and Arab views of black Africans in the ancient world that were just as negative and demeaning.

While most African Americans from colonial times to emancipation were slaves, approximately 10 percent were free. A number of free blacks owned slaves, with some owning well in excess of 100 (D'Sousa, 1995:78).

Most Southern statutes condoned the use of whatever force deemed necessary to achieve slave submission, but the killing of a slave was considered a felony in most Southern states unless death resulted from efforts to subdue resistance. However, few masters who killed slaves were ever convicted unless the slave was killed in an egregiously cruel manner (Kennedy, 1997:31).

⁵ The "bad nigger" syndrome is exemplified by old folk stories of characters such as Stackolee, LeRoi Brown, the "signifying monkey," and more contemporary characters in "black" movies such as *Shaft*. The very idea behind this syndrome is to redefine badness as goodness. Christina and Richard Milner (1972:170-171) comment on this process:

Since being "good" by White standards has usually meant "knowing your place," "doing what you are told," and being subservient, Black people have developed a counter standard. The White man's definition of "goodness" is seen to be emasculating and stultifying, which is bad for Blacks; the man who asserts his masculinity and refuses to bow before authority is therefore "good." Thus, a "bad nigger is one who is so "bad" he is "good;" he is admirable in his defiance."

² Some efforts to test the subculture of violence hypothesis have rejected it. Cao, Adams, & Jensen (1997), for instance, asked a sample of youths whether or not they would approve of violence in a variety of different situations and found no difference between blacks and whites in approval of violence. This was interpreted as evidence against the subculture of violence hypothesis. There are at least two things wrong with such a conclusion. The most obvious is that blacks *commit* more violence than whites regardless of what they *say*. Second, only a minority of blacks inhabit subcultures of violence—the "black community" is not homogeneous in values and lifestyle. Even if we take people's word at face value, we do not know how many, if any, of the black youths in the study participated in a subculture of violence.

RACE, POVERTY, AND CRIME

THE POVERTY/CRIME NEXUS

Charles Silberman informed us in 1978 that: "To the extent to which they do talk about black crime, liberals of both races generally attribute it to the wrenching poverty in which so many blacks live" (1978:118). Twenty-five years later, we still find that many sociologists explicitly assume that poverty, or "poverty in the midst of plenty," as one of them put it (Farley, 1990:217), is a (and possibly *the*) major cause of crime. According to this argument, people who kill, rob, rape, and otherwise exploit their fellow human beings are not morally bankrupt, but rather financially bankrupt. If they had more of the plenty they are supposedly in the midst of, they would cease exploiting their fellow human beings and behave in a civilized manner.

Don Gibbons assumes that poverty causes crime when he maintains that when poverty rates are controlled for, "racial differences in criminal involvement generally disappear" (1997:372). As was shown in the studies addressed in Chapter 2, however, no set of demographic variables have been shown to make racial differences in crime rates "disappear." Even if poverty were to make them statistically disappear, we are still left with the issue of causal direction, although many criminologists feel that the causal direction is so obvious as to preclude further discussion. For these folks, it is not enough to say that poverty is correlated with criminal behavior, as an article of faith it must be *causally* related. Yet, we all know that a correlation only points to a *possible* causal effect, and that sometimes what we consider the cause may actually be the effect.

Let us turn Gibbons on his head and say, "when crime rates are controlled for, racial differences in poverty generally disappear," and see where it takes us. I believe that this reversal of the typical sociological argument that crime causes poverty is more defensible. Individuals who do poorly in school and drop out, do time in juvenile detention, and acquire a criminal record severely compromise their opportunities to gain meaningful employment, to form prosocial networks, to become attractive as marriage partners to prosocial females, and to lead a "straight" life. There are perhaps few very intelligent (and lucky) career criminals who enter middle- and old-age financially secure, and a few who manage to lead decent lives despite their bad starts, but the great majority of persistent criminals live out their lives in poverty (Raine, 1993; Shover, 1985).

This is not to deny most of individuals of any race who follow the life trajectory described above were from lower class backgrounds, or that growing up in poverty increases exposure to criminogenic forces, and hence the probability of succumbing to criminal behavior. However, it does not necessarily follow that the poverty these individuals found themselves in caused their criminal behavior. Crime rates were lower during the Great Depression than they are currently, the majority of poor people do not become criminals, and many poor children of all racial/ethnic groups possessing good cognitive skills and a modicum of ambition and persistence achieve middle-class status (Hurst, 1995). Being born in poverty does not doom individuals to perpetuate it in their own adult lives, nor does it doom them to a life of crime. If individuals in poverty are "in the midst of plenty," the question begged is what is it about those people that keep them from legitimately sharing in that plenty. Whatever the factors are that differentiate those born into poverty who escape it from those who do not, these factors are more plausible candidates as causes of crime than the poverty that both groups once shared.

Take two hypothetical groups of individuals. One group (of any race) consisting of individuals born into poverty but who do not engage delinquent or criminal acts and who are blessed with at least average levels of intelligence and conscientiousness, and the other group (again, of any race) consisting of individuals born to middle-class parents, but who embark on a life of delinquency and crime. It is not difficult to predict which group will have the highest average level of financial success in adulthood, regardless of whether they are white, Asian, Hispanic, or African American. Colin Powell, Thomas Sowell, Larry Elder, and Clarence Thomas, among countless thousands of others, are examples of prominent African Americans born at a time when Jim Crow laws and practices were still alive and kicking. These individuals became highly successful in life by dint of their talents and efforts, and by avoiding criminal behavior.

African American community organizer George Givens provides us with an illustration of how crime translates into poverty. He describes what he sees as the typical attitude towards work among the young black males with whom he has worked: "Young blacks today don't want to start at the bottom. After the civil rights movement there was a false message that you didn't have to work your way up. If a job didn't pay \$15 an hour, you didn't want to do it. In a situation like that, the highest-paying and most popular employer usually ends up being the dope dealer" (cited in Kotkin, 1989:2). In the short-term, dealing dope will doubtless provide a more lucrative income than the typical legitimate entry-level positions available to most adolescents, and thus a temporary escape from poverty, but in the long-term it is a recipe for disaster. If dope dealing does not get dealers killed or maimed, it virtually assures that all future legitimate employment will be closed to them, largely by virtue of accumulated prison terms.

In Givens' scenario, crime has caused poverty, not poverty crime. Even though the young men he refers to may have been raised in poverty, it is their decision not to follow legitimate ways of breaking free from it that assures that their futures will be bleak. Economic studies have found that incarceration reduces employment opportunities by about 40 percent, reduces wage by about 15 percent, and wage growth by about 33 percent (Western, 2003). Each person who decides to follow the lure of easy money rather than securing legitimate employment and progressing from there, as millions of young people of all races and class backgrounds have done, has made a conscious choice to live on the wrong side of the law. To place responsibility for this choice anywhere other than squarely on the shoulders of the

person making it is to deny that person's humanity. Overall, the literature appears to be telling us (albeit, under its breath) that the risk of crime leading to poverty is greater than the risk of poverty leading to crime, although it is not denied that poverty is a risk factor for criminal behavior.

As well as foreclosing on personal legitimate opportunities achieving monetary success, crime also causes poverty by stripping communities where crime is most prevalent of its businesses and its jobs. The loss of businesses and the jobs they provide obviously contributes to the lack of financial well being of local residents. In areas where robberies, thefts, breakins, vandalism, and muggings are an everyday occurrence, the cost of doing business is sharply increased (increased insurance premiums, and additional expenses for security guards and alarm systems, etc.). After building costs and space constraints, crime is the most important reason for companies either not moving into inner-city areas or for moving out of them if they are already there (Porter, 1995). The lack of employment opportunities in high crime areas is in large part a function of the crime existing there. "Poverty is endemic where crime is endemic," and "crime is endemic where poverty is endemic," are identical statements because they both express a correlation, but in a causal sense, the former is arguably a more plausible proposition than the latter. Democratic Congressman John Lewis succinctly summed up the relationship as I see it when he wrote: "In a very real sense it is crime that has caused poverty, and is the most powerful cause of poverty today" (cited in Walinsky, 1997:11).

POVERTY AND RACE/ETHNICITY

No one disputes that African Americans suffer a higher rate of poverty than any other racial/ethnic group. According to The Department of Health and Human Services, in the year 2000, 38.6 percent of welfare recipients were African American, 31.2 percent white, 25 percent Hispanic, 2.2 percent Asian, and 1.6 percent Native American (Brogan, 2002). United States Census (2001) data for 2000 showed that the median household income for African Americans was lower than for any other major racial/ethnic group in the United States. Even in households headed by non-American citizens, many of whom have the disadvantage of starting all over again in a strange land, the median income was \$35,413 in 2000. The breakdown of median household income by race follows:

African American	\$30,439
American Indian/Alaskan Native	\$31,799
Hispanic	\$33,447
White/Anglo	\$45,904
Asian/Pacific Islander	\$55,521

There is a perfect inverse correlation between median family income and the crime rates of these groups (the American Indian/Alaska Native category is a three-year average [1998-2000] because their population is relatively small). Some will interpret this as evidence that poverty causes crime, and perhaps others will interpret it as evidence that crime causes poverty. Setting aside the argument that crime is a powerful cause of the perpetuation of

poverty, we need to explore some of the other factors underlying the high poverty rates of African Americans relative to other races and ethnic groups.

The Anomie/Strain Argument

Because the black median family income is only 66 percent of the white median, and because a greater percentage of African Americans still live in poverty than whites (21.1% versus 7.5% [United States Census Bureau, 2001]), for some this is *ipso facto* evidence that institutionalized racism still operates to keep blacks in poverty. Those who think this way do not similarly interpret the gap between white and Asian/Pacific Islander median family income (white median income is 83% of the Asian/Pacific Islander median) is the result of anti-white racism in America. Rather, they will search for more tangible and reasonable explanations for the income difference. Such explanations might include the apparent greater average intellectual and entrepreneurial talents of Asians, or perhaps for something as simple as the greater number of people in the workforce per family among them.

The assumption that racism is the reason for so much black poverty is central to the so-called *discrimination* model of racial differences. The most popular theory under the discrimination model is arguably anomic theory. In Robert Merton's classic 1938 paper introducing his theory, he asserted that the major force behind crime is a disjunction in the United States between the value of material success for which every American is supposed to strive and the equal availability of legitimate means of attaining it for all races and classes (Merton, 1938). According to the theory, all Americans, including blacks and other disadvantaged groups, are bombarded with cultural messages to aspire to the American Dream, but because blacks and lower-class members of other groups are structurally denied access to legitimate means to attain it, they are pushed towards criminal behavior as an alternative means.

While Merton's (1938) anomie/strain theory emphasizes the systemic denial of opportunities to disvalued groups, more recent anomie theorists emphasize personal disabilities (e.g., low intelligence, poor temperament, low conscientiousness) that may prevent some individuals from taking advantage of the opportunities available to them (Agnew, 1992; 1997; Agnew, et al., 2002; Walsh, 2000). The focus on individual differences is central to the distributional model. This model avers that different group averages on relevant individual traits and characteristics may account for different group averages on outcome variables, such as the group poverty rate. Whether individuals are denied access to legitimate means of achieving middle-class success by "the system" or by personal deficiencies, however, the result is the same—frustration, alienation, envy, rage, resentment—all of which generate pressure among some individuals to realize their financial aspirations and status in criminal ways. In short, the anomie/strain tradition avers that crime is a way that disadvantaged people obtain what their culture has taught them to want. The causal direction of the poverty/crime relationship in this view is therefore immaterial because something else (either a discriminatory social system or personal deficiencies inimical to occupational success) has led to both crime and poverty.

Merton's discrimination model was undeniably more applicable to African Americans than distributional theories at the time that Merton formulated it because Jim Crow laws were still very much alive in 1930's America. The bite of discrimination was felt more in the South,

but although it was somewhat diluted in the North, blacks were still confronted with "No Negroes" signs outside places of employment and lodging, and in front of houses for sale in white neighborhoods. Both *de jure* and *de facto* practices effectively combined to deny African Americans access to the legitimate means of achieving the American Dream. Regardless of personal talents and ambitions, the walls built by Jim Crow consigned the majority of African Americans to lives of poverty. In 1940, an astounding 87 percent of black families were living below the poverty line (Thernstrom & Thernstrom, 1998:233).

World War II signaled the beginning of the crumbling of Jim Crow barriers. The huge increase in orders for war-related material meant increased needs for workers in all areas of the economy. Coupled with the loss of millions of white men drafted into the armed forces when the United States entered the war, this produced great opportunities for African Americans to escape poverty. In the decade of the forties, the large numbers of blacks migrated north to the industrial states, effectively doubling the number of blacks living in the North, where they secured jobs paying as much as 55 percent more on average than they could hope for in the South (Woodward, 1974). Being concentrated in cities and confronted with less white animosity than they endured in the South, blacks became less subservient and more demanding with respect to obtaining basic civil and economic rights. These demands, coupled with a growing belief among whites that the demands were justified, led to a series of executive, legislative, and legal actions that finally buried Jim Crow. The executive orders began with Franklin D. Roosevelt's Fair Employment Practices Committee, Harry Truman's Commission on Higher Education, and his ordering of full integration in the armed forces. The abolition of the poll tax and literacy tests, and the all-important Civil Rights Act of 1964, were part of the legislative branch's efforts. The de jure abolition of segregated schools following Brown vs. Board of Education of Topeka, Kansas in 1954, was the most important of the judicial branch's contributions (D' Sousa, 1995; Woodward, 1974).

In light of all that has happened in the United States since the publication of Merton's theory, it is difficult to defend the proposition that blacks, or any other group, are systematically denied access (i.e., denied by the "system") to legitimate opportunities to gain monetary success. Those that may attempt to will run up against the evidence presented by a cascade of programs designed to help the disadvantaged, and being African American is an automatic admission slip to a place in these programs. Rather than being denied access to legitimate avenues to success, as some followers of the original anomie theory still maintain (Cernkovich, Giordano, & Rudolph, 2000), largely because of these programs, the occupational mobility of blacks into prestigious positions has increased at a more rapid rate than it has for whites over the last two decades (Farley, 1996; Wilson, Sakura-Lemessy, & West, 1999).

The gains made by African Americans over the past 60 years may be gauged by comparing the 22.1 percent poverty rate for black families in 2000 (United States Census Bureau, 2001) with the 87 percent reported by Thernstrom and Thernstrom (1998) for 1940. It is overlooked by those who think of the entire black population of the United States being mired in poverty that a 22.1 poverty rate means that 77.9 percent of black families are *not* living in poverty. As James Q. Wilson has written: "About half of all African-American families are part of the middle class, a group for whom the legacy of slavery, at least with respect to income and family structure, has been overcome" (2001:129). At least another 25 percent (i.e., those not defined as living in poverty) are on the verge of achieving that status. The extent to which blacks as a whole have prospered in the United States may be gauged by

African American economists Walter Williams's statement that: "Blacks spend enough money each year to make us, if we were a nation, the 14th richest" (2002:2). The one-fifth to one-quarter of blacks sharing only minimally in this abundance constitutes America's underclass. The issue of why the fraction of blacks living in poverty is greater than the fraction of other racial/ethnic groups living in poverty must be addressed candidly.

WORKING FOR A LIVING

Most American adults adopt the Mertonian "conformist" mode of adaptation to the cultural value informing them that they should strive toward the goal of achieving monetary success and abide by the legitimate and moral means of attaining it. Some become "ritualists" who accept the legitimacy of the means but give up on the goal. Although Merton considered ritualists to be deviant, they are law-abiding "nine-to-five" sluggers, not criminal deviants. Ritualists achieve a lower-middle-class lifestyle and do not feel the "strain" (envy and resentment at the success of others) said to propel "innovators" into crime and "retreatists" into a stuporous life on the streets.

The legitimate means of attaining the American Dream, of course, is to earn it. Earning a good income depends on gaining and keeping a good job, and increasingly getting a good job in the United States means getting a good education. A male of any race in the United States is virtually assured of avoiding poverty if he does just two things: finishes high school and secures and maintains steady employment. For females of any race, avoiding unwed motherhood is an added proviso. In 1995, fewer than three percent of white *or* black males who worked full-time year-round were in poverty. Among black females who worked full-time year-round, 7.5 percent were in poverty compared with 2.2 percent of similarly situated white females, a difference that probably reflects the greater likelihood of those black females having to support young children without the benefit of a male partner (Thernstrom & Thernstrom, 1997:242). Even though the poverty rate for black females working full-time is more than three times the rate of white females working full-time, it is still three times less than the overall black poverty rate, which says a lot about the link between work and avoiding poverty. It is also obvious that single parenthood impacts negatively on black female poverty status.

SINGLE-PARENT FAMILIES AND POVERTY

A great deal of the difference between the poverty rates of blacks and other racial/ethnic groups can be traced to the high prevalence of single-parent households headed by African American females relative to females of other racial/ethnic groups. Single-parent household is a better predictor of poverty than race. If racism were the culprit behind the difference in poverty rates, we would expect black families, regardless of their household composition, to be worse off than white families, regardless of their household composition. But this is not what we observe. The U.S. Census Bureau's (McKinnon & Humes, 2000) breakdown of family types by race and income showed that non-Hispanic white single-parent households were more than twice as likely as black two-parent households to have an annual income of

less than \$25,000 (46% versus 20.8%). To state it in reverse, a black two-parent family is less than half as likely to be poor as a white single parent family. These figures constitute powerful evidence against the thesis that black poverty is the result of white racism, as well as powerful evidence that high rates of single-parenting is a major cause of family poverty for all racial/ethnic groups. The prevalence of single-parent families is so high in the black community that: "[A] majority of black children are now virtually assured of growing up in poverty, in large part because of their family status" (Ellwood & Crane, 1990:81).

EDUCATION AND POVERTY

Notwithstanding the growing black middle class, many African Americans are disadvantaged in the workplace vis-à-vis whites and Asians by educational credentials that do not permit them to compete successfully in the occupational marketplace. This is not the result of denial of opportunity. As James Clarke (1998:255) has put it: "Despite unprecedented opportunities for 'equal' employment, and the best intentions of liberal politicians, millions of blacks simply lack the basic skills required for employment in a technology-driven economy." In other words, too many blacks leave school without acquiring an education sufficient to qualify them for meaningful employment. There is no point in cataloging these well-known educational deficiencies, such as illiteracy rates, college and high school dropout rates, and the gaps between African Americans and other groups in standardized scores. My purpose here is to examine the explanations typically made for these deficiencies rather than reiterate their presence.

The argument that social class accounts for the racial gap in standardized scores is belied by the facts. Blacks from families with annual incomes of \$70,000 or more have lower SAT scores than whites or Asians from families with an annual income of less than \$10,000, and blacks with one or both parents with college degrees score lower than whites or Asians whose parents went no further than high school (McWhorter, 2000; Thernstrom & Thernstrom, 1998). Lower SAT scores do not hold back African Americans from entering elite colleges, however. Because of affirmative action programs, blacks are admitted to universities with SAT scores as much as 25 percent lower than those required for whites or Asians, although more than 70 percent of those admitted under affirmative action programs fail to graduate (Sowell, 1993:144).

Another widespread belief is that the poor test performance of blacks is the result of low funding for schools in predominantly black districts. The assumption underlying this opinion is that more resources equal better pupil performance. However, based on tabular data obtained from the American Legislative Exchange Council's *Report card on American education*, I calculated a Pearson correlation coefficient of -0.415 (p = .002) between state per pupil expenditure on public education and the average SAT composite (math and English) score of its students for the year 2000. North Dakota had the highest average composite SAT score (1197), but was 48th in terms of per-pupil spending (\$4,597). Utah was dead last in per pupil spending (\$3,807) but ninth on SAT scores (1139). South Carolina had the lowest SAT average (966) but spent more per pupil than either North Dakota or Utah (\$5,719). New Jersey spent the most per pupil at \$9,703, but ranked 37th on average SAT score (1011). The relationship between per-pupil expenditure and average SAT scores increased in a regression

model containing percent of state in poverty and percentage black in state ($\beta = -0.429$, p = .003).

There is a slight positive relationship between per-pupil expenditure and percentage of blacks (0.073). Although this relationship is far from significant, if institutionalized racism were operating in the area of children's education we would expect to find a significant *negative* correlation between the two variables (the greater the percentage of African Americans the less a state's expenditure on education).

Students taking the SAT, however, are typically those who plan applying to prestigious colleges, so perhaps ACT scores would be a better test of the relationship between expenditure and performance. The zero-order correlation between average ACT scores and per-pupil expenditure is a positive but non-significant 0.129 (p = .366). High spending New Jersey was 34th in terms of ACT scores, and low spending Utah was10th. The lowest average ACT score was Washington, D.C. (5th highest in spending), and the highest average ACT score was Oregon (18th in spending).

The percentage of black students in a state was marginally significantly associated with average SAT scores (-0.27, p = .055), but highly significantly related to average ACT scores (-0.81, p < .0001). The percentage of a state's population in poverty was not significantly related to average SAT scores, but it was to ACT score (-0.556, p < .001). In a regression model, *percentage black* remained the most powerful predictor of ACT scores (β = -0.71), and *percentage poverty* fell to β = -0.28. The best we are able to say about these data is that per-pupil state expenditure has no discernible effect on average ACT scores and a negative one on average SAT scores.

These data reflect gross averages *between* states, averages that can hide differences *within* a state. The within-state evidence is roughly similar, however. For instance, William Sharp's (1993) analysis of school spending within Illinois found statistically significant negative correlations between school spending and performance in every subject at every grade level except grade 11. In a district-by-district analysis conducted by the National Center for Education Statistics (1995), school districts in which African Americans were in the majority spent an average of 15 percent more than in predominantly white districts. Washington, DC public schools (96% minority), for instance, spent 55 percent more per pupil in 1995 than neighboring Prince George's County school district (McWhorter, 2000:119). At the university level, in the decade of the 1980's Howard University (a designated "black" university) received more than \$1.5 billion in federal money, giving Howard one of the highest per-student expenditures in the nation. Only the nation's historically black universities are eligible for the special federal program dispensing this money (Taylor, 1992:251).

The experience of the so-called magnet schools, particularly those in Kansas City, Missouri, provide further evidence that money is not the answer to black educational woes. To improve the education of black students and enforce desegregation, in 1982 federal judge Russell Clarke ordered the Kansas City Missouri School District (KCMSD) to implement methods to draw white students from their suburban schools into the mostly black inner city schools. To finance the lavish plans laid out for these schools, Clarke ordered property taxes to be increased from \$2.05 to \$4.0 per \$100 of assessed value, and later to \$4.96. Flush with cash, the school district built 15 new schools and renovated 54 others, increased teacher salaries by 40 percent, reduced class sizes, and built educational and recreational facilities that rivaled those existing in the most elite universities in the country (Ciotti, 1998; Gewertz,

2000). At one point, 44 percent of the K-12 education budget was being spent on the nine percent of Missouri's students enrolled in the Kansas City and St. Louis magnet schools (Giotti, 1998).

The results of this expensive experiment were disappointing. The schools failed to draw many white students to them, and those who were stayed only a short time. White students were still from three to five years ahead of African American students on standardized tests, which is about the same gap seen in non-magnet schools (Giotti, 1998). The magnet schools failed in all of 11 indicators of expected performance—e.g., test scores, dropout rates, truancy rates, vocational and college preparation (Gewertz, 2000). The 17-year KCMSD experiment finally ended in 1999. Similar programs in other parts of the country have proved equally disappointing, thus highlighting once again the error of thinking that throwing enough money at a problem will solve it.

This is not to say that more money *causes* poor school performance, which absurdly implies that the answer to poor academic performance is to spend as little as possible. The reason for the significant negative correlation is that children in Washington, D.C., South Carolina and New Jersey do poorly in school, so these states pour more and more money into their school systems in a fruitless effort to improve performance. Compensatory education costs up to 2.4 times more money than regular school programs, and special education costs up to five times the cost of regular programs. These programs are mostly needed in the inner cities, where higher salaries paid to teachers in the form of "combat pay" also contribute to the negative relationship between per-pupil expenditure and student performance (Sharp, 1993). Children in North Dakota and Utah, on the other hand, do well enough academically with the resources they already have, do not require extensive compensatory education, and teachers do not have to claim "combat pay." Legislatures in these states thus perceive no need to spend more money on their schools.

INDIVIDUAL AND SUBCULTURAL EXPLANATIONS

If discrimination and under funded schools do not account for the poor preparation of many blacks for the modern workforce, what does? There are two possibilities, the discussion of either of which is widely considered impolite at best and racist at worst. We can ignore these possibilities but we cannot elude them, so if we are to be serious about the various problems in the inner city they must be openly and honestly discussed. The first is the low average IQ of African Americans relative to whites and Asians. Syllogistically, this distributive argument goes something like this: (1) Blacks have higher crime rates than whites or Asians because more blacks are poor than whites or Asians. (2) More blacks are poor because they lack decent employment. (3) They lack decent employment because more of them do poorly in school. (4) They do poorly in school because more of them lack the requisite cognitive skills to be successful in school. The second possibility is that the difference in poverty rates among the races is largely due to the alleged distain for education among many blacks (Clarke, 1996). These two possibilities, of course, may not be mutually exclusive.

It is not seriously disputed that the African American average IQ is about one standard deviation (15 points) below the European American average and about 18 points below the

Asian American average. These figures have been obtained from many thousands of studies involving millions of subjects over the past 80 or so years. The existence of the gap is not contested, but how it came to be is. Test bias is the favorite whipping boy, although no studies designed to detect it by examining factor structure, race-by-item interaction, predictive validity across classes and races, item difficulty analysis, and so forth, have found any such evidence. The failure of any study to detect test bias led the National Academy of Sciences (Seligman, 1992), the overwhelming majority of 1,020 Ph.D.-level experts surveyed by Snyderman and Rothman (1988), and the American Psychological Association's Task Force on Intelligence (Neisser, et al., 1995) to conclude that IQ tests are not biased against any group.

This does not mean that we can develop "culture free" tests in any absolute sense. By definition, any test requiring the use of mental faculties depends on skills and knowledge developed and accumulated in a culture. Cultural bias, however, presumably has a greater opportunity to infect a test through language than through abstract symbols. Yet paradoxically, many children against whom the tests are supposed to be biased, are *more* deficient on test designed specifically to compensate for cultural deficiencies (tests of fluid intelligence) than on "culturally loaded" (tests of crystalized intelligence) tests (Steelman & Doby, 1983; Jensen, 1998; Loehlin, 2000). The higher Asian American average IQ (many of whom are first and second generation immigrants) relative to that of whites, further belies the cultural bias argument.

The National Academy of Sciences, Snyderman and Rothman's 1,020 Ph.D.'s, and the American Psychological Association Task Force also found it uncontroversial to assert that IQ is substantially heritable. Heritability (h²) is an estimate of the degree to which variation in a phenotypical trait is genetically influenced in a population. It is a parameter estimate ranging between 0.0 and 1.0; the closer to 0.0, the less influence genes have, the closer to 1.0, the more influence they have. Heritability coefficients of between .50 and .60 are typically found for IQ with samples of children and adolescents, with variance explained by common environment to be in the .30 to .40 range. The variance explained by common environment in childhood essentially falls to zero in adulthood by late adolescence, while h² increase to about .75 (Grigorenko, 2000; Neisser, et al., 1995). Genetic influences on IQ (and on most other traits also) thus become increasingly stronger with age.

THE ENVIRONMENT AND IQ

I am *not* asserting that the black/white IQ gap is attributable to genes; genes do not operate in environmental vacuums. Some environments have a salutary influence and others a deleterious influence on IQ. For example, Jensen (1977) compared IQ scores of 1,300 black and white children living in a low SES region of rural Georgia with the IQ scores of black and white children in more affluent Berkeley, California. Although IQ scores decreased among the rural Georgian black children an average of 15 points between the ages of 6 and 16 years, no corresponding decrease for the white or black children in Berkeley was observed. He conclude that his study "would seem to favor and environmental interpretation of the progressive IQ decrement... if it were a genetic racial effect, it would have shown up in the California blacks as well" (1977:190).

The so-called *Flynn effect* (Flynn, 1987) also points to environmental effects on IQ. Flynn demonstrated that an upward creep in IQ scores has been taking place across the generations in all countries he examined. He concluded that the gains must be attributed to environmental factors because the gene pool cannot possibly have changed appreciably over the short time periods involved (the largest IQ gains are concentrated at the lowest scoring levels). The Flynn effect left IQ researchers with a conundrum: how to reconcile the undisputed evidence of high heritability for IQ with the undisputed large intergenerational IQ gains evidenced over the last four or five generations.

Dickens and Flynn (2001) appeal to the concept of gene/environment correlation (G/Er) to address this paradox. *Passive* G/Er refers to the correlation between genes and the environments provided to offspring by their biological parents. A child born to intellectually gifted parents will likely receive genes conducive to above average intelligence and an environment conducive to its development; that is, one in which intellectual behavior is modeled and reinforced. In other words, individuals born with a genetic advantage are likely to enjoy an environmental advantage as well. The correlation is passive in the sense that the child has simply received its genes and its environment and has not been instrumental in forming either. The genetic advantage may be quite small initially, but C/Er places the child on a trajectory in which the constant interplay between innate ability and environmental influences will eventually result in a quite large difference. Dickens and Flynn (2001:350) call this a "multiplier effect."

As the scope of environmental interaction widens for the child, the influence of passive G/Er wanes and *reactive* G/Er picks up the trajectory and further magnifies differences among phenotypes. Reactive G/Er refers to the way others in the social environment react to the individual on the basis of his or her evocative behavior. Children with intellectual interests will please their intellectually prone parents, who will in turn encourage and reward such interests, as will significant others such as teachers. It is this constant interplay of genes and environment that eventually magnifies what may have initially been a small genetic advantage into a quite large phenotypic advantage.

Unfortunately, this works in reverse also—a small genetic disadvantage may be amplified into a large phenotypic disadvantage over time. Individuals lacking the initial push toward scholarly endeavors provided by their genes typically find themselves in environments hostile to intellectual pursuits, and thus genes and environments place the individual on a downward spiral with respect to the optimal development of his or her intellectual abilities.

Active G/Er avers that within the range of cultural possibilities and constraints, genes help to determine which features of the environment will be salient and rewarding to us, and which will not. Active G/Er gains momentum as individuals mature and acquire the ability to take greater control of their lives, as the increasing larger heritability coefficients observed on numerous cognitive and personality traits as the average age of sample populations increase attest. Adults who have enjoyed and been rewarded for their intellectual achievements over years of positive G/Er experiences, will actively seek intellectual challenges without being urged to by others.

The multiplier effect of the environment on IQ has worked on the *population* as a whole with the increase in the sheer complexity of the modern world, and it is this, along with better nutrition and pre- and post-natal care, that is probably most responsible for the Flynn effect (Dickens & Flynn, 2001). Unfortunately, the Flynn effect does not imply that IQ levels of *individuals* can be permanently increased via transient programs. Dickens and Flynn's model

presupposes a *constant* trajectory in the same positive direction. Low IQ children placed in such programs do tend to make initial IQ gains, but they are quickly lost when children return to less cognitively-demanding environments that are matched to their disadvantaged genotypes (because low IQ children typically have low IQ parents) rather that with their temporarily environmentally-enhanced IQs.

In a similar vein, Dennis Garlick (2002) argues that low IQ individuals have brains that do not adapt well to novel environmental conditions. Garlick argues that there is a critical period in which the developing brain fine-tunes its ability to adapt to novel phenomena. This critical period begins in infancy when the human brain is most plastic (the fluid ability of neural networks to make connectional changes in response to experience). As we age, the brain becomes less and less plastic (adaptable), which is why the very earliest years are vital for neural organization. Garlick posits an initial genetic set point for differential brain plasticity (not differential intelligence per se), but that environmental factors are crucial in enabling the person to exploit this plasticity and to realizing his or her full intellectual potential.

Garlick agrees with Dickens and Flynn that temporary programmatic interventions do little good in terms or raising IQ. Such programs cannot affect the underlying neural plasticity since the level of plasticity is determined by genes, and gains made in the program will be lost if the person is not continually exposed to intellectual stimuli. A magnetic resonance imaging study of identical and fraternal twins support Garlick's theoretical insight. This study found that general intelligence is related to the amount of gray matter in the brain, and that the amount of gray matter is highly heritable (Thompson, et al., 2001). Other MRI studies of brain volume among twin pairs find heritability estimates between 0.80 and 0.90 for intracranial, white, gray, and cerebellar volume (reviewed in Posthuma, de Geus, & Boomsma, 2003).

MERIT AND OCCUPATIONAL SUCCESS

How important is IQ to occupational success, and thus to avoiding poverty? Large-scale studies find that occupational mobility, both up and down, is extremely fluid in the United States (Hurst, 1995). In open societies, people climb up and down this ladder based on the attributes they bring with them to the competition. An examination of 11 meta-analyses of occupational success found that IQ predicted mobility better than any other measured variable, particularly in the more cognitively demanding occupations, and that it predicted it equally well for all racial/ethnic and SES groups (Gottfredson, 1986). A later study of over 32,000 workers in 515 different occupations found that the correlation between job performance and IQ ranged between 0.23 and 0.58 according to the complexity of the job (Gottfredson, 1997). Similarly, an intergenerational British study of 17,414 subjects found that meritocratic factors (intelligence, ambition, etc.) accounted for six times the variance (48%) in occupational success than all social background variables combined (8%) (Saunders, 1997).³

Other meritocratic factors besides intelligence (not forgetting network connections and sheer luck) obviously effect occupational success. Among a long list of such factors are creativity, entrepreneurship, drive, persistence, ambition, reliability, discipline, and

scrupulousness. All these characteristics may be subsumed under the umbrella of conscientiousness. Conscientiousness, one of psychology's "big five" personality factors, is strongly linked to occupational success, perhaps even more strongly than IQ (Judge, et al., 1999). Conscientiousness has been labeled the "will to achieve" (Kyl-Heku & Buss, 1996), and has a median heritability based on 21 studies of 0.66 (Lynn, 1996). No studies of conscientiousness comparing subjects from different racial groups could be found.

EDUCATION AND THE BLACK COMMUNITY

The hypotheses presented by Dickens and Flynn and by Garlick bear strongly on the second explanation for the general lack of black academic success—the devaluation of education among a significant proportion of blacks. If intellectual stimulation early in life is so vital to later intellectual success, then the devaluation of such stimulation can be nothing but tragic. James Clarke views this devaluation as just one symptom of the general rejection of white culture and its values: "In black inner-city schools...academic success has become an invitation to ridicule or worse" (1998:287). The problem extends well beyond inner-city schools according to African American university professor John McWhorter, who views black educational failure on the "cult of victimology," and asserts that this cult "is just as prevalent among educated [blacks]" (2000:31). Given the data on education and belief in conspiracy theories presented in Chapter 4, the cult is apparently stronger among African Americans who have attended university.

McWhorter maintains that a cult of victimology leads to a "cult of separatism," and as a further natural consequence, to the cult of "anti-intellectualism." Separatism does not automatically lead to anti-intellectualism, as McWhorter acknowledges. It was arguably a separatism enforced from without that spawned a robust intellectualism among the Jews, history's perennial victims. Jews are well aware of their ancestor's historical victimization, but they are also aware that historical victimization is just that—historical. They get on with their lives in whatever country they find themselves, realizing that to dwell on the past is to sabotage the future.

For McWhorter, the answer to black educational failure is not more resources from white society, but rather to shed their mantle of victimhood. Another black academic asserts that: "there is now such chronic anti-intellectualism among Afro-American youth that those few, by some sociological miracle, become involved in their studies must find ways to camouflage their interests" (Patterson, 1998:278). Yet another black commentator blames black leadership and white guilt for black anti-intellectualism: "Black leadership (think Jesse Jackson and Al Sharpton) exploits white guilt, which instead of liberating blacks locks them in an attitudinal gulag of victimhood, a self-imposed Orwellian blackthink, a psychological woundedness that perpetuates a faith in past oppression as the root of present failure" (Fields, 2002:2).

Poor black educational performance has been defended by assertions that blacks have a different way of knowing and learning than whites and Asians. Nancy Amuleru-Marshall, director of researcher for the Atlanta public schools, contends that:"[A]ny tests that emphasize logical, analytical methods of problem solving will be biased against minorities" (quoted in D'Sousa, 1996:307). She appears to favor any test that does not predict anything at

all as long as it produces racially equal outcomes. Another educational psychologist defends black performance by explaining that: "[B]lack students have difficulty staying in their seats, and that to demand that they do so is racially insensitive [and] culturally inappropriate" (quoted in Thernstrom & Thernstrom, 1997:365). In other words, African Americans are too hyperactive to apply themselves to their studies, and even if they could sit still, they are unable to think logically and analytically anyway. With friends such as these, who needs enemies?

Afrocentric education is another way that separatism breeds and perpetuates poor school performance. Afrocentric education has wormed its way into countless black high schools (and some universities also), where it is seen as a counter to Eurocentric education. Afrocentrism is supposed to be a remedy for black failure in Eurocentric schools because its emphasis on the achievements of Africans will supposedly raise black self-esteem. Students in Afrocentric schools do "Swahili math" and "aha calculus," which nobody seems to be able to define or understand, learn that the Greeks stole their knowledge from Egyptian blacks, and learn that whites are melanin challenged bloodthirsty icemen and blacks are melanin-gifted and gentle sun people. Afrocentric teachers teach that black universities existed in the 16th century and "consisted of faculties of law, medicine, surgery, letters, grammar, geography, manufacturing, art and craft (D'Sousa, 1996:375). All this without a written language, and without one iota of evidence that such places ever existed! Nonetheless, students swallow whatever teachers feed them, and such fantastic fabrications, while perhaps making black children feel good about themselves, will cripple them in the real world. We thus have to ask again: with friends such as these, who needs enemies?

CONCLUSION

This chapter has argued that crime is a cause of poverty rather than the other way around, but also that other factors cause both crime and poverty. Racism does not cause poverty; if it did we would not see a growing black middle class whose numbers have reached far beyond W.E.B. Du Bois's old notion of the "talented tenth." The cult of victimology, preached by the civil rights cabal and by well meaning liberals, is the last thing in the world that blacks need to hear. Du Bois was himself of the opinion that "a little less whining, and a little more dogged work and manly striving, would do us more credit than a thousand civil rights bills" (quoted in D'Sousa, 1995:187). Du Bois was right; few things can be more damaging to people than to think their fate is in the hands of others, particularly others who supposedly despise them. If someone else is responsible for my predicament, then there is nothing that I can do about my fate except wait for that someone to evolve a more solicitous attitude toward me.

A major reason that we see so much poverty among blacks today is the high rate of illegitimacy in the black community. The decision to bear a child out of wedlock (or at least the decision not to take steps to prevent it) is a personal one, and to blame white society for it is to be paternalistic and patronizing toward blacks, and to be egregiously unfair to whites. The fact that white single-parent families are more than twice as likely to be in poverty that black two-parent families argues strongly against racism as an explanation for black poverty.

The factors that differentiate between blacks who are in poverty and those who are not are more pertinent than racism to explaining both poverty and criminal behavior. Those factors are graduating from high school, and obtaining and maintaining employment, with the added requirement for females of avoiding giving birth out of wedlock. Personal attitudes and characteristics are also very important. A book exploring the psychology of successful blacks lists a number of characteristics that successful blacks have in common. Most of them such as self-reliance, a sense of personal responsibility and a strong work ethic, which collectively represent conscientiousness, apply to successful people of all races. The most important characteristic that applies mainly to blacks involves the transcendence of "me as victim" attitude." Successful blacks "neither expect the Man to save them, nor blame the Man for all the problems and injustices of society" (Edwards & Polite, 1992:273). If blacks can dump the blame game, they will have gone a long way towards changing their lives, and if "acting white" is the only way to do well in school, then it behooves inner city African Americans to cast off their aversion to it and redefine it as "acting smart."

ENDNOTES

2002:301).

¹ This attitude may not have originated with the civil rights movement as Givens supposes. W.E.B. Du Bois expressed the same sentiment almost 100 years earlier when he observed that many blacks "viewed certain employment opportunities in low regard and chose crime over these 'menial' jobs" (in Gabbidon, 2001:591).

² The United States Supreme Court upheld the judge's ruling in 1990 in *Missouri vs. Jenkins*. In his dissent from the 5-4 decision, Justice Kennedy described the nature of these magnet schools:

Every school would have a 2,000 square-foot planetarium; greenhouses and vivariums; a 25-acre farm with an air-conditioned meeting room for 104 people; a model United Nations wired for language translation; broadcast capable radio and television studios with an editing and animation lab; a temperature controlled art gallery; movie editing and screening rooms; a 3,500 square-foot dust-free diesel mechanics room; 1,875-square foot elementary school animal rooms for use in a zoo project; swimming pools; and numerous other facilities (in Walsh & Hemmens, 2000:201).

³ IQ tests are often considered by those on the left to be a tool of repression and exclusion.

However, they were heartily embraced by the leaders of the British left who thought that they would turn the schools into "capacity-catching" institutions that would lift the talented into the middle and upper classes and thus subvert the caste-like class system that still existed there at the turn of the 20th century. It was the British right that opposed IQ test for just that reason (Pinker,

⁴ Fields is not the first black person to comment on the role of the self-appointed leadership of the black community in perpetuating the black cult of victimhood. In the early 20th century, Booker T. Washington (1972:30) wrote:

There is another class of colored people who make a business of keeping the troubles, the wrongs, and the hardships of the Negro race before the public. Having learned that they are able to make a living out of their troubles, they have grown into the settled habit of advertising their wrongs—partly because they want sympathy and partly because it pays. Some of these people do not want the Negro to lose their grievances, because they do not want to lose their jobs.

PARENTING EFFORT VERSUS MATING EFFORT: SEXUALITY, THE FAMILY, AND CRIME

SEXUALITY AND THE EVOLUTION OF ANTISOCIAL BEHAVIOR

Sexuality is a neglected, but robust, correlate of criminal behavior. A review of 51 studies examining the relationship between number of sex partners and criminal behavior found 50 of them to be positive and one to be non-significant (Ellis & Walsh, 2000). The same reviewers also found that age of onset of sexual behavior to be negatively related to criminal behavior (the earlier the age of onset, the greater the criminal activity) in all 31 studies reviewed. Relationships such as these that are consistently found across different cultures, races, times, samples, and methodologies. A recent behavior genetic study of over 1100 British twin pairs, for instance, found that the most antisocial males, although only 10 percent of the cohort, fathered 27 percent of the children in the cohort (Jaffee, et al., 2003). In addition to number of sex partners and age of onset of sexual behavior, the sex ratio (the ratio of the number of available men of marriageable age to the number of available women of marriageable age) may be the best demographic predictor of crime rates across cities, states, and nations available to us (reviewed in Barber, 2000a).

Why would we find sexuality to be so consistently related to criminality? There are two strategies that members of any animal species can follow to maximize reproductive success: parenting effort and mating effort, which are called r and K strategies by biologists, and more descriptively termed cad versus dad strategies when applied to humans (Cashdan, 1993; Draper & Harpending, 1982). Parenting effort is that proportion of the total reproductive effort invested in rearing offspring, and mating effort is that proportion of the total reproductive effort allotted to acquiring sexual partners. Reproductive strategies vary tremendously across species, with some species laying thousands or eggs every month and engaging in no parenting to others that may only produce a single offspring every two to four years and engage in extensive parenting. In general, the more long-lived a species, and the more altricial its young the more the neurohormonal traits underlying parenting effort have been selected for. Because humans are born more dependent than any other animal, parenting effort are altruism, empathy, nurturance, and intelligence (McDonald, 1992; Walsh, 2003).

Although the humans invest more in parenting effort than any other species, there is considerable variation within the species, with gender constituting the largest within-species divide in mating strategies. This gender asymmetry rests on the different levels of obligate parental investment. Female investment requires an enormous expenditure of time, energy, and resources, but the only *obligatory* biological investment of males is the time and energy they spend copulating. Male reproductive success increases in proportion to the number of females they can mate with, and thus males have an evolved a propensity to seek multiple partners. Mating effort emphasizes quantity over quality (maximizing the number of offspring rather than nurturing a few), although maximizing offspring numbers is obviously not the conscious motivation of those following this strategy. The proximate motivation is sexual pleasure, with more offspring being simply an algorithmic consequence that accrues when the strategy proves successful.

Conversely, a female cannot increase her reproductive success by seeking multiple sex partners. Doing so would have been maladaptive because few men aware of her promiscuity would be willing to provide long term investment for her offspring, whose paternity is uncertain (Buss, 1994; Geary, 2000). Female reproductive success rests on her ability to secure a mate to assist her in raising her offspring in exchange for exclusive sexual access. She can increase her success by mating with multiple partners in some circumstances, not by increasing the number of offspring as would be the case with males, but by obtaining resources from each partner, thus increasing the probability that offspring she already has will survive to reproductive age to pass on her genes (Geary, 2000; Hrdy, 1999).

The inherent conflict between the reckless and indiscriminate male mating strategy and the careful and discriminating female mating strategy has driven the evolution of traits such as aggressiveness, and low levels of empathy and constraint that help males to overcome both their male competitors and female reticence. The important point for criminologists is that although these traits were designed by natural selection to facilitate mating effort, they are also useful in gaining non-sexual resources via illegitimate means. In other words, the neurohormonal processes underlying these traits were selected to foster reproductive success, not criminality, but once the mechanisms are in place they can serve purposes other than those for which they were designed (Ellis & Walsh, 1997; Mealey, 1995; Quinsey, 2002). The reverse is also true—traits that facilitate parenting effort are conducive to other forms of prosocial activity. The asymmetry of reproductive strategies is the ultimate (evolutionary) reason why in every culture throughout history males have committed the overwhelming proportion of crimes, especially violent crimes, and other antisocial acts (Barak, 1998; Campbell, 1999).

EVOLUTIONARY THEORIES OF CRIMINAL BEHAVIOR

Although evolutionary theories of criminal behavior differ in subtle ways, they all focus on the differential apportionment of reproductive strategies (mating effort versus parenting effort) and the tactics that flow from them as their foundation. All theories view criminal behavior as a facultative strategy, the appearance of which is contingent on environmental triggers, although some allot a greater role to genes than others, and one theory avers that there is a subcategory of criminals (psychopaths) for whom criminal behavior is genetically

obligatory. There are two theories that make specific predictions about race, but we will defer discussion of them until Chapter 8.

Cheater Theory Linda Mealey's (1995) cheater theory maintains that primary sociopaths (psychopaths) have evolved as the human equivalent of the so-called cheater males present in many other animal species (Alcock, 1998), and hence their criminal (cheater) behavior is biologically normal. The presence of genetic mechanisms underlying a cheater strategy do not imply a defective genome because they perform exactly as natural selection designed them, although from a moral point of view the human cheater strategy is pathological. Mechanisms that lead the cheater male to bypass species-normal courting procedures and obtain copulation opportunities through deception or force are likely to have evolved via frequency dependent selection.¹

Secondary psychopaths or sociopaths also use cheater tactics to acquire resources and to satisfy their urges, but their behavior is not as tied to genetics as is the primary psychopath's. Mealey views the etiology of secondary psychopathy as being the joint product of genes and destructive environments. Secondary psychopaths and criminals in general are viewed as responding facultatively to social and environmental conditions, although genes underlie their propensity to respond to them in anti- rather than pro-social ways. Mealey thus joins theorists such as Durkheim (1982) in characterizing criminal behavior as normal, albeit morally regrettable, behavior.

Conditional Adaptation Theory Conditional adaptation theory (CAT), proposes that people adopt different reproductive strategies according to their experiences with interpersonal relationships, particularly childhood experiences (Draper & Hapending, 1982; Belsky, 1997). CAT proposes that early childhood is a sensitive period in which future reproductive strategies are calibrated by stressors relating to interpersonal relationships, with father absence being the major stressor. Father absence is correlated with the acceleration of the early onset of puberty and sexual activity (reviewed by Rossi, 1997). In other words, children subliminally monitor their interpersonal environments and will tend to adopt an unrestricted sexual strategy (mating effort) later in life if they perceive interpersonal relationships to be fleeting, unreliable, and emotionally unrewarding (Chisholm, 1993). Children who experience stable pair bonding and secure parental attachment will tend to adopt a sexually restricted strategy (parenting effort) in their reproductive years. The early home environment thus provides children with a set of expectations leading them to emphasize mating or parenting effort in their adult lives.

CAT posits a *whore* vs. *Madonna* dichotomy defining female mating strategies in addition to the *cad* vs. *dad* dichotomy describing male mating strategies (Cashdan, 1993; Fisher, 1992). If female assessments of interpersonal relationships have led them to view men as cads, they will not expect long-term paternal investment and will tend to enter menarche early and emphasize their sexuality to procure short-term investment from a variety of males (Hrdy, 1999). If females have come to view men as "dads," they will tend to emphasize chastity and fidelity, thereby maximizing the probability of securing long-term paternal investment (Belsky, 1997; Cashdan, 1993; Walsh, 1993; 1995).

Because the traits underlying the respective strategies such as altruism/egoism, impulsivity/constraint, and empathy/insensitivity are highly heritable (MacDonald, 1997), individuals may vary in their susceptibility to adopt a particular sexual strategy for genetic reasons rather than early childhood experiences (Belsky, 1999). In other words, the negative and ephemeral relationships observed among the sexually unrestricted may be a *consequence*

of their strategy rather than a cause. Children receive a suite of genes as well as an environment from their parents, and the similarity of parent/offspring sexual strategies may have more to do with shared genes than shared environments (Hrdy, 2000; Walsh, 1999; 2000c). Empirical support for this interpretation is supplied by Rowe (2002), who found heritability coefficients of 0.50, 0.54, and 0.28 for age at menarche, nonvirgin status, and age at first intercourse, respectively.

Alternative Adaptation Theory Alternative adaptation theory (AAT) is an evolutionary theory that favors a genetic explanation. The major proponent of AAT, David Rowe, maintains that cheating is a conditional strategy for most males, and that they will shift their strategy toward parenting effort as they mature. Because behavior genetic studies consistently show that the rearing environment stressed by CAT has little or no lasting influence on an individual's personality or intelligence, Rowe (1996) believes that we should not place much emphasis on childhood experiences.²

AAT also views intelligence as a predictor of where persons will focus their mating efforts, with those with relatively high intelligence tending toward parenting effort and those of relatively low intelligence tending toward mating effort. Rowe is asserting that low intelligence makes the procurement of resources needed to advertise potential parental effort to prospective females problematic, not that low intelligence renders a person intrinsically antisocial or that high intelligence renders a person intrinsically prosocial.

THE FAMILY

The family is the nursery of human nature, "the prototypical human social organization" (MacDonald, 1992:754), and an evolutionary adaptation in the fullest sense of the term. The most uniquely human characteristics of our species were formed during the Pleistocene epoch in small hunter/gatherer kin groups facing ecological conditions requiring high levels of biparental care and prolonged and intense contact between parents and offspring (Chisholm, 1996; Geary & Flinn, 2001; Rossi, 1997). Because humans evolved the deep mental structures we operate with today under these conditions, the biparental family is the "expected environment" of rearing for the species (Scarr, 1993). This is not to deny that there are many different family structures cataloged in the anthropological literature; natural selection does not code for specifics, but rather for tendencies informed by prevailing ecological conditions. The triad of mother, child, and father represent the nucleus around which kinship webs are woven regardless of whether males and females normatively live together or apart. In modern Western societies, children are no longer surrounded by multiple kin members, which leaves the relatively isolated nuclear family as the system that "works best ...to produce offspring who grow up to be both autonomous and socially responsible, while meeting the adult needs for intimacy and personal adjustment" (Popenhoe, 1994:94).

Poverty, crime, unemployment, educational failure, and a host of other ills in the contemporary inner city may be traceable to the virtual disappearance of the "expected" rearing environment for many black children, an astounding number of whom are born out of wedlock. To focus on the problem of illegitimacy, according to James Q. Wilson, "is to risk being called a racist, unless you quickly add that families are not important to children, in which case you may be called either a progressive or a fool" (2000:107). I do not know if

those who deride the importance of the family can be justly called fools, but they are badly misinformed. Families are of the utmost importance to children, and consequently illegitimacy must be considered a tremendously important problem.

Psychologist Kenneth Clark, who grew up in Harlem, saw illegitimacy as the root of the "institutionalized pathology of the ghetto," noting that: "Not only is the pathology of the ghetto self-perpetuating, but one kind of pathology breeds another. The child born in the ghetto is more likely to come into a world of broken homes and illegitimacy; and this family and social instability is conducive to delinquency, drug addiction, and criminal violence" (1965:81). Thirty years later, Charles Murray demonstrated his agreement with Clark, writing that illegitimacy is "the most important social problem of our time—more important than crime, drugs, poverty, welfare, or homelessness, because it drives everything else" (quoted in Lykken, 1995:195). Jarred Taylor (1992:305) also agrees, writing that: "If there is a single statistic that underlies the crime, poverty, and failure that beset blacks in America today, it is an illegitimacy rate of 66 percent."

While Clark, Murray, and Taylor got it right, such statements have never sat well with those who refuse to recognize the role of individual responsibility in human affairs, and who see those who do as "blaming the victim." Liberal Democratic Senator (and Ph.D. sociologist) Daniel Moynihan wrote in his famous 1965 report in that: "At the heart of the deterioration of the fabric of Negro society is the deterioration of the Negro family" (1965:5). Moynihan viewed this deterioration primarily in terms of the black illegitimacy rate, which stood (officially, at least) at 25 percent at the time. Although Moynihan was viciously attacked for his observation, he received support from none other than Martin Luther King.³ Citing the "alarming statistics on Negro illegitimacy," King wrote that the black family had become "fragile, deprived, and often psychopathic" (in Norton, 1987:53). The question that requires asking is why is there such a high rate of illegitimacy among African Americans?

THE EFFECT OF SLAVERY ON THE AFRICAN AMERICAN FAMILY

It is more than plausible that the plight of the African American family is another shameful residue of slavery and its Jim Crow aftermath. Echoing the thought of such early black scholars as W.E.B. Du Bois and E. F. Frazier, Moynihan traced the state of the black family to the legacy of slavery. Because slavery was in the distant past, liberal revisionists dismissed it as a cause of the problems besetting the black family and shifted the focus to white racism and black joblessness (Wilson, 2000). Structural arguments locate the problems of any group considered disadvantaged relative to middle-class, heterosexual white males in the here-and-now and avoid the stigma of blame that can accrue to cultural arguments. While cultural arguments acknowledge past environmental forces, they tend to locate problems within individuals because individuals are the carriers of cultural traditions. Cultural arguments are acceptable, however, when applied to the behavior of "oppressor groups" (Felson, 2001:227).

Arguing against the structural interpretation is the fact that black unemployment rates for men aged 25-64 who were actively seeking employment have remained essentially unchanged since 1960 at around 7 to 8 percent (Thernstrom & Thernstrom, 1997:246), and surely no one believes that racism today is what it was in 1960. During same period, however,

the black illegitimacy rate has jumped from 25 percent to around 70 percent. If something is alleged to be the cause of an effect, those who allege it have to explain why the effect (illegitimacy) has increased dramatically while one alleged cause (joblessness) has increased only minimally, if at all, and the other (racism) has become immensely weaker and more distant. Of course, the same point applies to those who view slavery as the culprit, since it is even more distant.

The slavery argument would be stronger if we could demonstrate a continuity of black family structure from slavery to the present. The argument revisionists have relied on to deny the impact of slavery rests primarily with Herbert Gutman's (1976) work, which denied such continuity. Guttman wrote that in the 50 years after emancipation the black family had been strong, with most children living in two-parent families. If this is the case, then we have to explain why the effects of slavery skipped several generations before revealing their full powers; recessive genetic traits may skip generations before reappearing, but cultural effects do not. Therefore, the revisionist argument goes, the problem lies with current conditions such as joblessness and racism, not slavery.

More recent accounts have revised the revisionists. Preston, Lim, and Morgan (1992) found that many black females in the census data upon which Gutman relied who identified themselves as "widows" were actually unmarried mothers, and that many "married" women were simply cohabitating. Historian Steven Ruggles has shown that the pattern of single-parent families "is clearly evident as far back as 1850 among free blacks" (1994:147). Likewise, Morgan and his colleagues (1993) show that black single-parent families have been at least three times more prevalent than white single-parent families since the turn of the twentieth century. Black single-parent families did rise dramatically during the latter part of the twentieth century, but so did white single parent families, so whatever the causes of this rise, they were not unique to blacks.

Writing about the "black family" with respect to the slaves who were brought to the United States is problematic. The monogamous nuclear family did not exist in most of Sub-Saharan Africa, so slavery could not destroy something that had not previously existed. The West African tribes from which most slaves who were transported to the Americas originated were polygynous. Tribal kinship ties rather than ties to a particular family unit defined the social being of free West Africans (Wetherell, 1981). When we talk of the slave nuclear family in the Americas, we are actually talking about a nuclear *reproductive* unit formed by slave owners to breed offspring, not something that slaves had experience with in Africa (Patterson, 1998). Although the reproductive unit was not a legitimate *social* unit (slaves were not allowed to legitimize their relationships through marriage), it provided the prototype for post slavery black gender relationships.

The great majority of slaves transported to the Americas were already slaves in Africa. Slavery was the most important component of the West African economy, so much so that tribal leaders from a number of African kingdoms sent delegations to London and Paris in the 1830's and 1840's to protest its abolition in territories controlled by Britain or France (Davidson, 1980). As mere objects of barter in Africa, "the main thing about slaves and their progeny was their utter illegitimacy. Slaves had children and relatives but no legitimate kin...They were kinless, which in effect meant that they were socially dead and were so defined in the laws, rituals, and customs of West Africa" (Patterson, 1998:28). The combination of a polygynous kinship-based culture, the "socially dead" status of the slaves in

their native continent, and the strict segregation from mainstream American culture did not bode well for the formation of stable nuclear families among emancipated slaves.

The union of slave man and women formed to provide their masters with offspring led to negative relationships between black men and women. The male role in a bonded relationship has always been to supply his mate and their children with resources, protection, security, and a family name/identity. The slave could offer none of these things, which were supplied (such as they were) by their white masters. This situation led to a carefree and irresponsible attitude toward women on the part of male slaves and to a pattern of independence and mistrust of men on the part of female slaves (Wilson, 2000). In response to these circumstances: "Afro-American men and women developed a distinctive set of reproductive strategies in their struggle to survive. Tragically, the strategies that were most efficient for survival under the extreme environment of slavery were often the least adaptive to survival in a free, competitive social order" (Patterson, 1998:41).

A significant component of the strategy Paterson refers to is irresponsible sexuality, which he maintains is very much in evidence in the inner cities of America:

Significantly, the sexual aggression against women did not stop at mere compulsive sexuality; rather, we find throughout the decades of the rural South, and throughout the underclass today, the vicious desire to impregnate and abandon women, as if Afro-American men were unable to shake off the one gender role of value (to the master) thrust upon them during slavery, that of progenitors (Patterson, 1998:51).

W.E.B. DuBois shows that Paterson's observations are not unique to the late 20th century. Commenting on the habits of lower class blacks in Philadelphia toward the end of the 19th century, he wrote: "The lax moral habits of the slave regime still show themselves in a large amount of cohabitation without marriage," and a "lack of respect for the marriage bond" (1899/1967:69). Elijah Anderson also supports this position when he states that in the innercity, access to females is "taken quite seriously as a measure of the boy's worth;" a young male's "primary goal is to find as many willing females as possible. The more 'pussy' he gets, the more esteem accrues to him" (1999:150). Sampson and Wilson make much the same point when they write of "Ghetto-specific practices such as an overt emphasis on sexuality and macho values" (2000:156).

High rates of sexually transmitted diseases in a population are palpable indicators of a focus on mating effort. The Massachusetts Department of Public Health found that black males were 61 time more likely than white males to have syphilis and 102 times more likely to have gonorrhea (Hood, 1989). According to the Center for Disease Control and Prevention, the African American population has at least four times the rate of HIV infection than the white population, and in 1999 black women accounted for 63% (almost 5 times the expected rate based on population proportion) of all new AIDS cases among women (HIVinsight, 2001). Part of these racial differences may be attributable to the better reporting practices of public clinics frequented more by blacks relative to the practices of private physicians more likely to be frequented by whites (Miller, 1994b).

Commentaries on black sexuality such as these would angrily dismissed as racist if made by whites, but W. E. B. Du Bois, Kenneth Clark, Orlando Patterson, Martin Luther King, Elijah Anderson, and William J. Wilson are all respected black scholars with impeccable liberal credentials. If we accept their analyses it is difficult to deny that there is a continuity in sexual practices among underclass blacks running from their African origins and continuing through slavery to the present day. These practices have been exacerbated and reinforced by the low sex ratio (more females of marriageable age than males of marriageable age) in the black community.

THE SEX RATIO

The sex ratio is perhaps the most powerful demographic factor influencing mating strategies in human populations. Among a variety of nominally monogamous animal species, a low sex ratio tends to shift mating patterns in the direction of polygyny (Debuse, Addison, & Reynolds, 1999; Tershy & Croll, 2000). In all sexually reproducing species, the sex that invests the least in offspring care (almost always males) is facultatively polygynous; that is, males will tend to concentrate on mating effort and shun parenting effort when environmental conditions allow. When the sex ratio is high (more males than females), on the other hand, males fortunate to have secured a mate will jealously guard her and provide her with resources and parenting effort. It is a matter of supply and demand, and it is as true of humans as it is of other species. Among humans, when the sex ratio is skewed among a population of marriageable age individuals, the less numerous sex becomes a scarce resource, and is therefore a valued commodity. The dyadic power in dating and mating relationships is held by the scarcer sex, who can dictate the conditions of the relationship (Pedersen, 1991). Because the reproductive strategies of men (emphasis on mating effort) and women (emphasis on parenting effort) are different, when sex ratios are significantly skewed mating environments are altered.

Surveying the historical literature on cultures ranging from ancient Athens, to the modern United States, Guttentag and Secord (1983) show that low sex ratio societies tend to be unstable, misogynistic, and licentious, and posited the following hypotheses:

Women in such [low sex ratio] societies would have a subjective sense of powerlessness and would feel disvalued by the society. They would be more likely to be valued as mere sex objects. Unlike the high sex ratio situation, women would find it difficult to achieve economic mobility through marriage. More men and women would remain single, or if they married, would be more apt to get divorced. Illegitimate births would rise sharply (1983:20).

Conversely, in high sex ratio societies, "women would be valued as romantic love objects" and as mothers, both sexes "would stress sexual morality," women would enjoy more power and control over their lives, male commitment to marriage would be strong, and society would be stable (1983:19-20). The contrasting attitudes and behaviors show that when the sex ratio is skewed the favored sex will be freer to behave in ways compatible with their innate inclinations, and that the disfavored sex must conform to the strategy of the favored sex if they desire to participate in the mating game (Pedersen, 1991; Barber, 2000; Wilson, 2000).

Harpending and Draper (1988) contrasted the behavior of the !Kung and Mundurucu cultures to illustrate the importance of the sex ratio in molding reproductive strategies, as well as the importance of ecology. The !Kung inhabit the inhospitable and resource poor Kalahari desert in South Africa, conditions that make cooperative rearing of offspring imperative.

Parenting effort has thus been evolutionarily favored over mating effort by both sexes. The Mundurucu inhabit the Amazon basin, a resource rich ecology requiring very little cooperation or effort expended on acquiring resources, which allows males the freedom to fight and raid other groups, and to compete for females. The ecological conditions under which these males live, and the low sex ratio resulting from violent male activities, lead them to favor mating effort over parenting effort.

The Ache, another group of South American Indians, enjoy the same kind of ecological niche enjoyed by the Mundurucu. Also like the Mundurucu, intertribal warfare and statusdriven intra-tribal club fights result in high male mortality, and shortages of available mates for females. Father absence among the Ache is associated with a childhood mortality rate of 45 percent compared with 20 percent for children with fathers. Under these circumstances, it is adaptive for a female unlikely secure a permanent mate to advertise her sexuality rather than her fidelity because by doing so she gains some resources from a number of males, thus increasing the probability that any children she may have will survive. Her behavior is adaptive not because it results in more offspring, but because it increases the probability that the offspring she already has will survive, and hence the probability that her genes will be represented in subsequent generations (Hill & Hurtado, 1996). Many of the culturally normative behaviors of the Ache and the Mundurucu, including promiscuity, illegitimacy, low-level paternal care, aggressiveness, hyper-masculinity, and transient bonding are antisocial from the Western point of view. They are, however, presumably adaptive in those cultures, and may be adaptive in violent subcultures in modern societies.

THE SEX RATIO AND MISOGYNY

The lower the ratio the lower the value placed on women, and it is especially low in the black community: "American blacks present us with the most persistent and severest shortage of men in a coherent subcultural group that we have been able to discover during the era of modern censuses" (Guttentag & Secord, 1983:199). The black sex ratio during the late slave era and Reconstruction was 0.85 to 0.87 (Wilson, 2000:117), meaning that there were only 85 to 87 black males of marriageable age for every 100 black women. The 2000 census (U.S. Census Bureau, 2001) reports a 1999 African American sex ratio of 0.87 compared with the near parity of the European American (1.04) and Asian American (0.99) sex ratios (Humes & MaKinnon, 2000).

The "effective" sex ratio is even lower than a simple ratio of males to females indicates. A greater proportion of black males are incarcerated in prisons and mental institutions than males of any other racial or ethnic group. An estimated 30 percent of all African American males will be incarcerated at some time in their lives, as opposed to 4 percent of white males (Bonczar & Beck, 1997). Far more black men than black women are imprisoned and serving overseas with the armed forces, and men serving overseas may meet and marry women of other races, thus further exacerbating the situation for black women. Additionally, black males of all ages die at higher rates than white or Asian males from homicides, alcoholism, drug overdoses, and accidents.⁴

Even if imprisoned black males were available for marriage, their employment records, and substance abuse, make them unattractive marriage prospects. Although a majority of

never-married African American women apparently want and value marriage, many of them would not consider such men a reliable source of parental investment (King, 1999; Wilson, 1987). Having such men in the home is actually be more harmful to both a female's economic well being and to the probability of offspring abuse, neglect, and antisocial behavior than having no man in the home (Rodney & Mupier, 1999), especially if the man is not the children's biological father (Daly & Wilson, 1996). As Jaffee and her colleagues (2003:120) put it: [W]hen highly antisocial fathers reside with the family, children experience a double whammy of risk for antisocial behavior. They are at genetic risk because antisocial behavior is highly heritable. In addition, the same parents who transmit genes also provide the child's rearing environment."

A sustained low sex ratio among blacks leaves little hope for the amelioration of the low-level gender war in the black community noted by Du Bois (1899) over a century ago (Hutchinson, 2001; King, 1999; Millner & Chiles, 1999). Weeks and her colleagues (1996:348) point out that: "Several studies of African American communities describe black women's distrust of black men, and their assumption that most black men are 'naturally' or inherently bad, sinful, and untrustworthy—particularly in their relationships with black women." The attitudes of these women have a solid foundation in fact because about one-quarter of black males between the ages of 16 and 24, and one-half between the ages of 25 to 34 are non-custodial fathers (Holzer & Offner, 2004), which essentially means that they have abandoned both their female partners and their offspring. A survey of married black and white women conducted in the 1970's found that 100 percent of white women said that they would marry again (not necessarily to the same man) if they could start their life over. Among black women, only 88 percent of the college educated, 64 percent of the middle status, and 36 percent of the low status women said that they would (Miller, 1994b). These figures are a telling reflection on the marital experiences of black women, particularly inner-city women.

Misogynistic themes, evident in generic terms for females such as "bitch" and "ho," and for sexual intercourse such as "killing the pussy," that permeate African American culture (increasingly among males of other racial/ethnic groups also) is further evidence of the devaluing of women. These attitudes did not arrive with such obscenities as gangsta rap; machismo and misogyny have been a major theme in black music at least from the days of rhythm and blues (Johnson, 1996; Ward, 1999). If black music is a reflection of cultural reality as often claimed (Boyd, 1996), the lyrics it contains reflect the value placed on women by a significant proportion of black males in the inner cities.

African American women adjust their reproductive strategies to their cultural milieu in ways reminiscent of the Ache and Mundurucu women. The severe shortage of black males and the unwillingness or inability of many of them to obtain decent employment and provide resources leads black girls and women to view them as cads rather than dads (Anderson, 1999; Wilson, 1987). Under these circumstances, it may benefit a mateless female with offspring to set up "networks of well-disposed men to help protect and provision her offspring" (Hrdy, 1999:251). Hrdy (1999:246) further states that this is "the emotional calculus behind the decisions that inner-city mothers make every day." Hrdy's point coheres with all evolutionary theories presented in this chapter, and is supported by a large body of literature showing a lower average age of menarche and age at first sexual experience for African American girls than for European- or Asian American girls, and that blacks of both sexes have more sexual partners within and outside of bonded relationships (reviewed in Miller, 1994b; Rushton & Bogaert, 1987; Staples & Johnson, 1993).

THE SEX RATIO AND ILLEGITIMACY

With a large number of females in the African American community following an unrestrictive sexual strategy, a high rate of illegitimate births, another palpable indicator of a focus on mating effort, is to be expected. Guttentag and Secord's (1983) study found correlations of -0.87 and -0.27 between sex ratios and illegitimacy rates across the 50 States for blacks and whites, respectively. In a multiple regression model, the sex ratio accounted for 73.7 percent of the variance in black illegitimacy, with an additional 9.8 percent accounted for by six socioeconomic variables. The difference between the black and white correlations was due to greater variation in black sex ratios than in white ratios across the states. In North Dakota, for instance, the sex ratio favored females, with 160 black males for every 100 black females in 1980, but in New York in the same year, there were only 86 males per 100 women. Predictably, only 2.9 percent of black families were female headed in North Dakota as opposed to the 33 percent in New York.

The effects of a low sex ratio should on illegitimacy rates is evident in many other nations. South and Trent (1988) and Barber (2000a) gathered evidence from 117 and 185 countries, respectively. Controlling for a number of demographic variables, such as GNP, percent urban, and population density, both studies found that the sex ratio was the best predictor of the illegitimacy rate, and for the rate of teenage births in or out of wedlock. These and many other studies support the evolutionary position that "when a young woman cannot pursue a high-investment strategy, which involves delayed reproduction and marriage, their reproductive success is enhanced by starting their reproductive careers early in life" (Barber, 2000a:35).

ILLEGITIMACY AND CRIME

The impact of illegitimacy on crime is not a matter of serious dispute. Crime rates rose almost directly proportional to illegitimacy rates from the 1960's to the 1990's in the United States Lykken (1995) and in Great Britain (Himmelfarb, 1994). Using data from all 50 American states, Mackey (1997) found a strong partial correlation of 0.82 between illegitimacy rates and crime rates after controlling for unemployment rates. A Finnish cohort study concluded that living in a single parent home roughly doubles a child's probability of becoming criminal after controlling for many other factors (Rasanen et al., 1999), and two British longitudinal studies found illegitimate boys to be far more involved in delinquency and other behavioral problems than children born in wedlock (Maughan & Pickles, 1990; West & Farrington, 1977). A study using official data comparing (mostly white) delinquents born in- and out-of-wedlock, found that illegitimate boys were almost twice as violent, and that they were significantly more abused, neglected, and deprived on all measures of well being (Walsh, 1990).

Illegitimacy increases a child's risk of future criminal behavior in diverse ways. Unwed mothers tend to be younger than women who bear their first child in wedlock, and to come from single parent, economically deprived families themselves (Vedder & Gallaway, 1993; Zuravin, 1988). Their situation as unwed mothers, as well as their own deprived backgrounds, means that they tend to lack the same level of social support enjoyed by married mothers.

This isolation, lack of support, and frustration increases the probability of child abuse and neglect (McLeod, Kruttschnitt, & Dornfield, 1994; Walsh, 1991). Such isolation decreases family and informal community control of children, while at the same time it increases the number of unsupervised teenage groups in the community who tend to congregate in gangs (Messner & Sampson, 1991).

Family structure alone cannot account for the relationship between illegitimacy and criminal behavior; much of the relationship may be spurious once the effects of genetic self-selection are accounted for (Cleveland et al., 2000). In other words, certain heritable traits associated with antisocial behavior may select individuals into different family structures and these traits are passed on to their offspring. Unmarried mothers have a tendency to follow an impulsive and risky lifestyle and to have a number of antisocial personality traits, be more promiscuous, and to have a below average IQ, all of which are heritable (reviewed in Cleveland et al., 2000).

The behavior genetic study conducted by Cleveland and his colleagues (2000) consisted of 1524 sibling pairs from different family structures taken from the National Longitudinal Survey of Youth. These researchers found that genetic factors were more important in explaining antisocial behavior than family structure (family structure itself being quite strongly influenced by genes). Genetic differences accounted for 94 percent the difference on an antisocial subscale between the most at-risk group (single mothers of half-siblings, a structure indicative of mating effort) and the least at-risk group (two parent family with full siblings, indicative of parenting effort). The researchers concluded by stating: "Although temperament, personality, or cognitive bias toward sexual variety may be proximate causes of single parenthood or multiple matings, they may also comprise components of an overall reproductive strategy that emphasizes mating over parenting effort" (2000:744-745). Similar findings and conclusions from a large-scale behavior genetic study in Great Britain have been reported (Moffit and the E-Risk study team, 2002).

Although unwed fathers are less often studied than unwed mothers, we must add the traits of these unscrupulous men into the genetic mix. Studies find that fathers of illegitimate children in the inner-city are more than twice as likely to be involved in delinquent and other antisocial behavior than non-fathers (Thornberry, et al., 2000; Stouthhamer-Loeber & Wei, 1998). Another study (Lerman, 1993), however, found that black unwed fathers are much more similar to black married men in terms of antisocial behavior than white unwed fathers are to white married men, a similarity which may reflect the greater normativeness of unwed fatherhood in the black community.

Assortative mating (the tendency for like to seek like) increases the likelihood that both the mother and father of illegitimate offspring will possess heritable characteristics predictive of antisocial behavior that may lead to the intergenerational transmission of criminal behavior via both genetic and environmental routes. Rowe and Farrington (in Rutter, 1996) found a correlation of 0.50 between husbands' and wives' criminal convictions in Britain, and a New Zealand study found substantial correlations (average r = 0.54) between husbands and wives for a variety of antisocial traits (Krueger, et al., 1998). Krueger and his colleagues view assortative mating for antisocial traits as creating criminal families via active and passive gene/environment correlation. The assortative mating process is active gene/environment correlation in the parental generation in that both partners are "niche picking." It is passive gene/environment correlation in the offspring generation who, via the assortative mating of their antisocial parents, will receive a double dose of genes underlying the traits that make

them vulnerable to antisocial behavior, as well as a home environment that models and facilitates the development of those traits.

Messner and Sampson's (1991) study of the sex ratio/crime issue in 153 American cities is the most thorough study of this topic appearing in the literature to date. They argued that cities with a high sex ratio should have higher rates of offending because males commit more crimes, especially violent ones, than females. They also acknowledged that high sex ratio communities are more stable because males tend to get and remain married in such communities and to provide resources and supervision of offspring. These competing hypotheses (both high and low sex ratios should have adverse effects on crime rate) were examined in both black and white populations. They first looked at the effect of the sex ratio on the percentage of female-headed households in multiple regression models containing seven other predictors. In the black model, the sex ratio was the most powerful predictor (β = -0.60), and in the white model it was the third most powerful predictor (β = -0.60), and in the white model it was the third most powerful predictor (β = -0.29), behind per-capita income and welfare availability. Messner and Sampson's findings support the contention that low sex ratios are associated with promiscuity and lack of male commitment, and that morality and male commitment are associated with high sex ratio cities.

Messner and Sampson then looked at race-specific effects of female-headed households on murder and robbery rates in multiple regression models. In the black model, percentage of female-headed households was the second most powerful predictor of murder rates ($\beta = 0.43$) after *West* (the region), and the most powerful predictor of robbery rates ($\beta = 0.37$). For murder rates among whites, the percentage of female-headed households was the second most powerful predictor ($\beta = 0.37$) after *population size*, and for robbery rates, it was third ($\beta = 0.32$) after most powerful after *median age* and *West*. The American and cross-national data suggest that the sex ratio (given sufficient variation) might be the strongest demographic/ecological predictor of crime rates that we have.

Looking at the evidence for the sex ratio/crime link across 70 different countries, Barber (2000b) found that the correlations between the sex ratio and murder rates (-0.40), rape rates (-0.45), and assault rates (-0.38) were higher than the correlations between those rates and 12 other demographic variables. In multiple regression models, the sex ratio remained the strongest predictor for murder and rape, but not for assault. This constitutes compelling crosscultural evidence that low sex ratios are associated with high rates of violent crime.

Examining female criminal offending, South and Messner (1986) found that a high sex ratio significantly decreased women's criminal offending and decreased rape victimization, but did not significantly influence female homicide victimization in a sample of 60 countries. South and Messner hypothesize that in high sex ratio societies women are highly valued and that their roles tend to be limited to the family, thus minimizing their access to criminal opportunities and their exposure to potential rapists, and also minimizing any economic need to involve themselves in illegal activities. The null finding for homicide perhaps indicates that although married women are protected from violence outside the home, they remain at risk of victimization within it.

CONCLUSION

This chapter's primary points are that parenting matters, and that an emphasis on mating effort calls into service traits that are useful in pursuing criminal as well as sexual goals; an emphasis on parenting effort helps to mute those traits. Evolutionary biology, history, and anthropology tell us that male parenting effort is only reluctantly undertaken. This is not to say that males who marry and sire offspring do not love, value, and take great pride in them, or that most men will not eventually want to settle down and support a wife and children. In other words, most men follow a mixed mating strategy, emphasizing mating effort when young and moving more toward parenting effort later. However, the evidence is consistent with the position that in low sex ratio societies males tend to put off investing in any single woman while there is a surplus of females willing to sexually accommodate them. Unfortunately, this strategy produces hordes of illegitimate children at risk for antisocial behavior (See the alarming effects of illegitimacy on crime documented by Hazar, Butler, and Maggs [1977] in the former Soviet Union after the Communist government attempted to destroy the family as a "bourgeois institution").

Given the roots of the modern African American family in African practices, the experience of slavery, and the persistently low black sex ratio, is difficult to see how innercity mating strategies can be brought into conformity with the demands of modern society. To do so, however, is imperative if we are to see a decrease in black crime rates. Children born out of wedlock are both genetically and environmentally handicapped from the beginning. The double deficit faced by such children, as well as the many other problems associated with illegitimacy, led Gottfredson and Hirschi (1997:33) to conclude that reducing illegitimacy is the policy recommendations deducible from their self-control theory: "Delaying pregnancy among unmarried girls would probably do more to affect the long-term crime rates than all the criminal justice programs combined." Theirs is a position with which it is very difficult to argue.

ENDNOTES

Frequency dependent selection (FDS) is an evolutionary process that has positive fitness consequences arising from certain practices and behaviors only when a small fraction of a population practices them. That is, when a small fraction of a mating population uses cheater tactics it will enjoy high mating success, but success will diminish in proportion to the number of conspecifics using those tactics. FDS eventually leads to two genetically distinct behavioral taxons (types) in a species in evolutionarily stable proportions. The cheater taxon exploits "weaknesses" in the normal courtship patterns of their species in order to gain copulation opportunities rather than follow species-normal pattern (Tooby & Cosmides, 1990).

² Having no lasting influence on intelligence and personality is not the same as having no lasting influence on adult sexual strategies, however. Even if genes constitute a "set point" for one strategy or the other, environmental experiences will magnify and accentuate any initial propensity.

³ African American economist Thomas Sowell has written that the animus aimed at Moynihan "marked a major turning point in discussion of racial issues. From then on, the test of what you said was no longer the whether it was true but whether it was politically correct. This silenced the

fainthearted—which is to say, most of academia and virtually all of the media" (2003:1). He went on to opine that even if we can ignore the facts, their consequences cannot be ignored. He writes: "None of those who demonized Daniel Patrick Moynihan has paid any price. But the black community has paid a terrible price because the problem he tried to point out was swept under the rug. Broken homes and children raising children have produced poisonous consequences, from educational failures to drugs and murder" (2003:1-2).

Other reasons for the consistently low sex ratio in the black community include gonadotropin levels (a class of hormones that regulate the functions of the gonads) in females appear to be partially responsible for skewing the sex ratio in the direction of an excess of female births. Black females have the highest levels, Asians the lowest, and whites have intermediary levels of this hormone (James, 1986; 1987). Black females are more likely to abuse alcohol and drugs, and less likely (or less able) to seek medical care or adequate nutrition when pregnant than whites or Asians (Lubinsky & Humphries, 1997), resulting in more in utero deaths. Because female fetuses are more robust than male fetuses, a greater proportion of female fetuses will survive to parturition.

COMPETITION AND CHEMISTRY IN HONOR SUBCULTURES

HUMAN ECOLOGY AND SOCIAL DISORGANIZATION

A major sociological question has long been whether ecological settings (the patterns of interrelationships between people and their physical and cultural environments) have an impact on the behavior of individuals independent of the characteristics of the people living in them. All organisms effect, and are effected by, their environment, but humans have the potential to more fully effect their environment than other animals. A corollary of this potential is that humans should be less at its mercy. Nevertheless, a revered sociological tradition arose in the 1920's and '30's that posited a major role for human ecology in the creation of crime and delinquency as different immigrant/migrant groups moved in and out of America's cities. The major finding of this so-called Chicago School of human ecology, headed by Clifford Shaw and Henry McKay, was that the same Chicago neighborhoods (the poorest) consistently had the highest rates of delinquency across the years regardless of their racial or ethnic composition. This finding (found in other cities also) was a sociologist's delight because it suggested that there are "natural areas" that facilitate crime independently of the traits and characteristics of the individuals residing in them.

Shaw and McKay (1972) appealed to the concept of social disorganization to explain why crime remains high in certain neighborhoods. Social disorganization represents the loss of the symbiotic relationships between people in their "natural areas" when "alien's" enter their neighborhoods. When culturally heterogeneous groups are thrown together in the same areas, cultural conflict ensues, behavioral norms are weakened, and cultural institutions such as the family, school, and church, as well as informal community organizations, lose their ability to regulate conduct. The lack of social controls allows slum youths to follow their natural inclinations, which rarely run in prosocial directions.

In addition to facilitating crime and delinquency by failing to inhibit it via social control, social disorganization facilitates crime and delinquency by providing positive incentives to engage in these activities. Morality abhors a vacuum, and in the absence of prosocial values, antisocial values will fill the void. When social controls breakdown the pimp, the prostitute, the drug dealer, and sundry thieves and hustlers feature prominently in the neighborhood landscape. Because these are the folks with the money, they become admired models for the

young who rarely see anyone with a legitimate job enjoying the same kind of income or "juice" in their neighborhoods. The values supporting deviant lifestyles soon become entrenched and transmitted across the generations until they become intrinsic properties of neighborhood residents.

The enthusiasm for impersonal ecological explanations waned somewhat with the realization that while it was always true that the same poor neighborhoods always had higher crime rates than other neighborhoods, these same neighborhoods had drastically different rates when inhabited by different racial/ethnic groups. This, of course, implied that the average trait levels of the neighborhood's inhabitants do make a difference. Ruth Kornhauser's reply to the claim that neighborhoods cause crime is instructive: "How do we know that area differences in delinquency rates result from the aggregated characteristics of the communities rather than the characteristics of individuals selectively aggregating into communities?" (1978:104). As John Wright (2009:148) explains: "It should be expected that individuals with similar traits and abilities, who have made many of the same choices over their life-course, should tend to cluster together within economic and social spheres. In other words, a degree of homogeneity should exist within neighborhoods, within networks within those neighborhoods, and within families within those neighborhoods. "Contrary to Durkheim's social factist dictum, Kornhauser and Wright are saying that macro-level data such as crime rates need not necessarily be generated entirely (or even at all) by macro-level social processes, such as neighborhood ecology. Some theorists argue that neighborhoods have no independent effect on crime rates once the human composition of the area is taken into account, while others argue just the opposite. I argue that in seeking the answer to the causes of rates of antisocial behavior, human composition and neighborhoods are joined at the hip: environments help to make people and people help to make the environments they live in.

THE INNER CITY

No one disputes that black inner-city neighborhoods are the most dangerous places in America to live and raise a family. When we hear of epidemics of gang violence, teenage pregnancy, drug dealing, and general mayhem, we know that the reference is to these neighborhoods. Many theorists turn to black poverty to explain the behavior of people in these neighborhoods, but we have already plowed that field. Millions of men the world over living on the verge of starvation in urban squalor have not descended to the same levels of antisocial behavior we see in the inner cities of the United States, particularly to the "massive abandonment of their wives and children" (Patterson, 1998:25). Moreover, when compared to whites equally economically deprived, blacks still commit significantly more crime (Sampson, 1995).

Is there any way that living in poverty can be seen as exerting at least some independent effect on crime rates without resorting to the simplistic "poverty causes crime" argument and while still acknowledging that poverty has its own causes? Yes there is, for being poor and black does not equate with being poor and white: "even given the same objective socioeconomic status, blacks and whites face vastly different environments in which to live, work, and raise their children" (Sampson & Wilson, 2000:152). White poverty is dispersed across different neighborhoods whereas black poverty is highly concentrated in single,

racially segregated, neighborhoods (Sampson, 1995). The concentration of poor blacks in one place has been called hyper-ghettoization (Sampson & Wilson, 2000). Hyper-ghettoization breeds even higher concentrations of poverty and racial segregation as those who are able to flee the neighborhood, making room for more undesirables to move in to create even higher rates of antisocial behavior. It is in this way that ghettoization and crime feed on one another.

Nevertheless, as Patterson pointed out above, millions of people the world over live in racially, ethnically, or socioeconomically segregated areas without resorting to the kinds of behavior prevalent in our inner cities. Coincidentally, Hyper-ghettoization has been invoked as an explanation for *low* crime rates among Jews, Chinese, and Japanese: "what is striking is that the argument used...to explain *low* crime rates among Orientals—namely, being separate from the larger society—has been the same argument used to explain *high* rates among blacks" (Wilson & Hernnstein, 1985:474; emphasis original). Poverty, not even poverty in the context of hyper-ghettoization, can adequately account for the multiple pathologies of the inner city.

Other racial/ethnic groups, however, have not had to endure the experience of slavery, neither have they formed oppositional cultures in response to oppression the way African Americans have, or succumbed to the cult of victimization. In addition to these cultural differences, we cannot ignore the distributional hypothesis claim that group averages on important traits may also interact with ecological differences to account for high rates of antisocial behavior in the inner cities.

INDIVIDUAL CHARACTERISTICS AND NEIGHBORHOOD CHARACTERISTICS

To adequately test any "people versus places" argument it is necessary to obtain individual and neighborhood measures so that we can assess the effects of neighborhoods holding individual characteristics constant and the effects of individual characteristics holding neighborhoods constant. Not doing this has been a major flaw in ecological research, which has tended to rely only on demographic data. Stewart, Simons, and Conger (2002) rectified this oversight and found no independent neighborhood effects among black children in Georgia and Iowa controlling for other structural and individual factors. This study emphasized the importance of parental quality, having violent peers, and adopting an oppositional street code. Of course, living in a violent neighborhood is a major factor in having violent peers and adopting an oppositional street code, so these factors may be validly considered neighborhood effects.

Wikstrom and Loeber's (2000) study of serious juvenile offending did discover neighborhood effects, but also that they were mediated by individual differences. They studied characteristics of the 90 neighborhoods of Pittsburgh, Pennsylvania in conjunction with selected individual-level characteristics of 1,530 juvenile boys residing in them. Neighborhoods were divided into advantaged, middle-range, disadvantaged-nonpublic and disadvantaged-public according to a variety of demographic indicators. The percentage of families living in poverty ranged from zero in the most advantaged neighborhood to 86 in the most disadvantaged neighborhood. Consistent with the hyper-ghettoization argument, fully 99 percent of the residents in the most disadvantaged neighborhood were African American, 72

percent of its families were on welfare, and 54 percent were receiving unemployment benefits. In the most advantaged neighborhoods, zero percent of residents were African American, and zero percent of its families were on welfare or unemployment.

The percentages of youths self-reporting serious offending in each of the four neighborhood types were was 30.9, 43.4, 50.5, and 63.7, respectively, which would have constituted unambiguous evidence of neighborhood effects by early human ecologists. Neighborhood effects were less clear, however, when individual risk and protective characteristics such as impulsiveness, guilt proneness, and parental supervision are taken into account. Based on these measures, boys were placed into *high risk*, *balanced*, and *high protective* categories. Boys at low risk for antisocial behavior were most concentrated in the advantaged environments, and boys at high risk wer concentrated in disadvantaged neighborhoods. The percentage of boys scoring high on the *protective index* in each of the four neighborhood categories was 24.1, 18.0, 6.4, and 5.4, respectively. The percentage of boys scoring high on the *risk index* in those neighborhoods was 13.3, 19.9, 28.8, and 34.9, respectively.

There were no neighborhood effects among boys at high risk for antisocial behavior, with high-risk boys committing antisocial acts at about the same level in all neighborhoods. The percentage of boys in the advantaged neighborhood category (77.8%) reporting serious delinquency actually exceeded the percentage of boys in the most disadvantaged neighborhood reporting it (70%). Among boys in the *high protective* category, the percentages reporting committing serious offenses ranged from 11.1% in the most advantaged neighborhood category, to 37.5 in the most disadvantaged neighborhood category. For boys in the *balanced* category, the percentages were 27.3, 40.1, 48.5, and 60.7 across neighborhood categories. Mindful of the pitfalls of self-report data relevant to over- and under-reporting, these data do suggest neighborhood effects for boys at low to medium risk for antisocial behavior, but none for boys at high risk.

Most interesting about this study is that neighborhood characteristics did not predict early onset delinquent behavior, although they did predict adolescent onset. Significantly, early onset of antisocial behavior is associated with a number of heritable cognitive and temperamental deficits, but adolescent onset antisocial behavior is not (Moffitt & Walsh, 2003). This is important because early onset antisocial behavior is predictive of offending behavior across the lifecourse as opposed to adolescence onset behavior, which tends to cease in late adolescence-early adulthood.

HONOR SUBCULTURES

Why is it that low-risk and "balanced" boys find it difficult to avoid antisocial behavior in the worst of our neighborhoods? Elijah Anderson's ethnographic studies of Philadelphia's black neighborhoods led him to the opinion that although there are still many of what he calls "decent" families in the worst of neighborhoods, the cultural ambience is set by what he calls "street" families. "Decent" individuals often have to adopt the oppositional attitudes and behavior of "street" individuals to survive. Valuing education and striving for upward mobility is viewed as "dissing" the neighborhood, and street people often "mount a policing effort to keep their decent counterparts from 'selling out' or 'acting white'" (Anderson,

1999:65). The violent oppositional subculture spurns everything mainstream America values, as in "the rap music that encourages its young listeners to kill cops, to rape, and the like" (Anderson, 1999:107). James Clarke describes the lengths to which young blacks will go to avoid "acting white":

The mood of distrust and anger towards whites, so evident in the words and actions of inner-city blacks, has carried over from generation to generation. That contempt for white mainstream values and culture is so deeply entrenched among inner-city children, a black marketing research firm discovered in 1992, that many of them would rather risk death than be ostracized by peers for endorsing values that are perceived as white (Clarke, 1996:287).

Anderson characterizes the street code in the inner city as operating in accord with the "law of the jungle" (1999:84). Violent posturing among males is a "campaign for respect" (1999:68), and as such, "there are always people looking around for a fight in order to increase their share of respect—or 'juice'" (1999:73). The search for this respect consumes inner city males them because it is "the core of the person's self-esteem" (1999:66).

Anderson's emphasis on respect, status, and self-esteem, and on his assessment the amount of sexual activity a male can achieve is "taken quite seriously as a measure of the boy's worth" (1999:150), has a distinctive evolutionary ring to it. Far from being pathological in a naturalistic sense, the behavior of inner-city males fits exactly what evolutionary biologists would expect given the cultural situation in which they find themselves (Walsh, 2003). To further understand the phenomenon of inner city violence from an evolutionary perspective we should add a further designation—honor subculture—to the previously employed descriptors (violent and oppositional) to depict inner city black culture.

Honor subcultures "are communities in which young men are hypersensitive to insult, rushing to defend their reputations in dominance contests" (Mazur & Booth 1998:362). Taking matters into one's own hands is the honorable and manly thing to do in honor subcultures and the only way to obtain street respect, especially since law enforcement had traditionally ignored black-on-black crime. In honor subcultures status is a zero-sum game because gaining status requires taking it from somebody else (Anderson, 1999). Assaults and homicides are typically the result of trivial challenges to a young man's reputation, and if these acts are staged in front of an audience composed of friends of both the assailant and victim, the actor can squeeze all the "juice" possible out of the incident (Baumeister, Smart, & Boden, 1996; Wilson & Daly, 1985). According to Quinsey (2002:3), this "in your face" jousting of poor inner city youths supports the evolutionary interpretation that, "...crime is functionally related to inter male competition that has its ultimate roots in reproductive rivalry."

Status has positive Darwinian fitness consequences for males in almost all sexually reproducing species, which is why males have been designed by natural selection to seek it (Alcock, 1998; Daly, 1996). How status is sought among human males depends on cultural context. The cost/benefit ratio of violent dominance competitions among culturally disadvantaged males for trivial reasons defies rational choice assumptions because competitors are risking injury or death in defense of an intangible, but when viewed by the light of evolutionary theory the logic becomes clear. The more young males come to devalue the future, the more risks they are willing to take to obtain their share of street respect, which provides them with enhanced mating opportunities. This does not mean that such behavior is

necessarily adaptive in modern environments, or that these young males are consciously motivated by reproductive success or even by increased sexual opportunities—status is valued for its own sake. Evolution is a mindless algorithmic process that designs neurological and physiological mechanisms that motivate organisms to seek the immediate means of obtaining specific goals. It does not directly motivate us to seek reproductive success, it only motivates us to seek the highly pleasurable means that more readily led to reproductive success in the conditions in which our species evolved its most human characteristics.

The human mind was crafted to solve problems encountered during the Pleistocene epoch and beyond. These ancient environments presented our ancestors with very different challenges from those faced by young males in modern inner cities. Nonetheless, modern males carry the same algorithms in their heads urging them to seek status as means to the reproductive end, and they do so in ways available to them in their current environments. In highly organized cultures with established and legitimate status hierarchies, male-male competition for status is rarely violent. Rather, it involves competition for wealth and prestige in socially prescribed ways, the acquisition of which draws females to them (Barkow, 1989). Many of the old gang theorists wrote of the inability of lower-class youths to attain legitimate status and thus to define as meritorious "the characteristics they *do* possess, the kinds of conduct of which they *are* capable (Cohen, 1955:66, emphasis original). Not being willing and/or able to engage in socially prescribed status competitions, inner-city youths revert to more ancient and violent methods to achieve it.

Status-related violence is not unique to disadvantaged males, however. Daly and Wilson point out that dueling over trivial matters of "honor," was ubiquitous among the aristocracy of Europe and the American South until fairly recently, and that killing has been "a decided social asset in many, perhaps most, prestate societies" (1988:129). Duels about "matters of honor" were instrumental in enhancing the duelists' reputation, thus providing them public validation of their self-worth (Baumeister, Smart, & Boden, 1996). Only with the establishment of modern civilization and law was dueling as a way of settling disputes brought into disrepute. If young men are not restrained by the force of law: "dominance contests become ubiquitous, the hallmark of male-male interaction" (Mazur & Booth, 1998:360). Thus, although murder and mayhem in pursuit of status is morally unacceptable, from an evolutionary and historical perspective, there is nothing unusual or "unnatural" about violent status competitions in the inner city.

GANGS, SELF-ESTEEM, AND PROTEST MASCULINITY

According to the National Institute of Justice's survey of the racial/ethnic composition of street gangs in the early 1990's, 48 percent of gangs in the United States were African American, 43 percent Hispanic, 5.2 percent Asian, and 4.4 percent white (Curry, Ball, & Fox, 1994:9). Because many youths in the inner cities lack a stable family structure, they turn to gangs to meet affiliation and other needs normally met by families and neighborhood institutions such as the church and employers. Gangs function for their members as a family, a friendship and play group, a protective agency, an educational institution, and an employer. Gang members advertise their "specialness," through the wearing of gang colors and tattoos, the use of gang signals and of sometimes severe initiation rites. Gangs have wide practical

and emotional appeal for inner- city youths, providing them with income, camaraderie, protection from other gangs, excitement, and self-esteem. Gang membership also confers valuable neighborhood status, which enhances members' status with neighborhood females also. Predictably, enhanced status leads to gang members having more sexual partners than non-gang members in the same neighborhood, and in gang leaders (the alpha males) having more sex partners than their gang subordinates (Padilla, 1992; Palmer & Tilley, 1995).

The gang is the core embodiment of underclass values, affording its members opportunities to exercise "hyper-masculine behavior" (Albanese & Pursely, 1993:209). Many theorists view hyper-masculine behavior as a function the absence of fathers in boys' lives or a general lack of attachment experiences (Hall, 2002; Hayslett-McCall & Bernard, 2002). The negative effects of father absence are not due to its non-normative nature in Western societies because similar effects are found in cultures where children *normatively* grow up in mother/child households separate from their fathers. Surveying the anthropological literature, Ember and Ember (1998:14) state that: "Societies in which children are reared in mother-child households or the father spends little time in child care tend to have more physical violence by males than do societies in which fathers are mostly around." Ember and Ember also note that boys reared in father-absent cultures acquire a "supermasculine" male identity, or "protest masculinity" as Draper and Harpending (1988) have called it.

One of the consequences of hyper-masculinity is the elevated and exaggerated sense of self-worth that accrues to those practicing it. It used to be fashionable to assert that blacks committed crimes, especially violent ones, because the historical indignities of slavery and Jim Crow racism saddled them with low self-esteem. Yet, almost all research on race and self-esteem has shown African American self-esteem to be equal or higher than that of whites (reviewed in Baumeister, Smart, & Boden, 1996). Anyone who has worked in the criminal justice trenches knows that, with the exception of most child molesters and wife beaters, insecure and self-deprecating individuals are greatly underrepresented among criminal populations. Most street violence is committed by individuals who have unrealistically inflated views of themselves, but which are heavily dependent on others for their validation (Baumeister, Smart, & Boden, 1996). Most criminally involved individuals have enormous egos and a tremendous sense of self- importance and entitlement (Hare, 1993; Sharp, 2000).

It is this narcissistic view of the self that explodes in indignant fury when confronted with another's contrary appraisal. Another's negative appraisal of self will lead to violence against that person because the reputation as a "bad ass" is the most valued reputation one can acquire in an honor subculture (Anderson, 1999; Katz, 1988), and the only acceptable way to protect it is through violence. Such violent individuals do not only respond to negative appraisals of themselves by others, they also go out looking for opportunities to validate their "bad ass" reputations. If the search leads to shows of deference from others, it can be "highly soothing, contributing to a sense of security, comfort, self confidence, and self-respect...Many innercity young men in particular crave respect to such a degree that they will risk their lives to attain it" (Anderson, 1994:89). The violent lengths to which inner-city males will go is found in the words of Sanyka Shakur, a former leader of the South Central Los Angeles *Gangster Crips*:

Our war, like most gang wars, was not fought for territory or any specific goal other than the destruction of individuals, of human beings. The idea was to drop enough bodies, cause enough terror and suffering so that they'd come to their senses and realize that we were the wrong set to fuck with, Their goal, I'm sure, was the same (quoted in Wrangham & Peterson, 1998:193).

TESTOSTERONE AND SEROTONIN IN HONOR SUBCULTURES

According to the U.S. Census Bureau (McKinnon & Humes, 1999), a larger proportion of African American males (36%) were under age 18 in 1999 than white males (25%). Because adolescent males of all races and ethnicities are more prone to violent behavior than older males, this demographic difference must account for a healthy portion of the racial differences in violent behavior. Young males are swimming in testosterone, and as Martin Daly (1996:163) has written, "There are many reasons to think that we have been designed to be maximally competitive and conflictual in young adulthood." By "designed," Daly means that natural selection has equipped organisms with neuroendocrinal mechanisms to help them to respond to challenges to their reproductive efforts in ways dictated by their environments. Fluctuating levels of testosterone and serotonin feature prominently among these evolved mechanisms, and both mechanisms have been implicated in many forms of antisocial behavior and dominance seeking (Comings, 2003; Ellis, 2003). Violence (at least credible threats of violence) is intimately related to reproductive success in almost all animal species through it role in attaining status and dominance, although most status competitions in wellordered social groups are not violent. However, when status hierarchies are in disarray and behavioral constraints are weak violence competition for respect becomes prevalent.

Testosterone is the major androgen responsible for the development of masculine physical and behavioral features. Testosterone energizes male competition for status and for the mating opportunities that accompany its attainment in all animals. As previously noted, the same traits associated with mating effort and dominance seeking are also traits related to criminal and other forms of antisocial behavior. Predictably, testosterone is significantly related to a number of problem behaviors, including violent crime, spousal abuse, and general rebelliousness, although its independent effects are quite modest (Kemper, 1990; Mazur & Booth, 1998). No one claims that testosterone *causes* these problem behaviors; it merely facilitates them for individuals inclined to them for whatever reason. Testosterone is like fuel in the gas tank—it does not cause you to want to go to Toledo, but it helps to makes the trip possible.

Most of the endocrinal evidence suggests that African Americans have higher average levels of testosterone than European or Asian Americans (Ellis & Nyborg, 1992; Lynn 1990; Rose et al., 1986). It is unclear whether the black/white difference (Asians have been less often compared) reflects a true racial basal difference or reciprocity (feedback) effects. The basal model argues that individual testosterone levels are genetically determined and more or less consistent across time (excluding aging effects). Reliability coefficients for testosterone measures taken at different times tend to support the basal model (Booth & Dabbs, 1993), as does the ability to predict behavior from testosterone levels measured at a single point in time (Mazur & Booth, 1998).

As opposed to the static basal model, the reciprocal model is a dynamic one that proposes that the effects of testosterone are not only mediated by the environment, but also that the environment causes testosterone levels to fluctuate up and down in response to various situations. Testosterone has a heritability coefficient of about 0.60 (Harris, Vernon &

Boomsma, 1998), which means that at least 40 percent of the variation in testosterone levels is accounted for by environmental factors. Spectators at sporting events, for instance, experience a rise in testosterone if their team wins and a decrease if it loses, although the changes are short-lived (Kemper, 1990). If testosterone is responsive to vicarious competition, it must be more so in response to real competitive challenges, especially challenges to a person's status and respect, and especially when such challenges occur in violent subcultures. It is for this reason that Mazur and Booth (1998) conclude that the reciprocal model coheres best with reality in terms of explaining the relationship between testosterone and behavior. Varying levels of environmentally induced testosterone, of course, can be superimposed on heritable basal levels, so the basal and reciprocal models need not be considered mutually exclusive.

The reciprocal model suggests that higher testosterone levels found among African American males may reflect the greater status challenges they face in their subcultures rather than true racial differences in baseline levels. Although Mazur (1995) found significant racial differences in testosterone in a sample of 4,462 army veterans, no racial differences were found among sub-samples of older males, college graduates, and males raised outside honor subcultures. Younger black males with little education, those most likely to have participated in honor subcultures in civilian life, largely accounted for the significantly higher black testosterone levels relative to whites.

Most of the 28 commentators on Mazur and Booth's (1998) target article were more receptive to the reciprocal model than to the basal model. However, levels of circulating testosterone only inform us of the amounts available, not the efficiency with which it is used at its target tissue. Remaining with our fuel analogy, just as important as how much gas is in the tank is the efficiency (the number and distribution of receptors for the molecule) of that which receives it—the carburetor. The "carburetor" for testosterone is the androgen receptor (AR) gene, which comes with different repeat frequencies (Krithivas, et al., 1999). Males with a shorter repeat version (< 22 repeats) of the AR gene have a greater binding affinity for androgens, thus making them more receptive to its effects. All studies done thus far indicate that African American males have a greater frequency (about 0.76) of the short version of the AR gene than whites (about 0.62) or Asians (about 0.55) (reviewed in Nelson & White, 2002).

The AR gene data may render the basal/reciprocal argument redundant. If black physiology is more receptive to the same level of testosterone than white or Asian physiology, identical levels of the hormone will have stronger activating effects for blacks than for other races (which is one of the reasons why blacks suffer more testosterone-related diseases such as prostate cancer at rates far exceeding white and Asian rates). Nevertheless, although we can assign testosterone a major causal factor for prostate cancer, we cannot do likewise with complex behaviors. Talking about the effects of testosterone on behavior is meaningless outside of an environmental context. Testosterone exaggerates preexisting patterns of behavior in response to social triggers, period. Forced to choose between testosterone and the environment as to which is more important to understanding violence, the environment wins easily.

Adding Serotonin to the Mix Serotonin is a neurotransmitter/modulator with a heritability coefficient ranging between 0.55 and 0.66 (Hur & Bouchard, 1997; Tellegen et al., 1988). It plays a vital role in behavioral inhibition (self-control, constraint) and promotes confidence and self-esteem (Brammer, Raleigh, & McGuire, 1994; Depue & Collins, 1999). Among non-

human primates in naturalistic settings, the highest ranking males have the highest levels of serotonin and the lowest ranking have the lowest levels. By artificially manipulating serotonin levels in experimental situations, researchers have shown that serotonin underlies primate status hierarchies (Raleigh, et al., 1991; Wrangham & Peterson, 1996). Low-ranking males in established hierarchies defer with little fuss to the demands of higher-ranking males, but when the hierarchy is disrupted it is the low-constraint (low serotonin) males who become the most aggressive in the competition for available resources. Males who succeed in establishing a new status hierarchy through forming alliances and aggressively pursuing their goals find that their serotonin rises to levels commensurate with their new position (Brammer, Raleigh, & McGuire, 1994), which again illustrates how secretion patterns of biochemical substances are calibrated by the environment.

There are racial differences in the percentage of polymorphisms (see note 3 in Chapter 1) in the serotonin transporter gene, ranging from a low of 17 percent among Japanese to 70 percent among African Americans (Galernter, et al., 1997; Lin, 2001), but there is no consensus among geneticists whether or not "genetic polymorphisms might lead to differential vulnerability of ethnic differences in psychopathology" (Lin, 2001:17), although they do lead to vulnerability among individuals (Plomin, et al., 2001). However, experiments with rhesus monkeys have shown that peer raised monkeys (read "fatherless, gang raised children" for humans) have lower concentrations of the serotonin metabolite 5-HIAA than parentally raised monkeys (Bennett, et al., 2002; Kreamer, et al., 1998). These studies again point to important environmental effects on the functioning of biological systems, particularly the deleterious effects of parental deprivation to which inner city African Americans are especially vulnerable.

Low serotonin is associated with negative emotionality—the tendency to experience many situations as aversive and to respond to them with irritation and anger—which has been strongly related to self-reported and official criminal behavior "across countries, genders, races, and methods" (Caspi, et al., 1994). A person high on negative emotionality and low on constraint is at high risk for violent acting out. Caspi and his colleagues (1994) inform us that low serotonin underlies both low self-control and negative emotionality, but also that both are adversely affected by child abuse and neglect. Lowering serotonin levels among the abused and neglected may be the body's way of preventing organisms from challenging a powerful abuser when a successful challenge seems highly unlikely and which would invite further abuse. Remove the constraints imposed by a powerful controller, however, and those same serotonin mechanisms equip organisms to sometimes take violent risks to elevate their status. In other words, natural selection has equipped us with mechanisms that caution us to maintain our "place" in established status hierarchies, but also that exhort us to try our luck in moving up the ladder in the absence of strong restraining forces

The above suggests that elevated testosterone is most likely to result in violence when it is present in conjunction with low serotonin (Fox, 1998). As disadvantaged males "try their luck," they do so against others very much like themselves (high testosterone/low serotonin) who are likely to interpret frustration more aversively and respond more impulsively. Such a combination increases the likelihood of responding violently to events that thwart attempts to gain status in the group Bernhardt (1997). In short, African American males living in honor subcultures may be responding to their situation in ways designed by nature. This is not an exculpatory statement; immoral behavior is not excused by its natural (i.e., designed by natural selection) origins.

CHILD ABUSE AND NEGLECT AND THE DEVELOPING BRAIN

Powerful evidence suggests that human infants have evolved neurological and endocrine structures that demand the formation of affectionate bonds with loving caretakers (Geary & Flinn, 2001; Perry & Pollard, 1998; Shore, 1997). As David Rowe (1992:402) has pointed out, "the affection dimension of child rearing appears to pull in more correlates with child behavior than any other dimension." It is therefore no surprise that one of the best documented correlates of violence and other forms of antisocial behavior is child abuse and neglect, the polar opposite of affectionate bonding (Heck & Walsh, 2001; Rutter, Giller, & Hagell, 1998). Because the inner cities are violent places in general, it is no surprise that we find child abuse/neglect to be more prevalent there than elsewhere. The Child Trends Data Bank (CTDB, 2002a) reported that of the 879,000 known maltreatment cases in 2000, Anglos committed 51 percent, blacks 25 percent, American Indians/Alaska Natives 2 percent, and Asians/Pacific Islanders 1 percent. African Americans and American Indians/Alaska Natives were overrepresented in terms of their proportion of the population and Anglos and Asians/Pacific Islanders were underrepresented. Even more alarmingly, infant homicide rates per 100,000 in 2000 were African American, 25.6, Hispanic 7.3, and Anglo 6.0 (CTDB, 2002b).

Patterson (1998) attributes the high rate of abuse and neglect among inner-city blacks to single parenthood, isolation for kinfolk, the lack of social support, and high rates of mothers' temporary cohabitation with adult males. A nationwide study found that children not living with both biological parents were 9.2 times more likely to witness family violence, 4.6 times more likely to be maltreated, and 4.3 times more likely to be sexually assaulted than children living with two biological parents (Turner, Finkelhor, & Ormond, 2006). In addition to poverty and the numerous other privations suffered by African American children, abuse and neglect add further burdens as well as imposing an additional risk factor for engaging in violent behavior themselves in the future. Abuse and neglect of its children may therefore be a major way in which the culture of violence perpetuates itself across the generations.

Although social scientists have explored child abuse and neglect at great length, they rarely address specific mechanisms (other than modeling) by which abuse and neglect affect the probability of future antisocial behavior among those victimized by it. Witnesses the violence of others does influence those who witness it. One survey of young child under six years of age conducted in an inner city pediatric clinic found that 10 percent of them had witnessed a shooting or stabbing, and almost all of them had witnessed violence many times in the home or in the neighborhood (Taylor, et al., 1994). There are reasons more palpable than modeling or mimicry, however, that help to explain the aftereffects of abuse and neglect found in the neurological literature. Social science must be aware of the evidence relating to the neurological consequences of abuse and neglect that go beyond obvious brain damage due to head injuries.

Neuroscience tells us that early childhood environmental experiences are *physically* captured in the brain and tend to remain as patterns of neuronal connections that will bias behavior in directions consistent with those experiences (Pinel, 2000, Teicher, 2002). Although 60 to 70 percent of human genes are involved in brain development (Shore, 1997), even that number raised to the tenth power would be hugely insufficient to specify the trillions of connections the human brain will eventually make among its approximately 100

billion communicating neurons. Although genes specify and build the various anatomical and chemical components of the brain and rough out approximate connective patterns, much of the specific connective wiring is what neuroscientists call "experience dependent" development (Black & Greenough, 1997; Depue & Collins, 1999). In a very real sense, the brain constructs itself from the experiences it encounters much like the course of a river is determined by the topography it encounters on its trip to the sea.

Neuronal connections are communicative structures that operate by releasing various neurotransmitters across synaptic gaps. Whether a particular neuronal pathway is retained or eliminated depends on the emotional strength of environmental experiences and the frequency with which they occur. Strong emotional experiences such as those accompanying abuse and neglect provoke especially strong nerve impulses, and if these impulses are frequent, the neurons involved become more sensitive and responsive to similar stimuli in the future (Shi, et al., 2004). Frequently activated neurons are subsequently electrochemically primed to fire at lower stimulus thresholds once voltage-dependant neurological tracks have been laid down (Pinel, 2000). In other words, brains primed by the stress of early abuse/neglect will be hypervigilant to threats, will take offense easily, and will readily respond more aggressively to real or imagined threats than brains primed by more pleasant experiences.

The most active period of "environmentally-wiring" the brain is infancy and early childhood (recall Garlick's discussion of brain plasticity in Chapter 5). Infants have a large excess of synaptic connections; the number and density of connections are at eight months of age are more numerous than they will ever be (Rakic, 1996). About half of these connections will eventually be eliminated via a selection process referred to as *neural Darwinism* (Edleman, 1992; 1998). Just as natural selection requires a large excess of genetic variation to work with, neuronal selection requires a large excess of synaptic connections with which to work. Genes are selected for retention or elimination in evolutionary time based on how well the morphological, physiological, or behavioral traits they underlie "fit" the organism into its environment. Similarly, neuronal connections are selected for retention or elimination according to how functionally viable they prove to be in the organism's environment. A pattern of connections thus serves as a neurological template of what the organism can expect from its environment.

Given that the excess of synaptic connections is greatest during the earliest years of life, it follows that environmental experiences are particularly salient during this period. The competition for synaptic space: "is biased in favor of the [neuron] populations that receive the greatest amount of stimulation during early development" (Levine, 1993:52). As Perry and Pollard (1998:36) point out: "Experience in adults *alters* the *organized* brain, but in infants and children it *organizes* the *developing* brain" (emphasis added). In brains organized by stressful and traumatic experiences, future experiences, even neutral or positive ones, will tend to be relayed along the same negative neural pathways etched out by early experiences because pathways established in early life are more resistant to pruning than pathways laid down later in life.

In addition to specifying the retention or elimination of neuronal pathways, chronic stress produced by abuse and neglect can produce neuron death via the frequent production of stress hormones, particularly cortisone (Teicher, et al., 1997). Children with chronic high levels of these hormones have been shown to experience more cognitive, motor, and social development delays than other children (Gunnar, 1996). A recent behavior genetic study showed that cortisone-induced neuronal loss reduced IQ by an average of 8 IQ points

independent of latent genetic influences (Koenen, et al, 2003). The higher level of abuse and neglect and other forms of violence in the inner city may not only perpetuate violence, it may also be partially to blame for the lower average academic performance among blacks. To reiterate, the effects on the developing brain are real physical effects, not simply psychological ones. Electrochemically stabilized neuronal pathways will intrude into our transactions with others for good or ill across the lifespan. This is why child abuse and neglect is such a tragedy, and why nurturing is so important.³

ABUSE/NEGLECT AND MAOA

Most abused and neglected children do not grow up to be violent themselves (Caspi, et al., 2002), which suggests that something else must be added to the mix with abuse/neglect to result in later violent criminal behavior. One candidate among many others for that "something else" is a gene that encodes for the activity level of an enzyme called monoamine oxidase A (MAOA). This enzyme acts in the brain to maintain the healthy balance of several different neurotransmitters, including serotonin and dopamine, by breaking them down and recycling the excess. Low levels of MAOA may be insufficient to clear away the "chemical debris" within the synaptic spaces, which will then interfere with subsequent neurotransmissions. Previous studies have found negative associations between MAO (mainly with a slightly different MAO called MAOB) levels and various correlates of criminal behavior such as impulsiveness, hyperactivity, substance abuse, and learning disabilities (Ellis, 1991), and with criminal and antisocial behavior itself (Ellis & Walsh, 2000).

A team of researchers examined the relationship between child abuse/neglect and MAOA among a New Zealand birth cohort followed from birth to age 26 (Caspi, et al., 2002). Records were available indicating which subjects had suffered childhood maltreatment. Maltreatment included rejection by the child's mother, frequent changes of primary caregiver, physical abuse resulting in injury, and sexual abuse. The combination of maltreatment and low MAOA predicted four antisocial outcomes:

- (1) The psychiatric diagnosis of adolescent conduct disorder (persistent fighting, bullying, lying, stealing, cruelty to people or animals, vandalism, and disobeying rules).
- (2) official court records of conviction for violent offenses (assault, robbery, rape, domestic violence, homicide).
- (3) aggressive personality traits (willingness to harm others for own advantage, interest in and enjoyment of violent material).
- (4) symptoms of adult antisocial personality disorder (a long-term history of repeated law violations, deceitfulness, conning, impulsivity, physical aggression, and irresponsibility with respect to jobs, spouse, or children, plus lack of remorse)

The most dramatic of the findings of this study was that the odds of subjects with a combination of maltreatment and low MAOA to be convicted of a violent crime was 9.8 times greater than the odds of similarly low MAOA subjects who were not maltreated to have

been convicted of a violent crime. These subjects also self-reported a significantly greater disposition for violence than low MAOA/non-maltreated subjects. Maltreatment did not result in a significantly elevated risk for violent conviction nor for a greater propensity to self-report violent disposition among high MAOA subjects.

This study provides evidence that genotypes moderate children's sensitivity to environmental insults (gene x environment interaction) and partly explains why not all victims of maltreatment grow up to victimize others. Although the low MAOA/maltreated group constituted only 12 percent of the male birth cohort, they accounted for 44 percent of its violent convictions. We should note that low MAOA alone did not predict antisocial outcomes; its propensity to increase the risk for violence apparently only exists if "activated" by child maltreatment. Maltreatment by itself also did not significantly increase the probability of having a violent conviction.

The New Zealand study has relevance for understanding African American violent crime in two ways. First, as we have seen, abuse and neglect in the black community is at least twice as prevalent as in the white or Asian communities, and the more severe the abuse (e.g., homicide) the greater the racial gap becomes. Secondly, on average, black males have about 10 to 15 percent less MAO than white males (Ellis, 1991; Weyler, Hsu, & Breakfield, 1990). It is ironic and tragic that the group burdened most by an environmental risk (child abuse and neglect) for violent behavior also suffers a biological liability (lower average MAO) for the same behavior. It is also unfortunate that sociologically trained criminologists tend to overlook the kind of gene x environment interaction demonstrated in the New Zealand study.

CONCLUSION

America's inner cities are violent and socially disorganized places that cannot fail to influence the behavior of those growing up in them. Yet, it is too easy to fall into the trap of viewing human beings as mere pawns of their environments; people make their own environments as surely as environments make people. Millions of black Americans have made decent environments for themselves, and even in the ghettoes, there are "decent" families, as Elijah Anderson (1999) has pointed out. Children, of course, must accept the environments their parents provide them with, and those environments will have a huge impact on their futures, although individual differences, via reactive and active gene/environment correlations and gene x environment interactions, will channel the environmental affects in varying directions.

There can be little doubt that the inner city neighborhoods in which many blacks grow up strongly bias the direction many youths will take. Neighborhoods do matter, and they matter in proportion to how far they depart from the control of caring, responsible, and moral institutions and individuals that socialize the young and impart in them their own caring, responsibility, and morality. If these characteristics are not instilled in the young, the default option—predatory selfishness—runs rampant.

Serotonin, testosterone, and MAO are strongly implicated in a variety of aggressive, violent, and dominance/status-seeking behaviors. Regardless of the specific biological and environmental pathways to violence are, they are always mediated by the individual's phenomenology. Largely because of lack of paternal influence, inner cites tend to breed

"hypermasculine" males with bloated favorable images of themselves for which they are constantly seeking validation from others. This concern for status and dominance sought at the expense of others in honor subcultures often leads to deadly violence. Many of the young individuals who are caught up in such behavior were victims of abuse and neglect as children, and as we have seen, such maltreatment can leave a permanent *physical* imprint on the brain.

ENDNOTES

¹ It is interesting to note 17th century British philosopher Thomas Hobbes' "three principle causes of a quarrel" –competition, diffidence, and glory—in this regard. "The first use violence to make themselves masters of other men's persons, wives, children, and cattle [gain]; the second, to defend them [safety]; the third, for trifles, as a word, a smile, a different opinion, and any other sign of undervalue [reputation]" (cited in Pinker, 2002:318).

² There are some contradictions in the literature on this matter. For instance, Wu and her colleagues (1995) found that testosterone levels were highest in Asians, lowest in whites, and intermediate in blacks. However, the sample was composed of old men (mean age = 69.9) suffering from prostate cancer. The atypical finding may be reflecting the unusual nature of the sample. The musculature, athletic ability, secondary sexual characteristics, voice tone, aggressiveness, and other characteristics associated with testosterone levels all point to the black < white < Asian gradient in testosterone.

³ I cannot begin to do justice to the huge literature on the neurological consequences of child abuse and neglect here. For reviews and summaries of this literature see, Glaser, 2000, Shore, 1997, and Walsh, 2002, chapter 4.

EVOLUTIONARY EXPLANATIONS FOR RACIAL BEHAVIORAL VARIATION

BEHAVIOR AND EVOLUTION

Understanding why individuals of African descent engage in more antisocial behavior than other racial groups would be less problematic if we focused solely on American blacks. The evidence discussed in Chapter 2, however, suggests that the black>white>Asian crime pattern is not unique to the United States, and that we cannot attribute black crime rates outside the United States to slavery, oppositional subcultures, the cult of victimhood, or to any other phenomenon that is part of the black experience in the United States. Most British and Canadian blacks are relatively recent immigrants to those countries, but the formation of oppositional cultures, the presence of a victim mentality, or any of the other putative causes of the high black crime rate, are not precluded in any country. If race is socially salient in these countries and doubtless it is, and if prejudicial practices exist, we could still invoke cultural explanations, although they would be a hard sell when it comes to societies where blacks are in the majority.

While biosocial factors play a large role in explaining behavioral variance within a cultural group, variance in behavior that differs between cultures is probably almost all accounted for by cultural differences. Any argument that appeals to culture, however, must eventually appeal to supracultural factors if it is not to sink into tautology. If some form of behavior (e.g., criminal behavior) in one group remains constantly high relative to other groups across different cultures, it is necessary to search for explanations that go beyond culture. We must not ignore culture, but as Jerome Barkow (1992:635) reminds us: "psychology underlies culture and society, and biological evolution underlies psychology." This chapter peers beneath culture and society to examine the evolutionary evidence for behavioral differences between groups. This evidence: "includes the fossil record of human evolution, non-human primate behaviour, and the current behavioural and morphological characteristics of our species" (Barkow: 1989:327).

Such thinking tends to evoke strong criticism from sociologists, although the content of their criticism makes it plain that it is not being offered informed by any semblance of biological insight, for most sociologists are not simply oblivious to biology; "they are militantly and proudly ignorant" (van den Berghe, 1990:177). It is axiomatic that behavioral

patterns of all living things are ultimately the result of evolutionary processes and that human nature is the sum of human adaptations to ancestral environments regardless of whether or not we are ignorant of the fact. Just as there is no *scientifically* viable alternative explanation to evolution by natural and sexual selection for anatomical and physiological design, there is no other scientifically viable alternative explanation for basic behavioral design. There are those who may concede that while the basic human behavioral repertoire is a product of natural selection and other evolutionary processes, because humans have developed culture and possess the cognitive skills to override biological dispositions, we have freed ourselves from evolutionary constraints (Ruffie, 1986). Cultural explanations of behavioral differences between members of different cultures are invaluable, and probably right as far as they go. All evolutionary scientists would doubtless agree that human cultures add immeasurable layers of complexity to our basic design, but cultural explanations are proximate-level explanations, and are incomplete without ultimate-level explanations. Ultimate level (evolutionary) explanations seek to complement, not supplant or compete with, proximate level (genetic, biological, structural, situational, phenomenological, etc) explanations.

Commenting on the quasi-existentialist notion that humans have no nature and thus evolutionary analyses are unnecessary, Kenrick and Simpson (1997:1) state that: "to study any animal species while refusing to consider the evolved adaptive significance of their behavior would be considered pure folly...unless the species in question is *Homo sapiens*." John Alcock (2001:223) makes a similar point in stating:

...to say that human behavior and our other attributes cannot be analyzed in evolutionary terms requires the acceptance of a genuinely bizarre position, namely, that we alone among animal species have somehow managed to achieve independence from our evolutionary history, that our genes have for some undefined reason have relinquished their influence on the development of human psychological attributes, that our brain's capacity to incorporate learned information has no relation to past selection, that differences in brain functioning in the past had no impact on the genetic success of people, and many other tenets that would be considered outlandish if applied to [other animal life forms].

Frans de Waal's (2002:1) remarks are more positive, noting that over the past twenty years or so, "the view of human behavior as the product of evolution, hence subject to the same explanatory framework as animal behavior, has gained ground and respectability. It has been transformed from a controversial minority view to one that today is widely applied."

Even if the behavioral repertoire of *Homo sapiens* as a species is the product of evolution, however, it does not mean that behavioral differences between races are likewise the result of evolutionary processes. That is, while it is commonly acknowledged that closely related species are morphologically and behaviorally distinct because they diverged from a common ancestor long enough ago for natural selection and sexual selection to have made them different with respect to these things, can we say the same thing about races?

JARED DIAMOND'S SEXUAL SELECTION AND ENVIRONMENTAL THEORIES

Jared Diamond attempts to explain the origin of human races using sexual selection theory in The Third Chimpanzee (1992), and the differences between them in cultural accomplishments in terms of geography in Guns, Germs, and Steel (1997). Charles Darwin proposed the theory of sexual selection to complete his theory of evolution, noting that while natural selection accounted for differences that were useful for survival, "Not one of the external differences between the races of man are of any direct or special service to him" (quoted in Diamond, 1992:117). Sexual selection involves competition for sexual partners, and favors characteristics that lead to reproductive success. As with natural selection, it causes changes in the relative frequency of alleles in populations in response to challenges, but in response to mating challenges only. Many of the traits forged by sexual selection may be neutral or even maladaptive in terms of survival. The lush plumage on male peacocks or the expansive antlers on males of the deer family, which place their possessors in greater danger from predators than their less elaborately adorned conspecifics, are frequently used examples. However, if they survive the dangers posed by their adornments, it is the most decorate males that produce the most offspring because those adornments function to attract females and/or intimidate rival males. Evolutionary vectors sometimes conflict, and the intersection of the survival vector (minimizing danger to the organism) and the reproduction vector (maximizing its genetic survival), is one such conflict.

Diamond explains that among many subspecies of animals there are apparently arbitrary female preferences for variants of species-common traits such as length of tail or mane, or feather color. He also notes that humans from different regions define as beautiful on members of the opposite sex that which is familiar to them, and opines that "we develop our beauty standards by imprinting on the people we see around us in childhood..." (1992:119). Of course, there has to be an "original" set of beauty standards for new generations to imprint on, and Diamond explains this with references to what biologists call the founder effect (a special case of genetic drift discussed later). A founder effect occurs "[I]f a few individuals colonize an empty land and their descendants then multiply and fill the land, the genes of the those few founding individuals may still may still dominate the resulting population many generations later" (1992:120). Thus, the standards that just happened to be present at the time of the founding are placed on a selection path because those who possess them will be reproductively favored. It is in this way, Diamond claims, that human races diverged morphologically. The power of sexual selection in forming subspecies, either alone or in tandem with natural selection, has been verified in many non-human species (Klein & Takahata, 2002:387).

Nowhere in his discussion of the origin of races does Diamond consider sexual selection for behavior, but the way an organism behaves is surely just as strong an attraction to potential mates as are its physical attributes. He is willing to admit selection for different morphology, disease resistance, and apparently a mental module for evaluating "good genes" (sexual selection), but he balks at selection arguments for behavioral and cognitive differences, calling them "racist" and "loathsome" (1997:19).

However, Diamond is forced to write about intelligence in *Guns* because he wants to dispel the notion that Europeans and Asians have dominated the world throughout recorded

history because they are more intelligent and conscientious than inhabitants of the continents they have dominated. The impetus for *Guns* was supposedly a question posed by a New Guinean called Yali asking Diamond why white people had all the cargo (a generic terms for all the accoutrements of modern societies) "when we black people had little cargo of our own?" (1997:14). In answering the question, Diamond supports the notion that genes underpin intelligence, declaring "in mental ability New Guineans are probably genetically superior to Westerners" (1997:21). He then repeats Yali's question adding his own twist to it: "Why is it that Europeans, despite their likely *genetic disadvantage* and (in modern times) their undoubted *developmental disadvantage*, ended up with much more of the cargo" (1997:22, emphasis added)?

Diamond evidently does not consider his statements about race, intelligence, and genetics "racist" and "loathsome." Scientist who base their conclusions about intelligence on many thousands of empirical studies involving millions of subjects are racist and loathsome, but he is not, presumably because his subjective conclusions define whites as genetically and developmentally disadvantaged. Nevertheless, Diamond's statements serve his purposes because he wants to give environmental differences all the credit for the accomplishments of different groups and none to biological differences between people (after all, his statement amazingly implies an inverse relationship between intelligence and accomplishment).

Diamond sums up his theory linking the ultimate and proximate causes of EuroAsian dominance of the world in schematic form (1997:87). EuroAsians achieved dominance because of superior technology (guns, steel, ships), because they have large, sedentary societies that necessitate to development of writing and political organization, and because they are the carriers of germs alien to other continents. These are the most proximate causes, but the ultimate cause is the favorable east/west axis of the EuroAsian land mass. An east/west axis allows for the spread of a variety of plant and animal species suitable for domestication and for the spread of ideas, which leads to agriculture and food storage, which leads to large societies, writing, etc., which leads to the invention of technology, which led to world domination. The spread of plants, animals, and ideas across the east/west axis is facilitated because the climate and terrain of the EuroAsian land mass is relatively benign from one end to the other. The north/south axes of Africa and the Americas, on the other hand, inhibit the diffusion of plants, animals, and ideas because of great longitudinal climactic changes and difficult terrain such as the Sahara Desert in Africa and the Isthmus of Panama in the Americas.

There is no argument with this; the east/west axis confers many benefits on those living on it not available to those inhabiting lands with a north/south axis. He does not take the next step, however, and tell us the biological consequences of life in different environments: "Diamond seems unaware that it is different environments that cause, via natural selection, biological differences among populations" (Rushton, 1999:99). Similarly, Levin writes: "Prof. Diamond does not notice, that, even if the first settled Euroasian societies differed from those of genetically similar Africans and Mesoamericans only because of environmental reasons, the individual traits favored within these societies might over time have pushed their populations onto divergent genetic tracks" (2002:2). Rushton and Levin are pointing out obvious biological truisms that Diamond is well aware of (he is a biologist) but chooses to ignore. Yet, he implicitly recognized it in his theory of the origins of races in which the genes underlying a variety of population differences are present only because of arbitrary cultural standards relating to mate preferences that were present in the founding group.

R/K SELECTION

Another evolutionary concept that may be useful in understanding group differences in behavior is *r/K selection* theory (MacDonald, 1997). The theory originated population biology and has been well worked out mathematically (Takada & Nakijima, 1992). It refers to a continuum of reproductive strategies among animal species that have evolved in response to environmental contingencies. All species evolved specific mechanisms that provide for the best chance of producing offspring that will survive and produce progeny of their own in the habitats they occupy (Molles, 2008).

The extreme r reproductive strategy ("r" is a mathematical symbol for the intrinsic rate of population growth) is characterized by maximum egg production and no parental care. It is an evolved strategy employed by populations inhabiting areas where resources are abundant but availability is unpredictable because of environmental instability; i.e., environments characterized by occasional natural disasters and populated by numerous predator species. Extreme fertility ensures genetic continuity even though the vast majority of offspring will perish before they are able to reproduce. The K strategy ("K" is a mathematical symbol for the carrying capacity of the environment; i.e., the maximum number of individuals it can continually sustain) opts for quality over quantity; and is followed by animals in relatively harsh, resource poor, but predictable environments in which intense parental investment is critical to rearing offspring to reproductive age (MacDonald, 1997). K-strategists produce few and relatively widely spaced, intensely nurtured, offspring.

Succinctly put, because they live in resource abundant but dangerous and unpredictable environments, r-selected species assure genetic survival by producing numerous offspring (mating effort) and letting them fend for themselves. In difficult but predictable environments, fitness is maximized by placing energy and resources into equipping a small number of offspring for survival. These strategies covary with many physiological and behavioral features that function to maintain them (recall the different reproductive strategies and environments of the !Kung and Mundurucu in Chapter 6). Although r/K theory was originally formulated to account for intra-species differences (Chisholm, 1993), there are those opposed to doing so when applied to the human species. Note that r- or K-selected traits are mostly *behavioral* traits underpinned by physiological processes that help to maintain those traits, thus we are talking about facultative strategies, not genetically fixed ones (Rushton, 1997).

THE EVOLUTIONARY THEORIES OF J. PHILIPPE RUSHTON AND EDWARD MILLER

There have only been two attempts to develop a coherent theory of the pattern of worldwide racial differences in behavior in modern times: J. Philippe Rushton's *life history theory* (1997) and Edward Miller's *paternal provisioning theory* (1994b), both of which have been condemned as racist by those with a penchant for substituting invective for argument. Anyone interested in this matter, however, will become aware that none of Rushton's or Miller's detractors have proposed alternative theories purporting to deal with the same wide range of behavioral phenomena (Diamond's theory is concerned only with why some groups

have more "cargo" than others). The evolutionary theories of criminal behavior discussed in Chapter 6 made predictions about age and gender, but tend to avoid race altogether. Rushton's and Miller's theories, on the other hand, do address race in a forthright manner. We begin by discussing Rushton's theory, building on the introduction to it presented in Chapter 1.

Rushton's life history theory is based on r/K theory and predicts a racial ordering in criminal behavior in which blacks will commit more crimes than whites, who will in turn commit more crimes than Asians. The basis for these predictions is evidence that people of African descent are more r-selected than people of European descent, who are more r-selected than people of Asian descent. In other words, although humans are more K-selected than any other species, Africans invest relatively more reproductive energy in mating effort than in parenting effort relative to whites, and whites do the same relative to Asians. As we have seen, traits that facilitate mating effort are also useful in the pursuit of opportunities to acquire other resources illegitimately (Kanazawa, 2003).

Lee Ellis's (1987) review of a large number of studies showed that traits used to identify r-selection were more typical of criminals, and that traits used to identify K-selection were more typical of non-criminals. Males with serious criminal histories have the following six r-selected traits to a greater extent than people in general: (1) shorter gestation periods; (2) earlier onset of sexual activity; (3) higher levels of casual sexual activity (4) less stable bonding; (5) lower parental investment (high rates of abuse, neglect, and abandonment of offspring); and (6) shorter life expectancy. Ellis is careful to deflect claims of racism from his work. He shows that the six characteristics he lists are simply more typical (*on average*) of blacks than of whites, and more typical of whites than of Asians, but warns that any one individual does not necessarily reflect the group average on all, or even any, of the traits. He also points out that he is not a member of the allegedly most prosocial group.

Rushton (1997) goes beyond Ellis to dig into physiology such as gamete production, speed of maturation, cranial capacity, and hormone levels. Since they presumably cannot possibly reflect current environmental influence, differences in twinning rates are perhaps the most striking evidence we have for racial differences in reproductive strategies. Rushton cites a number of studies indicating that the rate of dizygotic twinning among Mongoloids averages less than 4 per 1,000 births, compared with 8 per 1,000 for Caucasoids, and 16 per 1,000 for Negroids; racial differences are even larger for triplets and quadruplets (1997:165). There are no racial differences in monozygotic twinning rates because monozygotic twins are the result of random splitting of a single zygote, and not indicative of a high rate of gamete production. Rushton (1989) admits that racial correlates are *descriptors* of the r- or K-strategies and not a theory of how they came to be; this task he delegates to his life history theory.

Rushton developed his theory in a 358-page book, which cannot be adequately summarized here except to say that it is consistent with the evolutionary theories discussed in Chapter 6 and that his argument range deeper and broader than they are. Rushton (1997:216) contends that only evolutionary processes can make sense of the mountain of disparate data his theory rests on and challenges those who dispute him:

A formidable challenge for alternative theories to the r-K formulation is the inverse relation to be observed empirically between brain size and gamete production across human racial groups and their association with other bio-behavioral variables. No environmental factor is known to account for the trade-off between brain size, speed of maturation, and

reproductive potency, nor to cause so many diverse variables to correlate in so comprehensively a fashion. There is, however, a genetic factor: evolution.

Edward Miller also avers that only an evolutionary theory can tie together the jumble of evidence regarding race related behavioral differences. Miller (1993:10) states that Rushton "has made a strong case that they [Africans] display many characteristics that biologists would describe as r characteristics," but he questions whether they resulted from r selection. Using essentially the same evidence as Rushton, Miller claims that his paternal provisioning theory constitutes a more specific mechanism for explaining the origins of human race differences. He states that basic human behavioral traits evolved in the 99 percent of our evolutionary history in which we were hunters and gatherers, and that "cold weather huntergatherers evolved into Mongoloids and Caucasoids, and tropical African hunter-gatherers into Negroids, and that differences in morphological and behavioral gene frequencies can be explained by climactic differences during hunter-gatherer times" (1994b:228).

Miller's theory rests on the standard anthropological observation that in tropical climates allowing for year-round female gathering male provisioning is an unnecessary luxury. Where male provisioning is not required, male-female unions tend to be fragile and transitory. Under such circumstances, mating effort, which "is assisted by a strong sex drive, aggression, dominance, sociability, extraversion, impulsiveness, sensation seeking, and testosterone," (1994b:227) becomes the most adaptive reproductive strategy. Conversely, in cold climates, male meat hunting and provisioning of females is essential, and provisioning behavior (what we called parental effort in Chapter 6) is selected for. The traits Miller lists as useful for provisioning are "anxiety, altruism, empathy, behavioral restraint, gratification delay, and long life" (1994b:227). Miller then proceeds to offer evidence that the three major races differ on traits associated with provisioning versus mating effort such that East Asians are higher on traits associated with an evolutionary history of provisioning (they occupy the coldest climates) and lowest on traits associated with mating effort. Africans (who occupy the warmest climates) are highest on traits associated with a history of mating effort, and lowest on traits associated with provisioning. Europeans (who occupy climates intermediate between Africans and East Asians) fall between Africans and East Asians on measures of both mating and provisioning traits.

Both Miller and Rushton draw support from numerous anthropological studies. For instance, Patricia Draper has written at length about African mating/provisioning patterns and reports that among them there is early age at first intercourse, loose spousal bonding, the expectation of extramarital affairs (termed "outside wives"), long term fostering of offspring so as to remain attractive to further sexual partners, low paternal involvement with children and intense male-male competition for access to females. She adds that weak male-female bonding and the fostering of parenting roles, "opens the way for both men and women to emphasize mating effort (and raise fertility) and to reduce the time and energy devoted to parenting" (1989:154). James Q. Wilson (2000) also points out that in many Caribbean nations such as Jamaica, Antigua, and Trinidad, similar reproductive patterns and illegitimacy are found, with both males and females preferring a "visiting" relationship over a bonded one. He also makes reference to East Indians, brought to the West Indies and indentured servants several generations ago and who have suffered discrimination from both whites and blacks, work hard, form stable family relationships, have low illegitimacy rates, and control the behavior of their offspring.

Miller's theory differs from Rushton's in highlighting paternal provisioning as the mechanism that forged the average difference in trait levels of the three major races, and climate as the mechanism that led to different levels of provisioning. Other than this, the two theories are very similar. Both share the biological axiom that natural selection favors some traits over others according to the environments in which organisms evolved. Traits are expressed as behavior, and behavior has consequences that are or are not adaptive; i.e., they do or do not result in increased fitness. When the heirs of these organisms behave, they are executing adaptations, although the execution of evolved adaptation is not necessarily adaptive today. This is especially true for modern humans because modern urban environments are radically different from the environments in which our hunter/gatherer ancestors evolved their most basic human traits. Having said this, it is important not to construe either theory as genetic determinism: "Although genes provide the initial set point, environmental factors move individuals up or down the continuum of reproductive strategies" (Rushton, 1994:42). Traits are expressed facultatively according to environmental circumstances; they are not expressed mechanistically according to genetic programming.

There are holes in both theories that need to be filled, however. The vast majority of fathers of any race or nationality have an emotional investment in the safety and development of their offspring, and they all presumably assess the tradeoffs involved in investing in parenting and in securing additional mating opportunities. Only the most callous of males totally abandon their offspring, and most males of any race follow a mixed mating strategy. In terms of direct involvement with their children, Barry Hewlett (1992:153) points out that Aka pygmy fathers, "provide more direct care and are near their infants more than fathers in any other human population that has been investigated." Hewlett attributes high levels of paternal investment among the Aka to the high level of husband/wife (the Aka are monogamous) interaction and cooperation required by their highly mobile hunting/gatherer lifestyle (no territory, livestock, or fixed property to defend). The Aka are, of course, Africans, and therefore cannot be squeezed into Ruston's or Miller's gross lumping.

THE ISSUE OF EVOLUTIONARY TIME AND RACIAL DIVERGENCE

Both Rushton's and Miller's theories rely on an axiom of evolutionary theory that avers that because of ancestral environmental and cultural histories (geography, weather, migration trends, mating patterns, and so on), different populations have different allele frequencies. A number of these allelic variations are associated with variation in neurotransmitters, enzymes, and hormones such as dopamine, serotonin, MAO, and testosterone, which facultatively influence behavioral traits. A major issue with both theories is whether the races have separated long enough for evolution to have produced the behavioral patterns they describe; i.e., for those patterns to be gene-based with different racial averages. Both theorists accept the "uniregional" origin" model of human evolution over rival models, and both implicitly accept that human groups separated long enough ago for distinct races to have evolved.

The uniregional model of human evolution posits that modern *Homo sapiens* evolved from earlier forms in one region only—Africa—and then radiated outwards around the world about 100,000 years ago (Stringer & McKie, 1996). Uniregionalists interpret the fossil evidence as showing that the first "out-of-Africa" migration of *Homo erectus* to other regions

of the globe took place about 1.7 million years ago. These hominids evolved differently in different regions (Neandertals, Peking Man, Java Man, etc.), but all non-African descendants of *Homo erectus* eventually became extinct and have not contributed to the modern human gene pool. Only after these archaic populations became extinct "were regional ('racial') characteristics superimposed on the shared modern pattern" (Andrews & Stringer, 2001:232). Despite our differences, then, we are all Africans under the skin.

The multiregional model interprets the same fossil record to say that *Homo erectus* evolved into *Homo sapiens* independently in four different region—Africa, Asia, Europe, and Australia—although the ancestors of all four groups came from Africa (Wolpoff & Caspari, 1997). Both Rushton's and Miller's theories would be strengthened by the multiregional model if it turned out to be the correct one since they could then claim that the races evolved into modern humans from four different ancestral groups of *Homo erectus* with just enough gene flow between the different groups to stir the genetic pot and prevent speciation. This would also mean of course that the groups had diverged earlier, thus giving evolutionary mechanisms greater time to adapt each group to their particular niches.

Nevertheless, both researchers accept that the weight of the fossil evidence supports the uniregional model. The genetic evidence (stronger evidence that the fossil record because by definition genes had ancestors, but fossils may or may not have descendants) also supports the uniregional model (Jorde, et al., 2000). The multiregional model suggests that there would be roughly identically large pools of genetic variation within each continent, but what we find is that Africa contains more human genetic variation than all other continents combined (the African gene pool was the first to appear and thus has had more time to accumulate its broad range [(Andrews & Stringer, 2001]).

Evolutionary theories of racial behavioral differences are not seriously harmed by the adoption of the uiniregional model, however, since the 100,000 years (or whatever figure the physical anthropologists and population geneticists may finally settle on) of separation is more than adequate to account for the accumulation of allele variants assumed to underlie these differences. And, of course, we know already that allele differences *do* exist between and among races. Evolutionary theories focus primarily on natural selection as the mechanism by which different allele frequencies accumulate among different populations, although genetic drift supplies the initial impetus to genetic differentiation among separated groups that once shared a common gene pool.

GENETIC DRIFT AND FLOW

Population gene pools are not only changed by natural and sexual selection, but also by migration patterns. The process of *genetic drift*—random changes (e.g., different accumulations of mutations) in allelic frequencies between a parental population gene pool and its progeny gene pool(s)—is a major factor in differentiating populations. Genetic drift played an enormous role in evolution in producing speciation and sub-speciation. As Klein and Takahata (2002:319) put it: "Although random genetic drift, natural selection, and inbreeding (the mating of closely related individuals) affect both small and large populations, in the former they lead to very rapid loss of some alleles and fixation of others." Genetic drift affects small populations more than large ones for much the same mathematical reason that

atypical values ("outliers") in small samples affect the values of computed statistics such as the means, standard deviations, and correlations, more than they do large ones.

The size of the various hominid groups that moved out of Africa may have been no larger than modern hoards of great apes—about 24 (Woodward, 1992). Such small numbers are by no means necessary for allele fixation; even a number as high as 100 would be considered small in this context. Since migrating groups were not random samples of their parent populations, some alleles represented in the parent population may not have been represented in the migrant group, or carried by only one or two individuals. Failure to reproduce by these carriers meant that those alleles are lost to that population, no matter how large it eventually becomes. Other alleles carried by the most successful reproducers would soon become fixed; i.e., all the population's progeny inherit them because there is no alternative allele in the gene pool.

The mention of reproductive success *does not* mean that genetic drift is another term for natural selection. Natural selection is a non-random mechanism (it responds to specific environmental challenges), fitness promoting (it adapts organisms to their environments), and is thus directional (it fixes alleles in a direction that promotes their carriers' survival and reproductive success). Genetic drift, on the other hand, is entirely random, non-directional, and may or may not promote fitness; natural selection can even be thwarted by genetic drift since drift removes the genetic variation it requires. Nevertheless, genetic drift is a way that populations can evolve to differ from the parent population without involving natural selection.

Working against genetic drift is as *gene flow*. Newcomers into a breeding population redistribute alleles and breakdown isolation patterns. Computer simulations assuming a founding group of 40 opossum find that the F_{st} statistic estimating the genetic distance from the parent population after 27 generations was a very large 0.509 assuming no migrants into the group; just one migrant into the group per generation reduced it to about 0.13. The authors opined that the one-migrant-per-generation rule in small groups is enough to minimize the loss of genetic polymorphism, but also that "it may be inadequate for many natural populations" (Mills & Allendorf, 1996:1517).

Alternate human alleles could thus have been introduced from other breeding populations in earlier times, although it would have been quite rare in a sparsely populated planet cluttered with the almost insuperable geographic barriers separating breeding populations 100, 000 years ago. Takahata (1995) notes that if breeding couples were equally distributed around the world 100,000 years ago there would have been only 35 mating couples in the whole of the region that is now France. Genetic drift, even in the absence of strong natural selection, should be enough to diversify the genetic composition of the races. Recall that in Chapter 1 Ernst Mayr was quoted as defining races in terms of their histories of isolation: "A human race consists of the descendants of a once-isolated geographical population primarily adapted for the environmental conditions of their original country" (2002:91).

It is reasonable to assume that very little gene flow occurred between populations until commerce and the vehicles for conducting it (domestication of large pack animals, the invention of the wheel and of sailing vessels) sent individuals into previous alien breeding populations beginning only about 4,000 years ago (Woodward, 1992:195). The trickle that occurred back then has become a flood today as breeding populations become more accessible to one another, making gene flow an increasingly important process in future human evolution, and genetic drift practically irrelevant. Given the increasing rate of genetic

mingling in the world, race may indeed become a concept of purely historical interest some time in the future.

TIME IS OF THE ESSENCE

Having discussed the evolutionary processes that lead to genetic variation in populations, the next issue is whether or not there has been enough time for these processes to enable us to conclude that racial differences in behavior are at least partially underlain by that variation. Consider the transition from *Australopithecus* to *Homo erectus*. According to Wrangham (2001:123), this transition "might have lasted a few tens of thousands of years—or less." Now, "a few tens of thousands of years" is a very long time, but when one considers the monumental behavioral and morphological changes between these two families of Hominidae, it is not so long after all. During those years, there was an approximate doubling of average cranial capacity from the *Australopithecine* capacity of about 500cc to the average *Homo erectus* capacity of about 1,000cc; modern *Homo sapien sapiens* have an average of about 1400cc (Takahata, 1995). Because cranial capacity reflects brain capacity, it also reflects a tremendous increase in the behavioral capacities available to our species.

Consider the evolution of human pair bonding, which also involves the transition from *Australopithecus* to *Homo erectus*, and may also owe a lot to the evolution of intelligence in our species. In highly polygynous species in which dominance (and hence access to more females) is established by physical battles among males, the selection for male size and strength results in males becoming as much as 100 percent or more larger than females. Australopithecine males were 50 to 100 percent larger than females, which reflects a strongly polygynous mating history among our earliest ancestors (Geary, 2000). The low degree of sexual dimorphism among modern *Homo sapiens* (males are only about 12% larger than females, on average) indicates an evolutionary shift from violent male competition for mates to a more pair-bonded monogamous mating system and an increase in paternal investment (Plavcan & van Schaik, 1997).²

The selection for intelligence, and hence greater cranial capacity, placed considerable reproductive burdens on females and precipitated the shift in hominid reproductive strategy. The human female birth canal could not accommodate the birthing of an infant whose brain was as much as 45 percent of its adult weight, as it is in newborn chimpanzees (Shore, 1996). The pelvis of our ancestral females was probably shaped by natural selection to satisfy upright posture and bipedalism more than for increased fetal brain size. Upright posture has the effect of narrowing the birth canal, which would have made birthing difficult even in the absence of selection for increases cranial capacity. The evolutionary conundrum thus became one of resolving the conflict between our ancestral females' obstetric and postural requirements (Buck, 1999). Natural selection is blind: it works on trajectories already in motion, and has no way of anticipating future needs. Evolutionary conflicts such as this cephalo/pelvic disproportion problem care are not uncommon (human females still have more difficulty giving birth than other species because of this problem) and must be solved somehow. Selection for larger female pelvises could have provided a solution, but pelvises large enough to allow the passage of infants as developmentally advanced as other

primate infants would probably have hindered effective locomotion and placed mother's and their offspring at the mercy of predators.

The mechanism that evolved in response to the cephalo/pelvic problem was for human infants to be born at increasingly earlier stages of development as cerebral mass slowly increased. Human infants experience 25 percent brain growth inside the womb, and 75 percent growth outside the womb. The high degree of human developmental incompleteness at birth necessitates strong selection pressures for neurohormonal mechanisms such as oxytocin and abundant oxytocin receptors in females designed to assure that the young would be nurtured for as long as necessary. The female investment of so much time and energy in nurturing tasks created selection pressure for male/female bonding. Bonded females received provisions and protection for herself and offspring, bonded males received exclusive sexual rights, and their joint parental endeavors increased the probability of their offspring surviving to reproductive age, thus increasing the probability of their genes (including those facilitating the propensity to pair bond) being represented in future generations (Fisher, 1992; Geary, 2000).

The changes in cranial capacity and bonding behavior in response to various evolutionary pressures were truly monumental even if they took many thousands of generations, but less spectacular change can occur fairly rapidly. Steven Jay Gould's (1992) theory of punctuated equilibrium reminds us that populations can be genetically stable (in equilibrium) for very long periods in their evolutionary history, and that evolutionary changes do not necessarily occur by gradual and imperceptible changes over eons of time. Gould avers that the equilibrium is "punctuated" by rapid transformations from time to time, and that this rapid transformation best takes place in relatively small and isolated subpopulations (genetic drift again). These punctuation events often lead to speciation given small enough groups, long enough time, and complete isolation. Larger groups, less time, and less isolation can produce subspecies (races).

Gould's rapid speciation hypothesis is supported by studies of Lake Victoria fish. There are many hundreds of different species and subspecies in this lake, most of which are physically and behaviorally quite different. These differences have arisen as each species and subspecies has adapted to the various niches the lake provides. What is particularly interesting is that the current lake is only about 12,000 years old. Since the species and subspecies found in the lake today are found nowhere else in the world, it means that all this genetic differentiation arose from a small number of founders that arrived there a very short time ago in evolutionary terms (Klein & Takahata, 2002:325). The rapid speciation of finches on the Galapagos archipelago is another example cited by Klein and Takahata (2002:317).

It has also been pointed out that since its introduction into America about 150 years ago, the common house sparrow has evolved a dozen or more racial varieties (Goldsby, 1977). Certainly, fish and birds have shorter generational spans that humans, making for more rapid evolution (150 years equals about 100 sparrow generations), but 100 human generations is only about 2,000 years. Even if we really load the dice against the hypothesis of human subspeciation and say that the out-of-Africa migration occurred only 50,000 years ago rather than 100,000 years ago, that figure represents 2,500 human generations. Surely, this is more than enough for the elaboration of at least some differences in racial characteristics (race *related*, not race *specific*) in our species.³

As a final example, consider the dog. With considerable less genetic variation to work with than humans, 15,000 years of domestication has produced about 400 breeds of dog, most

of them in the last 200 years (Pearson, 2003). Daniel Freedman points out that: "A breed of dog is a construct zoologically and genetically equivalent to a race of man" (in Sarich & Miele, 2004:203). From their common wolf ancestor dogs have evolved (with a huge push from artificial selection) large differences in morphology, temperament, intelligence, and behavior, although the "genetic differences as measured by DNA are small" (Sarich & Miele, 2004:10). Compare Great Danes and Chihuahuas for size, Greyhounds and Dachshunds for speed, Jack Russell Terriers and Shetland Sheepdogs for pugnacity, and Border Collies and Afghan Hounds for intelligence (yes, there are tests for canine intelligence). When we make such comparisons in a species with less genetic variation than in our own, and even granting the role of artificial selection, it makes one wonder why anyone would believe that *Homo sapiens* could not have evolved measurable behavioral differences in its "breeds" through natural selection.

CONCLUSION

Far from evolutionary processes being irrelevant to human behavioral analysis, this chapter has shown that it is at its very heart. Behavior is evoked from organisms in response to environmental challenges, and natural selection passes judgment on that behavior if it has positive survival and reproductive consequences. Selection for behavioral traits is almost certainly more rapid than for morphological traits because the organism plays an active part in somatic time in the selection of its behavior. If the behavior is adaptive, the genes underlying it will proliferate as long as the behavior they facilitate remain adaptive (which they may not in environments different from those in which they arose). This is why Plomin and his colleagues have asserted that: "the behavioral genomic level of analysis may be the most appropriate level of understanding for evolution because the functioning of the whole organism drives evolution. That is, behavior is often the cutting edge of natural selection" (2003:533, emphasis added).

It is conceded that the theories examined here are highly offensive to some, but where are the alternative theories? A thread in an evolutionary psychology e-mail list was initiated some time ago asking if anyone was aware of any alternatives theories that may not be construed as offensive by bioegalitarians. The thread developed into a lively discussion, but no one knew of any alternative. There was considerable agreement that if ideological opponents of Rushton's and Miller's theories really believed their arguments they would be in the forefront in collecting comparative racial data to support them. Rather than do this, however, their main tactics appear to either offer ad hoc explanations for racial differences, or to avoid collecting such data at all and to intimidate others into doing the same. Such tactics can only be described as scientific malfeasance. Writing about the unprofessional animosity that followed anthropologist Carleton Coon's 1960's work on the evolution of races, evolutionary biologist Leigh Van Valen wrote that Coon's critics were trying to padlock the mind. What Van Valen had to say about Coon's generation of critics can be just as well applied to Rushton and Miller's critics, or to the critics of any other scientists keen to look at racial issues in a forthright manner.

To condemn a scientific enquiry because of its possible political consequences is bigotry, no matter by whom practiced....Coon's theses are irrelevant to racismBut whether they in

fact support racism is a question utterly distinct from whether they are true. To confound these points is to evaluate a question of truth, presumably divinely revealed because not open to question, by a criterion of value or utility. And this is to padlock the mind (in Shipman, 1994:217).

Given the lack of alternatives to Rushton's and Miller's theories, they win by default because they are the only shows in town. This does not mean that they constitute the final word in broadly understanding the fundamentals of variation in racial behavior, or that one cannot find flaws in their arguments such as some anomalous findings, imperfections in the source data, overinterpretation of that data, and overgeneralizations from them. These things are to be expected in any theory, especially in theories of such ambition and broad scope. Rushton (1988) openly admits most of these flaws, as any honest researcher should. Nevertheless, the way usually science works is to proceed from whatever coherent accounts are available to us to see where it takes us. Good theories are clearly articulated, testable, and push the envelope in their efforts to arrive at a coherent synthesis of all relevant data. Rushton's and Miller's works may thus be viewed as prolegomena to more thoroughly grounded theories, and if others do not care for what consider the political implications of Ruston's and Miller's theories, they should busy themselves with collecting the data and devising theories of their own to challenge them, not continue to resort to personal attacks.

ENDNOTES

Based on mitochondria DNA (mtDNA) data, Henry Harpending and his colleagues (1993:495) have claimed that the human populations had already subdivided into races before moving out of Africa. They state: "The existence of between-group differences [in mtDNA] far older than within-group differences implies that the late Pleistocene expansion of our species occurred separately in populations that had been isolated from each other for several tens of thousands of years."

² . Some more recent evidence (Reno, et al., 2003) disputes this mainstream view relating to the large degree of sexual dimorphism in *Australopithecus afarensis*.

³ A spectacular example of the effects of small group size and isolation on the loss of genetic diversity is provided by Williams and her colleagues (2002). They examined a herd of elk introduced into Pennsylvania from Yellowstone National Park, Wyoming, and parks in South Dakota (originating from the Yellowstone herd) between 1915 and 1926. After 25 generations the F_{st} statistic between the Pennsylvania herd and the Yellowstone parent population was 0.45.

REFERENCES

- Adamson, C. (2000). Defensive localism in black and white: A comparative history of European-American and African-American youth gangs. *Ethnic and Racial Studies*, 23:272-298.
- Agnew, R. (1992). Foundations for a general strain theory of crime and delinquency. *Criminology*, 30:47-87.
- Agnew, R. (1997). Stability and change in crime over the lifecourse: A strain theory explanation. In T. Thornberry (Ed.), *Developmental theories of crime and delinquency*, pp. 101-132. New Brunswick, NJ: Transaction.
- Agnew, R., T. Brezina, J. Wright, & F. Cullen (2002). Strain, personality traits, and delinquency: Extending general strain theory. *Criminology*, 40:43-71.
- Aguirre, A. & J. Turner (1998). American ethnicity: The dynamics and consequences of Discrimination. Boston: McGraw Hill.
- Albanese, J. & R. Pursley (1993). *Crime in America: Some Existing and Emerging Issues*. Englewood Cliffs, NJ: Prentice-Hall.
- Alcock, J. (1998). *Animal behavior: An evolutionary approach* (6th edition). Sunderland, MA: Sinauer Associates.
- Alcock, J. (2001). The triumph of sociobiology. New York: Oxford University Press.
- American Anthropological Association (1997). Statement on 'race.' http://www.aaanet.org.
- Anderson, E. (1994). The code of the streets. *The Atlantic Monthly*, 5:81-94.
- Anderson, E. (1999). Code of the street: Decency, violence, and the moral life of the inner city. New York: W.W. Norton.
- Andreasen, R. (2000). Race: Biological reality or social construct? *Philosophy of Science*, 67 (Proceedings): S653-S666.
- Andrews, P. & C. Stringer (2001). The primates' progress. In Gould, S. (Ed.), *The book of life*, pp. 219-251. New York: W.W. Norton.
- Bamshad, M., S. Wooding, W. Watkins, C. Ostler, M. Batzer, & L. Jorde (2003). Human population genetic structure and inference of group membership. *American Journal of Human Genetics*, 72:578-589.
- Barak, G. (1998). *Integrating Criminologies*. Boston, Allyn and Bacon, 1998.
- Barber, N. (2000a). On the relationship between country sex ratios and teen pregnancy: A replication. *Cross-Cultural Research*, 34:26-37.
- Barber, N. (2000b). The sex ratio as a predictor of cross-national variation in violent crime. *Cross-Cultural Research*, 34:264-282.

- Barkow, J. (1989). *Darwin, sex and status: Biological approaches to mind and culture*. Toronto: University of Toronto Press.
- Barkow, J. (1992). Beneath new culture is an old psychology: Gossip and social stratification. In Barkow, J., Cosmides, L., & Tooby, J. (Eds.). *The Adapted mind: evolutionary psychology and the generation of culture.* (pp.627-637). New York: Oxford University Press.
- Baumeister, R., L. Smart, & J. Boden (1996). Relation of threatened egoism to violence and aggression: The dark side of self-esteem. *Psychological Review*, 103:5-33.
- Beard, P. (2001). Charles Whitman. Orlando, FL: FirstPublish.
- Beck, E. & S. Tolnay (1995). Violence toward African Americans in the era of the white lynch mob. In D. Hawkins (Ed.), *Ethnicity, race, and crime: Perspectives across time and space* (pp.121-144). Albany, NY: State University of New York Press.
- Belsky, J. (1997). Attachment. mating, and parenting. Human Nature, 8:361-381.
- Belsky, J. (1999). Conditional and alternative reproductive strategies: Individual differences in susceptibility to rearing experiences. In J. Rodgers & D. Rowe (Eds.), Genetic influences on fertility and sexuality. Boston: Klumer.
- Bennett, A., K. Lesch, A. Heills, J. Long, J. Lorenz, S. Shoaf, M. Champoux, S. Suomi, M. Linnoila, & J. Higley (2002). Early experience and serotonin transporter gene variation interact to influence primate CNS functioning. *Molecular Psychiatry*, 7:118-122.
- Bernhardt, P. (1997). Influences of serotonin and testosterone in aggression and dominance: Convergence with social psychology. *Current Directions in Psychological Science*, 6:44-48
- Bernard, T. (1990). Angry aggression among the "truly disadvantaged." *Criminology*, 28:73-96
- Bioforensics (2003). Racial profiling: Will new DNA test shatter serial killer myths? http//bioforensics.com/conference/Racial%20Identification/racial.
- Black, J. & W. Greenough (1997). How to build a brain: Multiple memory systems have evolved and only some of them are constructivist. *Behavioral and Brain Sciences*, 20:558-559.
- Blumstein, A. & J.Cohen (1987). "Characterizing criminal careers." Science, 237:985-991.
- Bonczar, T. & A. Beck (1997). *Lifetime likelihood of going to state or federal prison*. Washington, DC: U.S. Department of Justice.
- Bobo, L. & J. Kluegel (1997). Status, ideology, and dimensions of whites' racial beliefs and attitudes: Progress and stagnation. In Tuch, S. & J. Martin (Eds). *Racial attitudes in the 1990s: Continuity and change*, pp. 93-120. Westport, CT: Praeger.
- Booth, A. & J. Dabbs (1993). Testosterone and men's marriages. Social Forces, 72:463-477.
- Bostic, R. (2002). A test of cultural affinity in home mortgage lending. University of Southern California Lusk Center of Real Estate, position paper. Available online at: www.usc.edu/lusk.
- Boyd, T. (1996). A small introduction to the "G" funk era: Gangsta rap and black masculinity in contemporary Los Angeles. In M. Dear, E. Schockman, & G. Wise, (Eds.), *Rethinking Los Angeles*, pp. 127-146. Thousand Oaks, CA: Sage.
- Brammer, G., M. Raleigh, and M. McGuire (1994). Neurotransmitters and social status. In Ellis, L. (Ed.), Social stratification and socioeconomic inequality. Vol.2: Reproductive and Interpersonal aspects of dominance and status. (pp. 75-91). Westport, CT: Praeger.

- British Home Office (2000). Statistics on race and the criminal justice system. London: Home Office Research Unit.
- Brogan, P. (2002). Welfare demographics shift toward children. *Idaho Statesman*, July 14, A4.
- Buck, R. (1999). The biological affects: A typology. *Psychological Review*, 106:301-336.
- Buss, D. (1994). The evolution of desire: Strategies of human mating. New York: Basic Books.
- Butler, P. (2002). Racially based jury nullification: Black power in the criminal justice system. In S. Gabbidon, H. Taylor Green, & V. Young (Eds.) *African American classics in criminology and criminal justice*, pp. 325-347. Thousand Oaks, CA: Sage.
- Byrne, J. (1986). Cities, citizens, and crime: The ecological/nonecological debate revisited. In Byrne, J. & R. Sampson (Eds.), *The Social Ecology of Crime*, pp. 116-130.London: Springer-Verlag.
- Calavita, K. & H. Pontell (1994). Savings and loan fraud as organized crime: Toward a conceptual typology of corporate illegality. *Criminology*, 31:519-548.
- Caspi, A., T. Moffitt, P. Silva, M. Stouthamer-Loeber, R. Krueger, & P. Schmutte. (1994). Are some people crime-prone? Replications of the personality-crime relationship across countries, genders, races, and methods. *Criminology*, 32:163-194.
- Campbell, A. (1999). Staying alive: Evolution, culture, and women's intrasexual aggression. *Behavioral and Brian Sciences*, 22:203-214.
- Cao, L., A. Adams, & V. Jensen (1997). A test of the black subculture of violence thesis: A research note. *Criminology*, 35:367-369.
- Cartwight, J. (2000). Evolution and Human Behavior. Cambridge, MA: MIT Press.
- Cashdan, E. (1993). Attracting mates: Effects of parental investment on mate attraction strategies. *Ethology and Sociobiology*, 14:1-23.
- Caspi, A., J. McClay, T. Moffitt, J. Mill, J. Martin, I. Craig, A. Taylor, & R. Poulton (2002). Evidence that the cycle of violence in maltreated children depends on genotype. *Science*, 297, 851-854.
- Cavalli-Sforza, L. (2000). Genes, peoples, and languages. New York: North Point Press.
- Cavalli-Sforza, L., P. Menozzi, & A. Piazza (1994). *The history and geography of human genes*. Princeton, NJ: Princeton University Press.
- Calavita, K. & H. Pontell (1994). Savings and loan fraud as organized crime: Toward a conceptual typology of corporate illegality. *Criminology*, 31:519-548.
- Cernkovich, S., P. Giordano, & J. Rudolph (2000). Race, crime, and the American dream. *Journal of Research in Crime and Delinquency*, 37:131-170.
- Chen, C., M. Burton, E. Greenberger, & J. Dmitrieva (1999). Population migration and the variation of dopamine D4 receptor (DRD4) allele frequencies around the globe. *Evolution and Human Behavior*, 20:309-324.
- Child Trends Data Bank (2000a). Infant homicide. http://www.childtrendsdatabank.org.
- Child Trends Data Bank (2000b). Child maltreatment. http://www.childtrendsdatabank.org.
- Chilton, R. (1986). Urban crime rates: Effects of inequality, welfare dependency, region, and race. In J, Byrne & R. Sampson (Eds.). *The Social ecology of crime*, pp. 116-130. New York: Springer-Verlag.
- Chisholm, J. (1996). The evolutionary ecology of attachment organization. *Human Nature*. 7:1-38.

- Ciotti, P. (1998). Money and school performance: Lessons from the Kansas City desegregation experiment. *Policy Analysis*, 298:1-25.
- Clarke, J. (1996). "Black-on-Black Violence." Society, 33:46-50.
- Clarke, J. (1998). *The lineaments of wrath: Race, violent crime, and American culture.* New Brunswick, NJ: Transaction Publishers.
- Clark, K. (1965). Dark Ghetto: Dilemmas of social power. New York: Harper & Row.
- Clark, R., F. Betzler, B. Best, & D. Sowney (nd.). *Afro-lineal organized crime. New Jersey Commission of Investigation*. [Online]. http://www.state.nj.us/sci/afro.pdf.
- Cleveland, H., R. Wiebe, E. van den Oord. & D. Rowe (2000). Behavior problems among children from different family structures: The influence of genetic self-selection. *Child Development*, 71:733-751.
- Cohen, A. (1955) Delinquent boys. New York: Free Press.
- Crank, J. (2003). Imagining justice. Cincinnati, OH: Anderson.
- Crow, J. (2002). Unequal by nature: A geneticist's perspective on human differences. *Daedalus*, 131:81-88.
- Cullen, F. (2003). Forward to J. Crank's *Imagining justice*. Cincinnati, OH: Anderson.
- Comings, D. (2003). Conduct disorder: A genetic, orbitofrontal lobe disorder that is the
- major predictor of adult antisocial behavior. In Walsh, A. & L. Ellis (Eds.). *Biosocial criminology: Challenging environmentalism's supremacy, pp. 145-164. Hauppauge, NY: Nova Science.*
- Cummings, M. (2000). *Human heredity: principles and issues*. London: Brooks/Cole.
- Curran, D. & C. Renzetti (2001). Theories of crime (2nd Ed.). Boston: Allyn & Bacon.
- Curry, D., R. Ball, & R. Fox (1994). *Gang crime and law enforcement record keeping*. National Institute of Justice. Washington, DC: U.S. Department of Justice.
- D'Alessio, S. & L. Stolzenberg (2003). Race and the probability of arrest. *Social Forces*, 81:1381-1397.
- Daly, M. (1996). Evolutionary adaptationism: another biological approach to criminal and antisocial behavior. In Bock, G. & J. Goode (Eds.), *Genetics of criminal and antisocial behaviour*. pp. 183-195. Chichester, England. Wiley.
- Daly, M. & M. Wilson (1996). Violence against stepchildren. *Current Directions in Psychological Science*, 5:77-81.
- Darbyshire, N. (1995). Met chief breaks taboo to reveal most muggers are black. *Daily Telegraph*, July 7:1-4.
- Davidson, B. (1980). The African slave trade. Boston: Little, Brown.
- Dawkins, R. (1982). The extended phenotype. Oxford: Oxford University Press.
- Depue, R. & P. Collins (1999). Neurobiology of the structure of personality: Dopamine, facilitation of incentive motivation, and extraversion. *Behavioral and Brain Sciences*, 22:491-569.
- de Waal, F. (2001). *Tree of origin: What primate behavior can tell us about human social evolution*. Cambridge: Harvard University Press.
- Debuse, V., J. Addison, & J. Reynolds (1999). The effects of sex ratio on sexual competition in the European lobster. *Animal Behavior*, 58:973-981.
- Diamond, J. (1992). *The third chimpanzee: The evolution and future of the human animal*. New York: HarperCollins.
- Diamond, J. (1994). Race without color. *Discover*, 15:83-89.

- Diamond, J. (1997). Guns, germs, and steel: The fates of human societies. New York: W.W. Norton.
- Dickens, W. & J. Flynn (2001). Heritability estimates versus large environmental effects; The IQ Paradox resolved. *Psychological Review*, 108: 346-349.
- Ding, Y., H. Chi, D. Grady, A. Morishima, J. Kidd, K. Kidd, P. Flodman, M. Spence, S. Schuck, J. Swanson, Y. Zhang, & R. Moyziz (2002). Evidence of positive selection acting at the Human dopamine receptor D4 gene locus. *Proceedings of the National Academy of Science*, 99:309-314.
- Dollard, J. (1988). *Caste and class in a southern town*. Madison: University of Wisconsin Press.
- Draper, P. (1989). African marriage system systems: Perspectives from evolutionary ecology. *Ethology and Sociobiology*, 10:145-169.
- Draper, P. & H. Harpending (1982). "Father absence and reproductive strategies: An evolutionary perspective." *Journal of Anthropological Research*, 38:255-273.
- D'Sousa, D. (1995a). *The end of racism: Principles for a multiracial society*. New York: Free Press.
- D'Sousa, D. (1995b). Black America's moment of truth. *The American Spectator*, October: 35-45
- Du Boise, W. (1899/1967). *The Philadelphia Negro: A social study*. Millwood, NY: Kraus-Thompson.
- Du Bois, W. (1903/1969). The souls of black folk. New York: New American Library.
- Durkheim, E. (1982). Rules of sociological method. New York: Free Press.
- Eastland, T. (1996). *Ending affirmative action: The case for colorblind justice*. New York: Basic Books.
- Edelman, G. (1992). Bright air, brilliant fire. New York: Basic Books.
- Edelman, G. (1998). Building a picture of the brain. *Daedalus*, 127:37-69.
- Edwards, A & C. Polite (1992). *Children of the dream: The psychology of black success*. New York: Doubleday.
- Elder, L. (2002). The Soft bigotry of President Bush. http://www.townhall.com.
- Ellwood, D. & J. Crane (1990). Family changes among black Americans: What do we know? *Journal of Economic perspectives*. 4:65-84.
- Ellis, L. (1987). Criminal behavior and r/K selection: An extension of gene-based evolutionary theory. *Deviant Behavior*, 8:149-176.
- Ellis, L. (1991). Monoamine oxydase and criminality: Identifying an apparent biological marker for antisocial behavior. *Journal of Research in Crime and Delinquency*, 28:227-251.
- Ellis, L. (1996). Arousal theory and the religiosity-criminality relationship. In P. Cordella & L. Siegel (Eds.), *Readings in contemporary criminological theory*, pp.65-84. Boston: Northeastern University Press.
- Ellis, L. (2003). Genes, Criminality, and the Evolutionary Neuroandrogenic Theory. In Walsh, A. & L. Ellis (Eds.). *Biosocial criminology: Challenging environmentalism's supremacy*, pp. 12-34. Hauppauge, NY: Nova Science.
- Ellis, L. & H. Nyborg (1992). Racial/ethnic variations in male testosterone levels: A probable contributor to group differences in health. *Steroids*, 57:72-75.
- Ellis, L. & A. Walsh (1997). Gene based evolutionary theories in criminology. *Criminology*, 35-229-276.

- Ellis, L. & A. Walsh (2000). Criminology: A global perspective. Boston: Allyn & Bacon.
- Ember, M. & C. Ember (1998). Facts of violence. Anthropology Newsletter, October: 14-15.
- Eysenck, H. & G. Gudjonsson (1989). *The causes and cures of criminality*. New York: Plenum.
- Farley, J. (1990). Sociology. Englewood Cliffs, NJ: Prentice-Hall.
- Farley, R. (1996). The new American reality. New York: Russell Sage Foundation.
- Feder, M., A. Bennett, & R. Huey (2000). Evolutionary physiology. *Annual Review of Ecology And Systemics*, 31:315-341.
- Federal Bureau of Investigation (2001). Uniform Crime Reports—2000. Washington, DC: U.S. Government Printing Office.
- Felson, R. (2001). Blame analysis: Accounting for the behavior of protected groups. In Cole, S. (Ed.), *What's wrong with sociology?* Pp. 223-245. New Brunswick, NJ: Transaction.
- Fields, S. (2002). White guilt and affirmative action. http://www.townhall.com/columnists/suzannefields/printsf20021205.shtml
- Fisher, H. (1992). *Anatomy of love. The natural history of monogamy, adultery, and divorce.* New York: W.W. Norton.
- Flowers, R. (1988). Minorities and criminality. New York: Greenwood.
- Flynn, J. (1987). Massive gains in 14 nations: What IQ tests really measure. *Psychological Bulletin*, 101: 171-191.
- Fox, R. (1998). Testosterone is not alone: Internal secretions and external behavior. *Behavioral And Brain Sciences*, 21:375-376.
- Fox, J. & J. Levin (2001). The will to kill: Making sense of senseless murder. Boston: Allyn and Bacon.
- Freedman, D. (1997). Is nonduality possible in the social and behavioral sciences? Small essay on holism and related issues. In N.Segal, G. Weisfeld, & C. Weisfeld (Eds.), *Uniting Psychology and Biology*, pp. 47-80. Washington, DC: American Psychological Association.
- Gabbidon, S. (2001). W.E.B. DuBois: Pioneering American Criminologist. *Journal of Black Studies*. 31:581-599.
- Gado, M. (2001). *The disappeared*. Online crime library. http://crimelibrary.com/serial/francoise/2.httm.
- Galernter, J., H. Kranzler, & J. Cubells (1997). Sewrotonin transporter protein (SLC6A4) allele and haplotype frequencies and linkage disequilibria in African- and European-American and Japanese populations in alcohol-dependent subjects. *Human Genetics*, 101:243-246.
- Gannett, L. (2001). Racism and human genome diversity research: The ethical limits of 'population thinking.' *Philosophy of Science*, 68 (Proceedings):S479-S492.
- Garlick, D. (2002). Understanding the nature of the general factor of intelligence: The role of Individual differences in neural plasticity as an explanatory mechanism. *Psychological Review*, 109: 116-136.
- Geary, D. (2000). Evolution and proximate expression of human paternal investment. *Psychological Bulletin*, 126:55-77.
- Geary, D. & M. Flinn (2001). Evolution of human parental behavior and the human family. *Parenting: Science and Practice*, 1:5-61.

- Georges-Abeyie, D. (1990). Criminal justice processing of non-white minorities. In McClean, B. & D. Milanovic (Eds.), *Racism, empiricism and criminal justice*. Vancouver, BC: Collective Press.
- Gewertz, C. (2000). A hard lesson for Kansas City's troubled schools. *Education Week*, April 22, 1-5.
- Gibbons, D. (1997). Review Essay: Race, ethnicity, crime, and social policy. *Crime and Delinquency*, 43:358-380.
- Gilder, G. (1993). Wealth and poverty. San Francisco: Institute for Contemporary Studies.
- Glaser, D. (2000). Child abuse and neglect and the brain—A review. *Journal of Child Psychology and Psychiatry*, 41:97-116.
- Glaser, D. & S. Frosh (1993). Child sex abuse. Toronto: University of Toronto Press.
- Goffman, E. (1961). Asylums. Garden City, NY: Anchor.
- Goldberg, B. (2202). *Bias: A CBS insider exposes how the media distort the news*. Washington, DC: Regnery Publishing.
- Goldman, D., J. Lappalainen, and N. Ozaki (1996). Direct analysis of candidate genes in impulsive behavior. In Bock, G. & J. Goode (Eds.), *Genetics of criminal and antisocial behaviour*. (pp. 183-195) Chichester, England. Wiley.
- Goldsby, R. (1977). Race and races. New York: Macmillan.
- Gordon, R. (1976). "Prevalence: The Rare Datum in Delinquency Measurement and its Implications for the Theory of Delinquency." In M. W. Klein (Ed.), *The Juvenile Justice System*, pp. 201-284. Beverly Hills, CA: Sage.
- Gordon, R. (1997). Everyday life as an intelligence test: Effects of intelligence and intelligence context. *Intelligence*, 24:203-320.
- Gottfredson, L. (1986). Social consequences of the g factor in employment. *Journal of Vocational Behavior*, 29: 379-410.
- Gottfredson, L. (1997). Why g matters: The complexity of everyday life. *Intelligence*, 24:79-132.
- Gottfredson, M. & T. Hirschi. (1997). National crime control policies. In Fisch, M. (Ed.), *Criminology* 97/98, pp. 27-33. Guilford, CT: Dushkin Publishing.
- Gould, S. (1992). Life in a punctuation. *Natural History*, 101, October: 10-21.
- Graves, J. (2001). *The emperor's new clothes: Biological theories of race at the millennium*. New Brunswick, NJ: Rutgers University Press.
- Greek, C. (2001). Media crime. http://www.criminology.fsu.edu/crimemedia/lecture4.html.
- Grigorenko, E. (2000). Heritability and intelligence. In R. Sternberg (Ed.), Handbook of *Intelligence*, pp. 53-91. Cambridge, UK: Cambridge University Press.
- Gruber, J., P.B. Levine, and D. Staiger (2000). Abortion legalization and child living circumstances: who is the 'marginal child?' *Quarterly Journal of Economics*, 115: 263-291.
- Gunnar, M. (1996). Quality of care and the buffering of stress physiology: Its potential in protecting the developing human brain. University of Minnesota Institute of Child Development.
- Gutman, H. (1976). *The black family in slavery and freedom, 1750-1920.* New York: Pantheon.
- Guttentag, M & P. Secord (1983). *Too many women: The sex ratio question*. Beverly Hills, CA: Sage.
- Hacker, A. (1992). Two Nations. New York: Scribner's.

- Hall, S. (2002). Daubing the drudges of fury: Men, violence and the piety of the 'hegemonic masculinity thesis. *Theoretical Criminology*, 6:35-61.
- Hare, R. (1993). Without conscience: The disturbing world of the psychopaths among us. New York: Pocket books.
- Harpending, H. & G. Cochran (2002). In our genes. *Proceedings of the National Academy of Science*, 99:10-12.
- Harpending, H. & P. Draper (1988). Antisocial behavior and the other side of cultural evolution. In T. Moffitt, & S. Mednick (Eds.), *Biological contributions to crime causation*, pp. 293-307. Dordrecht: Martinus Nyhoff.
- Hapending, H., S. Sherry, A. Rogers, & M. Stoneking (1993). The genetic structure of ancient human populations. *Current Anthropology*, 34:483:496.
- Harris, A. & J. Shaw (2001). Looking for patterns: Race, class, and crime. In Sheley, J. (Ed.). *Criminology: A contemporary handbook* (pp. 129-163). Belmont: CA, Wadsworth.
- Harris, J., Vernon, P. & Boomsma, D. (1998). The heritability of testosterone: A study of Dutch adolescent twins and their parents. *Behavior Genetics*, 28:165-171.
- Harry, D. & J. Marks (1999). Human population genetics versus the HGDP. *Politics and the Life Sciences*, 18:303-305.
- Hartle, D.& A. Clark (1989). *Principles of population genetics*. Sunderland, MA: Sinhauer.
- Hawkins, D. (1995). Ethnicity, race, and crime: A review of selected studies. In D. Hawkins (Ed.), *Ethnicity, race, and crime: Perspectives across time and space* (pp.11-45). Albany, NY: State University of New York Press.
- Hayslett-McCall, K. & T. Bernard (2002). Attachment, masculinity, and self-control: A theory of male crime rates. *Theoretical Criminology*, 6:5-33.
- Hazard, J., W. Butler, & P. Maggs (1977). *The Soviet legal system*. Dobbs Ferry, NY: Oceana.
- Heck, G. & A. Walsh (2000). The effects of maltreatment and family structure on minor and serious delinquency. *International Journal of Offender Therapy and Comparative Criminology*, 44:178-193.
- Heise, J. (1990). We've captured the most dangerous serial killers! In A. Crockett (Ed.), *Serial Murderers*. New York: Pinnacle.
- Hewlett, B. (1992). Husband-wife reciprocity and father-infant relationship among Aka pygmies. In B. Hewett (Ed.), *Father-child relations: Cultural and biosocial contexts*, pp. 153-176. New York: Aldine de Gruyter.
- Hickey, E. (1991). Serial killers and their victims. Belmont, CA: Brooks/Cole.
- Hickey, E. (2006). Serial Murderers and Their Victims (4th Ed.). Belmont, CA: Wadsworth.
- Hill, K. & A. Hurtado (1996). Ache life history. New York: Aldine de Gruyter.
- Himmelfarb, G. (1994). A de-moralized society: The British/American experience. *The Public Interest*, Fall:57-80.
- HIVinsite (2001). HIV infection: United States. http://hivinsite.ucsf.edu/InSite.jsp.
- Hirschi, T. & M. Gottfredson (1987). Causes of white collar crime. Criminology, 25:949-974.
- Hockschild, J. (1995). Facing up to the American dream: Race, class, and the soul of the nation. Princeton: Princeton University Press.
- Holdaway, S. (1997). Some recent approaches to the study of race in criminological research. *British Journal of Criminology*, 37:383:400.

- Holzer, H. & P. Offner (2004). The puzzle of black male unemployment. *The Public Interest*, 154:74-84.
- Hood, J. (1989). Money isn't everything. The Wall Street Journal, Feb. 9:A10.
- Howard, C. (1979). Zebra: The true account of the 179 days of terror in San Francisco. New York: Richard Marek.
- Hrdy, S. (1999). *Mother Nature: A history of mothers, infants, and natural selection*. New York: Pantheon.
- Hrdy, S. (2000). Discussion paper. In Bancroft, J. (Ed.), *The role of theory in sex research*, pp.33-45. Bloomington, IN: Indiana University Press.
- Hughes, M. (1997). Symbolic racism, old fashioned racism, and whites' opposition to Affirmative action. In Tuch, S. & J. Martin (Eds). *Racial attitudes in the 1990s: Continuity and change*, pp. 45-75. Westport, CT: Praeger.
- Humes, K. & J. McKinnon (2000). The Asian and Pacific Islander in the United States. U. S. Census Bureau. Washington, DC: U.S. Government Printing Office.
- Hur, Y. & T. Bouchard (1997). The genetic correlation between impulsivity and sensation-seeking traits. *Behavior Genetics*, 27:455-463.
- Hurst, C. (1995). Social inequality: Forms, causes, and consequences. Boston: Allyn and Bacon.
- Hutchinson, E. (2001). Behind, beside, in front of him? Black women talk about their men. In Benokraitis, N. (Ed.), Contemporary ethnic families in the United States, pp. 58-70.
- Ianni, F. (1998). New Mafia: Black, Hispanic, and Italian styles. Society, 35:116-129.
- Jafee, S., T. Moffitt, A. Caspi, & A. Taylor (2003). Life with (or without) father: The benefits of living with two biological parents depend on the father's antisocial behavior. *Child Development*, 74:109-126.
- Jencks, C. (1992). *Rethinking Social Policy: Race, Poverty and the Underclass*. Cambridge, Harvard University Press.
- Jenkins, P. (1994). *Using murder: The social construction of serial homicide*. New York: Aldine de Gruyter.
- Jenkins, P. (1998). African Americans and serial homicide. In R. Holmes & S. Holmes (Eds.), *Contemporary perspectives on serial murder*. Thousand Oaks, CA: Sage.
- Jensen, A. (1977). Cumulative deficit in IQ of blacks in the rural south. *Developmental Psychology*, 13: 184-191.
- Jensen, A. (1998). The g factor: The science of mental ability. Westport, CT: Praeger.
- Johnson, L. (1996). Rap, misogyny, and racism. *Radical American*, 26: 7-19.
- Jord, L., W. Watkins, M. Barnshad, M. Dixon, C. Ricker, M. Seielstad, & M. Batzer (2000). The Distribution of human genetic diversity: A comparison of mitochondrial, autosomal, and Y-chromosome data. *American Journal of Human Genetics*, 66:979-988.
- Joselit, J. (1983). *Our gang: Jewish crime and the New York Jewish community, 1900-1940.* Bloomington, IN: Indiana University Press.
- Kanazawa, S. (2003). A general evolutionary psychological theory of criminality and related male-typical behavior. In Walsh, A. & L. Ellis (Eds.). *Biosocial criminology: Challenging environmentalism's supremacy*, pp. 37-60. Hauppauge, NY: Nova Science.
- Katz, J. (1988). Seductions of crime: Moral and sensual attractions in doing evil. New York: Basic Books.

- Kemper, T. (1990). Social structure and testosterone: Explorations of the socio-biosocial chain. New Brunswick: Rutgers University Press.
- Kennedy, R. (1997). Race, crime, and the law. New York: Pantheon.
- Kenrick, D. & J. Simpson (1997). Why social psychology and evolutionary psychology need one another. In Simpson, J. & D. Kenrick (Eds.), *Evolutionary Social Psychology*, pp. 1-20. Mahwah, NJ: Lawrence Erlbaum.
- King, A. (1999). African American females' attitudes toward marriage: An exploratory study. *Journal of Black Studies*. 29:416-437.
- Kitano, H. & R. Daniels (1995). *Asian Americans: Emerging minorities*. Englewood Cliffs, NJ: Prentice Hall.
- Klein, J. & N. Takahata (2002). Where do we come from? The molecular evidence of human descent. Berlin: Springer-Verlag.
- Knox, G. & L. Fuller (1995). The Gangster Disciples: A gang profile. *Journal of Gang Research*. 3:58-76.
- Koenen, K., T. Moffitt, A. Caspi, A. Taylor, & S. Purcell (2003). Domestic violence is associated with environmental suppression of IQ in young children. *Development and Psychopathology*, 15:297-311.
- Kornhauser, R. (1978). *Social sources of delinquency: An appraisal of analytical methods*. Chicago: University of Chicago Press.
- Kotkin, J. (1989). Black economic base in L. A. erodes as demographics change. *Washington Post*, October, 1: H2.
- Kreamer, G., M. Ebert, D. Schmidt, & W. McKinney (1998). A longitudinal study of the effect of different social rearing conditions on cerebrospinal fluid norepinephrine and biogenic amine metabolites in rhesus monkeys. *Neuopsychopharmacology*, 2:175-189.
- Krithivas, K., S. Yurgalevitch, B. Mohr, C. Wilcox, S. Batter, M. Brown, C. Longcope, J. McKinley, & P. Kantoff (1999). Evidence that the CAG repeat in the androgen receptor gene is associated with the age-related decline in serum androgen levels in men. *Journal of Endocrinology*, 162:137-142.
- Krueger, R., T. Moffitt, A. Caspi, A. Bleske, & P. Silva (1998). Assortative mating for antisocial behavior: Developmental and methodological implications. Behavior Genetics, 28:173-185.
- Kyl-Heku, L. & D. Buss (1996). Tactics as units of analysis in personality psychology: An illustration using tactics of hierarchy negotiation. *Personality and Individual Differences*, 21: 497-517.
- LeFevre, A. & R. Hederman (2001). *Report card on American education: A state by state analysis.* Washington, DC: American Legislative Exchange Council.
- LaFree, G. (1982). Male power and female victimization: Toward a theory of interracial rape. *American Sociological Review*, 45:842-854.
- LaFree, G. (1996). Race and crime trends in the United States, 1946-1990. In D. Hawkins (Ed.), *Ethnicity, race, and crime: Perspectives across time and space* (pp. 169-193). Albany, NY: State University of New York Press.
- Lafree, G. & K. Russell (1993). The argument for studying race and crime. *Journal of Criminal Justice Education*, 4:273-289.
- LaFree, G., K. Drass & P. O'Day (1992). "Race and crime in postwar America: Determinants of African-American and white rates." *Criminology*, 30:157-185.

- Laub, J. (1983), Urbanism, race, and crime. *Journal of research in crime and delinq*uency, 20:183-198.
- Lerman, R. (1993). A national profile of young unwed fathers. In R. Lerman & J. Ooms (Eds.), *Young unwed fathers: Changing roles and emerging policies*, pp. 27-51. Philadelphia: Temple University Press.
- Leslie, C. (1990). Scientific racism: Reflections on peer review, science and ideology. *Social Science and Medicine*, 31:891-912.
- Levin, J. & J. Fox (1985). Mass murder: America's growing menace. New York: Plenum.
- Levin, M. (1998). Squaring the circle: Review of *Guns, germs and steel: The fates of human Societies*. http://www.1rainc.com/swtaboo.html.
- Levine, D. (1993). Survival of the synapses. The Sciences, 33:46-52.
- Lewis, B. (1990). Race and slavery in the Middle East. New York: Oxford University Press.
- Leyton, E. (1986). *Hunting humans: Inside the minds of mass murderers*. New York: Pocket Books.
- Lin, K. (2001). Biological differences in depression and anxiety across races and ethnic groups. *Journal of Clinical Psychiatry*, 62:13-19.
- Loehlin, J. (2000). Group differences in intelligence. In R. Sternberg (Ed.), Handbook of Intelligence, pp. 176-193. Cambridge, UK: Cambridge University Press.
- Loury, G. (1995). One by one from the inside out. Essays and reviews on race and responsibility in America. New York: Free Press.
- Lubinski, D. & Humphreys, L. (1997). Incorporating intelligence into epidemiology and the social sciences. *Intelligence*, 24:159-201.
- Luninskas, J. (2001). Remembering the zebra killings. *Frontpage Magazine*. www.frontpagemag.com/guestcolunists/lubinskas.
- Lykken, D. The Antisocial Personalities. Hillsdale, NJ: Lawrence Erlbaum, 1995.
- Lynn, M. (1989). Race differences in sexual behavior: A critique of Rushton and Bogaert's evolutionary hypothesis. *Journal of Research in Personality*, 23:1-6.
- Lynn, R. (1990). Testosterone and gonadotropin levels and r/K reproductive strategies. psychological Reports, 67:1203-1206.
- Lynn, R. (1996). *Dysgenics: Genetic deterioration in modern populations*. Westport, CT: Greenwood Press.
- Macey, J. (1994). Banking by quota. Wall Street Journal, September 7: A14.
- MacDonald, K. (1992). Warmth as a developmental construct: An evolutionary analysis. *Child Development*, 63:753-773.
- MacDonald, K. (1997). Life history and human reproductive behavior: Environmental/contextual Influences and heritable variation. *Human Nature*, 8:327-359.
- Mackey, W. (1997). Single-parent families contribute to violent crime. In Swisher, K.(Ed.), *Single-Parent Families*, pp. 49-52. San Diego, CA: Greenhaven Press.
- Mann, C. (1990). Black Female Homicides in the United States. *Journal of Interpersonal Violence*, 5:176-201.
- Mann, C. (1995). The contribution of institutionalized racism to minority crime. In D. Hawkins (Ed.), *Ethnicity, race, and crime: Perspectives across time and space* (pp. 259-280). Albany, NY: State University of New York Press.
- Marks, J. (1996). Science and race. American Behavioral Scientist. 40:123-133.
- Martens, F. (1990). African American organized crime, an ignored phenomenon. *Federal Probation*, 54:43-50.

- Maughan, B. & A. Pickles (1990). Adopted and illegitimate children growing up. In Robins, L. & M. Rutter (Eds.), *Straight and Devious Pathways from Childhood to Adulthood*, pp. 36-61. Cambridge: Cambridge University Press.
- Mayr, E. (2002). The biology of race and the concept of equality. *Daedalus*, Winter:89-94.
- Mazur, (1995). Biosocial models of deviant behavior among army veterans. *Biological Psychology*, 41:271-293.
- Mazur, A. & A. Booth (1998). Testosterone and dominance in men. *Behavioral and Brain Sciences*, 21:353-397.
- McCaghy, C. & T. Capron (1994). *Deviant behavior: Crime, conflict, and interest groups*. New York: Mcmillan.
- MacDonald, K. (1992). Warmth as a developmental construct: An evolutionary analysis. *Child Development*, 63:753-773.
- MacDonald, K. (1997). Life history theory and human reproductive behavior: Environmental/contextual influences and heritable variation. *Human Nature*, 8:327-359.
- McGraw, S. (2002). Marc Sappington: The Kansas City Vampire. http://www.crimelibrary.com.
- McKinnon, J. & K. Humes (2000). *The Black Population in the United States*. U.S. Census Bureau: Washington, DC, 1999.
- McLeod, J., C. Kruttschnitt, & M. Dornfield (1994). Does parenting explain the effects of structural conditions on children's antisocial behavior? A comparison of blacks and whites. *Social Forces*, 73:575-604.
- McWhorter, J. (2000). Losing the race: Self-sabotage in black America. New York: Free Press.
- Mealey, L. (1990). Differential use of reproductive strategies by human groups? *Psychological Science*. 1:385:387.
- Mealey, L. (1995). The sociobiology of sociopathy: An integrated evolutionary model. *Behavioral and Brain Sciences*, 18:523-59.
- Merton, R. (1938). Social structure and anomie. American Sociological Review, 3:672-682.
- Merton, Robert. Social theory and social structure. Glencoe, IL: Free Press, 1957.
- Messner, Steven and Robert. Sampson. "The sex ratio, family disruption, and rates of violent crime: The paradox of demographic structure." *Social Forces*, 69:693-723, 1991.
- Miller, E. (1993). Another critique of Rushton: Could r selection account for the African personality and life cycle? *Personality and Individual Differences*, 15:665-676.
- Miller, E. (1994a). Tracing the genetic history of modern man. *Mankind Quarterly*, 35:71-108.
- Miller, E. (1994b). Paternal provisioning versus mate seeking in human populations. *Personality and Individual Differences*, 17:227-255.
- Miller, J. (1996). Search and destroy: African American males in the criminal justice system. Cambridge: University of Cambridge Press.
- Mills, S. & F. Allendorf (1996). The one-migrant-per-generation rule in conservation and management. *Conservation Biology*, 10:1509-1518.
- Millner, D. & N. Chiles (1999). What brothers think, what sisters know: The real deal on love and relationships. New York: Morrow.
- Milner, C. & R. Milner (1972). *Black players*. Boston: Little, Brown. *Missouri vs. Jenkins*, 495 U.S. 33 (1990).

- Moffit, T. and the E-Risk Study Team (2002). Teen-aged mothers in contemporary Britain. *Journal of Child Psychology and Psychiatry*, 43:1-16.
- Moffitt, T. & A. Walsh (2003). The Adolescent-Limited/Life-Course Persistent Theory of Antisocial Behavior: What have we Learned? In Walsh, A. & L. Ellis (Eds.). *Biosocial criminology: Challenging environmentalism's supremacy*, pp. 123-144. Hauppauge, NY: Nova Science.
- Mokiber, R. (1988). Corporate crime and violence: Big business, power and the abuse of public *trust*. San Francisco: Sierra Club Books.
- Molles, M. (2008). *Ecology: Concepts and applications* (4th Ed.). New York: McGraw Hill.
- Morgan, S., A. McDonald, A. Miller, & S. Preston (1993). Racial differences in household and family structure at the turn of the century. *American Journal of Sociology*, 98:798-828.
- Moynihan, D. (1965). *The Negro Family: The Case for National Action*. Washington, DC: U. S. Department of Labor.
- Murray, D., J. Schwartz, & R. Licher (2001). *It ain't necessarily so: How media make and Unmake the scientific picture of reality.* Lanham, MD: Rothman & Littlefield.
- National Center for Education Statistics (1995). *Disparities in public school district spending,* 1989-1990. Washington, DC: U.S. Government Printing Office.
- Neisser, U., Boodoo, G., Bouchard, T., Boykin, A., Brody, N., Ceci, S., Halpern, D., Loehlin, J., Perloff, R., Sternberg, R. & Urbina, S. (1995). Intelligence: Knowns and unknowns.
 Report of a task force established by the board of scientific affairs of the American Psychological Association. Washington, DC: American Psychological Association.
- Nelson, K. & J. White (2002). Androgen receptor CAG repeats and prostate cancer. *American Journal of Epidemiology*, 155:883-890.
- Nettler, G. (1984). Explaining crime (3rd Ed.). New York: McGraw Hill.
- Newton, M. & J. Newton (1991). *Racial & religious violence in America: A chronology*. New York: Garland.
- Norton, E. (1987). Restoring the traditional black family. In L. Barnes (Ed.), *Social problems*. Guilford, Con: Dushkin.
- O'Brien, R. (1987). The interracial nature of violent crimes: A reexamination. *American Journal of Sociology*, 92:817-835.
- O'Brien, R. (2001). Crime facts: Victim and offender data. In Sheley, J. (Ed.). *Criminology: A contemporary handbook* (pp. 59-83). Belmont: CA, Wadsworth.
- Ontario Provincial Government (1996). Report of the commission on systematic racism in the Ontario criminal justice system. Toronto: Queen's Printer.
- Padilla, F. (1992). The gang as an American enterprise. New Brunswick, NJ: Rutgers University Press.
- Palmer, C. & Tilley, C. (1995). Sexual access to females as a motivation for joining gangs: An evolutionary approach. *The Journal of Sex Research*, 32:213-217.
- Patterson, O. (1998). *Rituals of blood: Consequences of slavery in two American centuries*. Washington, DC: Civitas Counterpoint.
- Pedersen, F. (1991). Secular trends in human sex ratios: Their influence on individual and family behavior. *Human nature*, 2:271-291.
- Pearson, H. (2003). Mutt origins exposed: Genetic program IDs dogs. *Nature Science Update*, June 3:1-2.

- Perazzo, J. (1999). The myths that divide us: How lies have poisoned American race relations. Briarcliff Manor, NY: World Studies Books.
- Perrazzo, J. (2001). The truth about hate crime statistics. FrontPage Magazine, August 30th.
- Perry, B. & R. Pollard (1998). Homeostasis, stress, trauma, and adaptation: A neurodevelopmental view of childhood trauma. *Child and Adolescent Psychiatric Clinics* of America, 7:33-51.
- Phillips, U. (1927). Life and labor in the old South. Boston: Little, Brown.
- Pinel, J. (2000). *Biopsychology* (4th Edition). Boston: Allyn and Bacon.
- Pinker, S. (2002). The blank slate: The modern denial of human nature. New York: Viking.
- Plavcan, J. & C. van Schaik (1997). Intrasexual competition and body weight dimorphism in anthropoid primates. *American Journal of Physical Anthropology*, 103:37-68.
- Plomin, R., (2003). General cognitive ability. In Plomin, R., J. Defries, I.Craig, & P. McGuffin (Eds.), *Behavioral genetics in the postgenomic Era*, pp.183-201. Washington, DC: American Psychological Association.
- Plomin, R., J. Defries, I.Craig, & P. McGuffin (2001). *Behavioral genetics (4th Ed.)*. New York: Worth Publishers.
- Plomin, R., J. Defries, I.Craig, & P. McGuffin (2003). Behavioral genomics. In Plomin, R., J. Defries, I.Craig, & P. McGuffin (Eds.), *Behavioral genetics in the postgenomic Era*, pp.531-540. Washington, DC: American Psychological Association.
- Pope, C. & Snyder, H. (2003). Race as a factor in juvenile arrests. Juvenile justice bulletin (NCJ 189180). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Popenoe, D. (1994). The family condition of America: Cultural change and public policy. In H. Aaron, T. Mann, & T. Taylor (Eds.), *Values and public policy*, pp. 81-111. Washington, DC: The Brookings Institute.
- Porter, M. (1995). The competitive advantage of the inner city. *Harvard Business Review*, 73:63-64.
- Posthuma, D., E. de Geus, & D. Boomsma (2003). Genetic contributions to anatomical, behavioral, and neurophysiological indices of cognition. In Plomin, R., J. Defries, I.Craig, & P. McGuffin (Eds.), *Behavioral genetics in the postgenomic Era*, pp.141-161. Washington, DC: American Psychological Association.
- Poussaint, A. (1972). Why blacks kill blacks. New York: Emerson Hall Pub.
- Powell, P. (1996). Man who admits killing 9 women baffles experts. *Idaho Statesman*, December, 18, p. 15a.
- Preston, S., S. Lim, & S. Morgan (1992). African American marriages in 1910: Beneath the Surface of census data. *Demography*, 29:1-15.
- Quartz, S. & T. Sejnowski (1997). The neural basis of cognitive development: A constructivist manifesto. *Behavioral and Brain Sciences*, 20:537-596.
- Quinsey, V. (2002). Evolutionary theory and criminal behavior. *Legal and Criminological Psychology*, 7:1-14.
- Raine, A. (1993). The psychopathology of crime: Criminal behavior as a clinical disorder. San Diego: Academic Press.
- Raine, A. (1997). Antisocial behavior and psychophysiology: A biosocial perspective and a prefrontal dysfunction hypothesis. In Stoff, D., J. Breiling, & J. Maser (Eds.), *Handbook Of Antisocial Behavior*, pp. 289-304. New York: John Wiley.

- Rakic, P. (1996). Development of the cerebral cortex in human and non-human primates. In M. Lewis, (Ed.), *Child and Adolescent Psychiatry: A Comprehensive Textbook*, pp. 9-30. New York: Williams and Wilkins.
- Raleigh, M., McGuire, M., Brammer, G., Pollock, D., & Yuwiler, A. (1991). Serotonergic mechanisms promote dominance acquisition in adult vervet monkeys. *Brain Research* 559:181-190.
- Rasanen, P., H. Hakko, M. Isohanni, S. Hodkins, M. Jarvalin, & J. Tiihonen (1999). Maternal smoking during pregnancy and risk of criminal behavior among adult male offspring in the Northern Finland 1966 birth cohort. *American Journal of Psychiatry*, 156:857-862.
- Rasche, C. (1995). Minority women and domestic violence: The unique dilemmas of battered women of color. In Price, B. & N. Sokoloff (Eds.). *The Criminal Justice System and Women: Offenders, Victims, and Workers*, pp. 246-261. New York: McGraw-Hill.
- Reaves, B. & M. Hickman (2002). *Police departments in large cities, 1990-2000*. Bureau Of Justice Statistics. Washington, DC: U.S. Printing Office.
- Reno, P., R. Meindi, M. McCollum, & O. Lovejoy (2003). Sexual dimorphism in Australopithecus afarensis was similar to modern humans. *Proceedings of the National Academy of Sciences*, 100:9404-9409.
- Ridley, M. (1999). *Genome: The autobiography of a species in 23 chapters*. New York: HarperCollins.
- Roberts, J. & Gabor, T. (1990). Lombrosian wine in new bottles: Research on race and crime. *Canadian Review of Criminology*, 32-291-313.
- Roberts, P. (2002). Whatever happened to civil rights? http://www.townhall.com.columnists/paulcraigroberts.
- Roberts, P. & L. Stratton (1995). *The color line: How quotas and privilege destroy Democracy*. Washington, DC: Regnery.
- Rodney, E. & R. Mupier (1999). Behavioral differences between African American males adolescents with biological fathers and those without biological fathers in the home. *Journal of Black Studies*, 30:45-61.
- Rolinson, G. & V. Keith (1995). Drugs, crime, murder, and the underclass: An analysis of aggregate data from the largest metropolitan areas. In G. Thomas (Ed.), *Race and Ethnicity in America* (pp.129-144). Washington, DC: Taylor & Francis.
- Rose, R., L. Bernstein, H. Judd, R, Hannish, M. Pike, & B. Henderson (1986). Serum testosterone levels in healthy young black and white men. *Journal of the National Cancer Institute*, 76:45-48.
- Rossi, A. (1997). The impact of family structure and social change on adolescent sexual behavior. *Children and Youth Services Review*, 19:369-400.
- Rowe, D. (1992). Three shocks to socialization research. *Behavioral and Brain Sciences*, 14:401-402.
- Rowe, D. (1996). An adaptive strategy theory of crime and delinquency. In J. Hawkins (Ed.), *Delinquency and crime: Current theories*, pp. 268-314. Cambridge: Cambridge University Press.
- Rowe, D. (2002). On genetic variation in menarche and age at first sexual intercourse: A critique of the Belsky-Draper hypothesis. *Evolution and Human Nature*, 23: 365-372.
- Ruffie, J. (1986). *The population alternative: A new look at competition and the species*. New York: Random House.

- Ruggles, S. (1994). The origins of African American family structure. *American Sociological Review*, 59:136-151.
- Rushton, J. (1988). The reality of racial differences: A rejoinder with additional evidence. *Personality and Individual Differences*, 9:1035-1040.
- Rushton, J. (1989). The evolution of racial differences: A response to Lynn. *Journal of Research in Personality*, 237-20.
- Rushton, J. (1991). Race differences: A reply to Mealey. *Psychological Science*, 2:126.
- Rushton, J. (1994). The equalitarian dogma revisited. *Intelligence*, 19:263-280.
- Rushton, J. (1995). Race and crime: International data for 1989-1990. *Psychological Reports*, 76:307-312.
- Rushton, J. (1997). *Race, Evolution, and Behavior: A Life History Perspective*. New Brunswick, NJ: Transaction.
- Rushton, J. (1999). Review of *Guns, germs and steel: The fates of human Societies*. Population and Environment, 21:99-107.
- Rushton, J. & A. Bogaert (1987). Race differences in sexual behavior: Testing an evolutionary hypothesis. *Journal of Research in Personality*, 21:529-551.
- Rushton, J. & G. Whitney (2002). Cross-national variation in violent crime rates: Race, r-K theory, and income. *Population and Environment*, 23:501-511.
- Rutter (1996). Introduction: Concepts of antisocial behaviour, of cause, and of genetic influence. In Bock, G. & J. Goode (Eds.), *Genetics of criminal and antisocial behavior*, pp. 1-20. Chichester, England: Wiley.
- Rutter, M., H. Giller, & A. Hagell (1998). *Antisocial behavior by young people*. Cambridge: Cambridge University Press.
- Sampson, R (1995). The community. In Wilson, J. & J. Petersilia (Eds.), *Crime*, pp. 193-216. San Franciso: ICS Press.
- Sampson, R. & W. J. Wilson (2000). Toward a theory of race, crime, and urban inequality. In Cooper, S. (Ed.), *Criminology*. Pp. 149-160.
- Sarich, V. & F. Miele (2004). Race: The reality of human differences. Boulder, CO: Westview.
- Saunders, D. (2002). Conservatism can survive despite liberal bias. http://www.townhall.com/columnists.debrasaunders.
- Saunders, P. (1997). Social mobility in Britain: An empirical evaluation of two competing explanations. *Sociology*, 31:261-288.
- Saur, N. (1992). Forensic anthropology and the concept of race: If races don't exist, why are forensic anthropologists so good at identifying them? *Social Science and Medicine*, 34:107-111.
- Scarr, S. (1993). Biological and cultural diversity: The legacy of Darwin for development. *Child Development*, 64:1333-1353.
- Schatzberg, R. & R. Kelly (1996). *African-American organized crime: A social history*. New Brunswick, NJ: Rutgers University Press.
- Seligman, D. (1992). A question of intelligence: The IQ debate in America. New York: Birch Lane.
- Sharp, B. (2000). *Changing criminal thinking: A treatment program*. Lanham, MD: American Correctional Association.

- Sharp, W. (1993). School spending: Is there a relationship between spending and student achievement? A correlation study of Illinois schools. Paper presented at the Annual Meeting of the Education Finance Association, Albuquerque, NM, March.
- Shaw, C. & H. McKay (1972). *Juvenile Delinquency and Urban Areas*. Chicago: University of Chicago Press.
- Shi, S., T. Cheng, L. Jan, & Y. Jan (2004). The immunoglobin family member dendrite arborization and synapse maturation 1 (Dasm1) controls excitatory synapse maturation. *Proceedings of the National Academy of Sciences*, 101:13246-13351.
- Shipman, P. (1994). *The evolution of racism: Human differences and the use and abuse of science.* New York: Simon & Schuster.
- Shore, R. (1997). *Rethinking the brain: New insights into early development.* New York: Families and Work Institute.
- Shover, N. (1985). Aging Criminals. Beverly Hills, CA: Sage.
- Shreeve, J. (1994). Terms of estrangement. *Discover*, 15:57-63.
- Silberman, C. (1978). Criminal violence, criminal justice. New York: Random House.
- Singletary, M. (1999). Freddie Mac's backhanded benevolence. *Washington Post*, September, 26: H01.
- Snyderman, M. & Rothman, S. (1988). *The IQ controversy, the media and public policy*. New Brunswick, NJ: Transaction.
- South, S. & S. Messner (1986). The sex ratio and women's involvement in crime: A cross-national perspective. *The Sociological Quarterly*, 28:171-188.
- South, S. & K. Trent (1988). Sex ratios and women's roles: A crossnational analysis. *American Journal of Sociology*, 93:1096-1115.
- Sowell, T. (1993). *Inside American Education: The decline, the deception, the dogmas*. New York: Free Press.
- Sowell, T. (2003). Racial censorship. http://www.townhall.com/columniststhomassowell.
- Sokal, A. (1996). "Transgressing the boundaries: Toward a transformative hermeneutics of quantum gravity." *Social Text*, 46/47:217-252.
- South, S. & R. Felson (1990). The racial patterning of rape. Social Forces, 69:71-93.
- Stampp, K. (1956). The peculiar institution. Slavery in the antebellum South. New York: Vintage.
- Staples, R. & L. Johnson (1993). *Black families at the crossroads*. San Francisco: Jossey-Bass.
- Steele, S. (1991). The content of our character. New York: HarperCollins.
- Steelman, L. & J. Doby (1983). Family size and birth order as factors on the IQ performance of Black and white children. *Sociology of Education*, 56: 101-109.
- Stewart, E., R. Simons, and R. Conger (2002). Assessing neighborhood and social psychological Influences on childhood violence in an African-American sample. *Criminology*, 40: 801-824.
- Stouthamer-Loeber, M. & E. Wei (1998). The precursors of young fatherhood and its effect on delinquency of teenage males. *Journal of Adolescent Health Research*, 22:56-65.
- Stringer, C. & R. McKie (1996). *African exodus: The origins of modern humanity*. London: Jonathon Cape.
- Swanson, J., J. Oosrwelaan, M. Muias, S. Schuck, P. Flodman, M. Spence, M. Wasdell, Y. Ding, H. Chi, M. Smith, M. Mann, C. Carlson, J. Kennedy, J. Sergeant, P. Leung, Y. Zhang, A. Sadeh, C. Chen, C. Whalen, K. Babb, R. Moyzis, & M. Posner. (2000).

- Attention Deficit/hyperactivity disorder children with a 7-repeat allele of the dopamine receptor D4 gene have extreme behavior but normal performance on critical neuropsychological tests of attention. *Proceedings of the National Academy of Science*, 97:4754-4759.
- Takada, T. & H. Nakajima (1992). An analysis of life history theory in terms of the density-dependent Leftkovich matrix model. *Mathematical Biosciences*, 112:155-176.
- Takahata, N. (1995). A genetic perspective on the origin and history of humans. *Annual Review of Ecology and Systematics*, 26:343-372.
- Tang H., T. Quertermous B. Rodriguez, S. Kardia, X. Zhu, A. Brown, J. Pankow, M, Province, S. Hunt, E. Boerwinkle, N. Schork, N. Risch (2005) Genetic structure, self identified race/ethnicity, and confounding in case-control association studies., *American Journal of Human Genetics*, 76:268-75.
- Taylor, J. (1992). Paved with good intentions. The failure of race relations in contemporary America. New York: Carroll & Graff.
- Taylor, L., B. Zuckerman, V. Harik, & B. Groves (1994). Witnessing violence by young children and their mothers. *Journal of Developmental and Behavioral Pediatrics*, 15:120-123.
- Tatum, B. (1996). The colonial model as a theoretical explanation of crime and delinquency. In A. Sulton (Ed.), *African-American perspectives on crime causation, criminal justice Administration and crime prevention*, pp. 33-52. Boston: Butterworth-Heinemann.
- Teicher, M. (2002). Scars that won't heal: The neurobiology of child abuse. *Scientific American*, 286:68-75.
- Tellegen, A., D. Lykken, T. Bouchard, K. Wilcox, N. Segal. & S. Rich (1988). Personality similarity in twins reared apart and together. *Journal of Personality and Social Psychology*, 36: 1031-1039.
- Tershy, B. & D. Croll (2000). Parental investment, adult sex ratios, and sexual selection in a socially monogamous sebird. *Behavioral Ecology and Sociobiology*, 48:52-60.
- Thernstrom, S. & A. Thernstrom (1997). *America in black and white: One nation indivisible*. New York: Simon and Schuster.
- Thompson, P., T. Cannon, K. Narr, T. van Erp, V. Poutanen, M. Huttunen, J. Lonnqvist, C. Standerskjold-Nordenstam, J. Kaprio, M. Khaledy, R. Dail, C. Zoumalan, A. Toga. (2001). Genetic influences on brain structure. *Nature Neuroscience*, 4: 1-6.
- Thornberry, T., E. Wei, M. Stouthamer-Loeber, & J. Van Dyke (2000). Teenage fatherhood and Delinquent behavior. *Juvenile Justice Bulletin*. Washington, DC: Office of Justice and Delinquency Prevention.
- Toledo Blade (2000). Black brothers admit to murdering eight whites. *Toledo Blade*, April 7th, A1.
- Tooby, J. & Cosmides, L. (1990) On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality* 58, 17-67.
- Toronto Globe and Mail (1996). Prison admissions per 100,000 members of a racial group. Toronto Globe and Mail, Jan. 18. (http://www.storm.ca/~moparman/globe.htm)
- Tuch, S. & J. Martin, Eds. (1997). *Racial attitudes in the 1990s: Continuity and change*. Westport, CT: Praeger.
- Turner, H., D. Finkelhor, & R. Ormrod (2006). The effects of lifetime victimization on the mental health of children and adolescents. *Social*

- Science and Medicine, 62:13-27.
- Turner, P. (1993). I heard it through the grapevine: Rumor in African American culture. Berkley, University of California Press.
- Umemoto, K. & C. Mikami (2000). A profile of hate crime in Los Angeles County. *Western Criminology Review*, 2 [Online]: http://wcr.Sonoma.edu/v2n2/umemoto.html.
- United States Bureau of the Census (1995). *Marital status and living arrangements: March,* 1994. Washington, DC: U.S. Government Printing Office.
- United States Census Bureau.(2000). *The Population of the United States*. U.S. Census Bureau: Washington, DC.
- United States Department of Health and Human Services (1997). *Child maltreatment 1996: Reports from the states to the National Center on Child Abuse and Neglect.* Washington, DC: National Center on Child Abuse and Neglect.
- van den Berghe, P. (1990). Why most sociologists don't (and won't) think evolutionarily. *Sociological Forum*, 5:173-185.
- Vedder, R. & L. Gallaway (1993). Declining black unemployment. *Society*, 30:57-63.
- Walinsky, A.(1997). The crisis of public order. In Fisch, M. (Ed.). *Criminology 97/98*, pp. 8-15. Guilford, CT: Dushkin.
- Walsh, A. (1987). The sexual stratification hypothesis and sexual assault in light of the changing conceptions of race. *Criminology*, 25:153-173.
- Walsh, A. (1990). Illegitimacy, child abuse and neglect, and cognitive development. *Journal of Genetic Psychology*, 151:279-285.
- Walsh, A. (1991) *Intellectual imbalance, love deprivation, and violent delinquency: A biosocial perspective.* Springfield, IL: Charles C. Thomas.
- Walsh, A. (1993). Love styles, masculinity/femininity, physical attractiveness and sexual behavior: A test of evolutionary theory. Ethology and Sociobiology, 14:25-38.
- Walsh, A. (1995). Biosociology: An Emerging Paradigm. New York, Praeger.
- Walsh, A. (2000a). Behavior genetics and anomie/strain theory. Criminology, 38:1075-1107.
- Walsh, A. (2000b). Evolutionary psychology and the origins of justice. *Justice Quarterly*, 17:841-864.
- Walsh, A. (2000c). Human reproductive strategies and life history theory. In Bancroft, J. (Ed.), *The role of theory in sex research*, pp. 17-29. Bloomington, IN: Indiana University Press.
- Walsh, A. (2001). *Correctional assessment, casework and Counseling* (3rd Ed.). Lanham, MD: American Correctional Association.
- Walsh, A. (2002). *Biosocial Criminology: Introduction and Integration*. Cincinnati, OH: Anderson Publishing.
- Walsh, A. (2003). The sex ratio: A biosocial explanation for racial/ethnic variation in variation in crime rates. In Walsh, A. & L. Ellis (Eds.) *Biosocial criminology: Challenging environmentalism's supremacy*. Pp. 61-82. Huntington, NY: Nova Science Publishers.
- Walsh, A. (2005). African Americans and serial killing in the media: The myth and the reality. *Homicide Studies*, 9:271-291.
- Walsh, A. (2006). Evolutionary psychology and criminal behavior. In J. Barkow (Ed.). Missing the Revolution: Darwinism for Social Scientists. pp. 225-268. Oxford: Oxford University Press.

- Walsh, A. & L. Ellis (1999). Political ideology and American Criminologists' explanations for criminal behavior. *The Criminologist*, 24(6): 1-27.
- Walsh, A. & C. Hemmens (2000). From law to order: The theory and practice of law and justice. Lanham, MD. American Correctional Association.
- Ward, B. (1999). Sex machines and prisoners of love: Male Rhythm and blues, sexual politics and the black freedom struggle. In P. Ling & S. Monteith (Eds.), *Gender in the civil rights movement*, pp 41-67. New York: Garland.
- Washington, B. (1972). *The Booker T. Washington papers*, Vol. 1. L. Harlan (Ed.). Chicago: University of Chicago Press.
- Weeks, M., M. Singer, M. Grier, & J. Schensul (1996). Gender relations: Sexuality and AIDS risk among African American and Latina women. In C. Sargent & C. Brettell (Eds.), *Gender and health: An international perspective*, pp. 338-370. Upper Saddle River, NJ: Prentice Hall.
- West, D. & D. Farrington (1977). The delinquent way of life. New York: Crane Russak.
- Western, B. (2003). Incarceration, employment, and public policy. New Jersey Institute for Social Justice. http://www.njisj.org/reports/western_report.html.
- Weyler, W., Y. Hsu, & X. Breakefield (1990). Biochemistry and genetics of monoamine oxidase. *Pharmocotherapy*, 47:391-417.
- White, P. & J. Woodbridge (1998). *The prison population in 1997*. Home Office Research Unit, London: Home Office.
- Weisburd, D., S. Wheeler, E. Waring & N. Bode (1991). *Crimes of the middle classes: White collar offenders in the criminal courts.* New Have, CT: Yale University Press.
- Wetherell, C. (1981). Slave kinship: A case study of the South Carolina Good Hope Plantation. *Journal of Family History*, 6:294-308.
- Wikstrom, P. & R. Loeber. (2000). Do disadvantaged neighborhoods cause well-adjusted children to become adolescent delinquents? A study of male juvenile serious offending, individual risk and protective factors and neighborhood context." *Criminology*, 38: 1109-1142.
- Wilbanks, W. (1987). The myth of a racist criminal justice system. *Criminal justice research bulletin*, Vol. 3. Huntsville, TX: Sam Houston State University.
- Wikstrom, P. & R. Loeber (2000). Do disadvantaged neighborhoods cause well-adjusted children to become adolescent delinquents? A study of male juvenile serious offending, individual risk and protective factors and neighborhood context. *Criminology*, 38: 1109-1142.
- Williams, A. (2002). Hate crime reversed. http://www.townhall.com/columnists.Awilliams.
- Williams, A. (2003). Racial double standard? Of course! http://www.townhall.com/columnists.Awilliams.
- Williams, C., T. Serfass, R. Cogan, & O. Rhodes (2002). Microsaellite variation in the reintroduced Pennsylvania elk herd. *Molecular Ecology*, 11:1299-1310.
- Williams, W. (1999). The unspoken truth about racial crimes. Find/Articles.com.
- Williams, W. (2002). The devil made me do it. http://www.mugu.com/cgi.bin/Upstream.
- Wilson, M. & Daly, M. (1985). Competitiveness, risk taking and violence: The young male syndrome. *Ethology and Sociobiology*, 6:59-73.
- Wilson, G., I. Sakura-Lemessy, & J. West (1999). Reaching the top: Racial differences in Mobility paths in upper-tier occupations. *Work and Occupations*, 26:165-186.

- Wilson, J. Q. (2000). *The marriage problem: How our culture has weakened families*. New York: HarperCollins.
- Wilson, M. & Daly, M. (1985). Competitiveness, risk taking and violence: The young male syndrome. Ethology and Sociobiology, 6:59-73.
- Wilson, W. J. (1987). The Truly Disadvantaged. Chicago: University of Chicago Press.
- Wilson, J. Q. & R. Herrnstein (1985). *Crime and Human Nature*. New York: Simon & Schuster.
- Wrangham, R. & D. Peterson (1996). *Demonic males: Apes and the origins of human violence*. Boston: Houghton Mifflin.
- Wolfgang, M. & F. Ferracutti (1967). *The Subculture of Violence: Towards an Integrated Theory in Criminology*. London: Tavistock.
- Wolpoff, M. & R. Caspari (1997). Race and human evolution. New York: Simon & Schuster.
- Woodward, C. (1974). *The strange career of Jim Crow* (3rd. Edition). New York: Oxford University Press.
- Woodward, V. (1992). Human heredity and society. St. Paul, MN: West Publishing.
- Wrangham, R. (2001). Out of the Pan, into the fire: How our ancestors' evolution depended on what they ate. In de Waal, F. (Ed.). *Tree of origin: What primate behavior can tell us about human social evolution*, pp.143. Cambridge: Harvard University Press.
- Wrangham, R. & D. Peterson (1996). *Demonic males: Apes and the origins of human violence*. Boston: Houghton Mifflin.
- Wright, J. (2009). Inconvenient truths: Science, race and crime. In A. Walsh & K. Beaver. *Biosocial criminology: New directions in theory and research*, pp. 137-153. New York: Routledge.
- Wright, R. & J. Miller (1998). Taboo until today? The coverage of biological arguments in criminology textbooks, 1961 to 1970 and 1987 to 1996. *Journal of Criminal Justice*, 26:1-19.
- Wright, R. (1994). *The moral animal: Evolutionary psychology and everyday life*. New York: Pantheon Books.
- Wu, A., A. Whittemore, L. Kolonel, E. John, R. Gallaher, D. West, J. Hankin, C. Teh, M. Dreon, & R. Paffenbarger (1995). Serum androgens and sex-hormone binding globulins in relation to lifestyle factors in older African-American, white and Asian men in the United States and Canada. Cancer Epidemiology, Biomarkers and Prevention, 4:735-741.
- Yee, A., H. Fairchild, F. Weizmann, & G. Wyatt (1993). Addressing psychology's problems with race. *American Psychologist*, 48:1132-1140.
- Young, V & A. Sulton (1996). Exclude: The current status of African-American scholars in the field of criminology and criminal justice. In A. Sulton (Ed.), *African-American perspectives on crime causation, criminal justice Administration and crime prevention*, pp. 1-16. Boston: Butterworth-Heinemann.
- Zuckernan, M. & N. Brody (1988). Oysters, rabbits and people: A critique of "race differences and behavior" by J. P. Rushton. *Personality and Individual Differences*, 9:1025-1033.
- Zuravin, S. (1988). Child maltreatment and teenage first births: A relationship mediated by chronic sociodemographic stress. *Journal of Orthopsychiatry*, 58:91-103.
- Zuriff, G. (2002). Inventing racism. The Public Interest, winter:114-128.

INDEX

Α

```
AAA, 3, 7, 9
AAT, 76
academic performance, 65, 101
academic success, 69
academics, 3, 16, 20, 39, 41
accidents, 81
accounting, 24
accuracy, 3, 7
achievement, 12
activity level, 101
Adams, 56, 121
adaptation, 55, 62, 75, 76, 112, 132, 136
ADHD, 8
adjustment, 76
administrators, 37
adolescence, 66, 92
adolescents, 58, 66, 133, 136
adult, 58, 75, 76, 86, 99, 101, 115, 122, 133, 136
adulteration, 54
adultery, 52, 124
adulthood, 58, 66, 92, 96
adults, 62, 100
advertising, 71
advocacy, 15
affective states, 16
affirmative action, 24, 44, 63, 123, 124
Africa, xiii, 21, 78, 80, 108, 112, 113, 114, 116, 118
African American, v, vi, ix, xii, 16, 17, 18, 22, 23,
  24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36,
  37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49,
  50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62, 63,
  64, 65, 69, 70, 71, 77, 79, 81, 82, 83, 86, 91, 94,
  95, 96, 97, 98, 99, 102, 120, 121, 127, 128, 129,
   130, 132, 133, 134, 137, 138
African American women, 82
```

```
African Americans, ix, xii, 16, 17, 18, 22, 23, 24, 25,
  26, 27, 31, 32, 33, 34, 36, 38, 41, 44, 45, 46, 47,
  48, 49, 50, 51, 53, 54, 55, 56, 58, 59, 60, 61, 63,
  64, 65, 69, 70, 71, 77, 91, 96, 98, 99, 120, 127,
African-American, 22, 23, 31, 32, 61, 119, 128, 134,
  135, 136, 139
age, 28, 57, 66, 67, 68, 73, 74, 76, 80, 81, 82, 85, 96,
  99, 100, 101, 103, 109, 110, 111, 116, 128, 133
aggression, 3, 53, 55, 79, 111, 120, 121
aggressive personality, 101
aggressiveness, 74, 81, 103
aging, 96
agriculture, 108
AIDS, 54, 79, 138
air, 71, 123
Alabama, 31
Alaska, 59, 99
Alaska Natives, 99
Alaskan Native, 27, 59
alcohol, 21, 27, 87, 124
alcohol abuse, 27
alcoholism, 81
alienation, 60
allele, xiii, 8, 9, 14, 112, 113, 114, 121, 124, 136
alleles, 2, 7, 8, 9, 107, 113, 114
alpha, 95
alternative, 12, 13, 60, 106, 109, 110, 114, 117, 120,
alternatives, 4, 117, 118
alters, 100
altruism, 73, 75, 111
Amazon, 81
ambivalence, 16
amelioration, 82
American culture, 51, 55, 79, 82, 122, 137
American Indian, 2, 27, 48, 59, 99
American Indians, 2, 8, 48, 81, 99
American Psychological Association, 66, 124, 131,
  132
```

amine, 128	
anatomy, ix	В
androgen, 96, 97, 128	
androgens, 10, 97, 139	banks, 46, 47
anger, ix, 16, 93, 98	Barack Obama, 47
Anglo-Saxon, 50	barriers, 46, 51, 61, 114
animals, 9, 13, 40, 49, 89, 96, 101, 107, 108, 109,	barter, 78
114	base pair, 10
anomalous, 118	battered women, 133
anthropological, 5, 11, 76, 95, 111	beating, 39
anthropology, 86, 134	behavior, x, xi, xii, xiii, 3, 8, 13, 16, 17, 19, 21, 27,
antisocial acts, 74, 92	30, 37, 43, 44, 48, 51, 52, 53, 54, 58, 60, 67, 73,
antisocial behavior, 8, 43, 52, 53, 54, 82, 84, 86, 90,	74, 75, 76, 77, 80, 81, 82, 83, 84, 85, 86, 89, 90,
91, 92, 96, 99, 101, 105, 122, 123, 127, 128, 130,	91, 92, 93, 95, 96, 97, 98, 99, 100, 101, 102, 103,
134	105, 106, 107, 109, 110, 111, 112, 115, 116, 117,
antisocial behaviour, 122, 125, 134	118, 119, 122, 123, 124, 125, 126, 127, 129, 130,
antisocial personality, 84, 101	132, 133, 134, 136, 139
antisocial personality disorder, 101	behavioral problems, 83
anxiety, 111, 129	behavioral sciences, 124
application, 2, 47, 53	beliefs, 54, 120
appraisals, 95	benefits, 92, 108, 127
argument, 2, 3, 9, 10, 13, 15, 19, 24, 27, 44, 47, 57,	benevolence, 135
59, 63, 65, 66, 78, 90, 91, 97, 105, 108, 109, 110,	benign, 50, 108
128	bias, xii, 20, 21, 22, 23, 26, 27, 33, 34, 66, 84, 99,
armed forces, 61, 81	102, 134 hinding 07, 130
arousal, 8	binding, 97, 139 binding globulin, 139
arrest, 17, 18, 20, 22, 23, 25, 26, 27, 32, 49, 52, 122	biological consequences, 108
arson, 17, 18, 27	biological parents, 67, 99, 127
Asia, 21, 113	biological processes, 9
Asian, 6, 7, 11, 19, 20, 21, 24, 25, 26, 32, 37, 38, 49,	biological systems, 98
58, 59, 60, 66, 81, 82, 94, 96, 97, 102, 103, 105,	birds, 116
110, 127, 128, 139	birth, 10, 38, 71, 101, 102, 115, 116, 133, 135
Asian American, 24, 25, 26, 32, 37, 49, 66, 81, 82,	births, xii, 43, 80, 83, 87, 110, 139
96, 128	black market, 93
Asian Americans, 24, 25, 26, 32, 37, 49, 96, 128	Black Muslims, 32
assault, 17, 18, 21, 23, 25, 27, 29, 52, 85, 101, 137	black women, 79, 81, 82
assaults, 31, 34	Blacks, 20, 23, 33, 45, 51, 52, 53, 54, 56, 62, 63, 65
assessment, 35, 93, 137	blame, x, 54, 55, 70, 71, 77, 101
assimilation, 44, 51 assumptions, 13, 93	blaming, ix, x, 77
asymmetry, 74	blood, 6, 40, 131
Athens, 80	body weight, 132
Atlantic, 119	boils, 10, 19
attachment, 75, 95, 121	bomb, 28
attacks, 33, 118	bonding, 75, 81, 99, 110, 111, 115, 116
attempted murder, 30	bonds, 99
attitudes, xii, 44, 45, 50, 51, 52, 54, 71, 80, 82, 92,	boredom, 8, 9
120, 127, 128, 136	Boston, 119, 120, 122, 123, 124, 127, 130, 132, 136,
Australia, 113	139
authority, 23, 56	boys, 83, 91, 92, 95, 122
autopsy, 30	brain, xiii, 8, 10, 30, 68, 99, 100, 101, 103, 106, 110,
availability, 19, 60, 85, 109	115, 116, 120, 123, 125, 135, 136
aversion, 71	brain dayalonment, 00
	brain development, 99

child molesters, 95 brain functioning, 106 brain growth, 116 child rearing, 99 childhood, 30, 66, 75, 76, 81, 99, 100, 101, 107, 132, brain size, 110, 115 135 brain structure, 136 brain tumor, 30 children, xiii, 30, 32, 40, 49, 53, 58, 62, 63, 65, 66, branching, 6 68, 70, 73, 75, 76, 78, 79, 81, 82, 83, 84, 86, 87, breakdown, 59, 62, 89, 114 90, 91, 93, 95, 98, 99, 100, 101, 103, 111, 112, breeding, 6, 8, 14, 114 121, 122, 128, 130, 135, 136, 138 bribery, 37 chimpanzee, 122 Britain, 78, 84, 131, 134 China, 4 brothers, 32, 130, 136 chromosome, 7, 127 brutality, 33, 50 chromosomes, 7 bullying, 101 chronic stress, 100 Bureau of the Census, 18, 25, 27, 137 cigarettes, 54 burglary, 17, 18, 20, 27 Cincinnati, 122, 137 burn, 17 circulation, 54 bypass, 75 citizens, 22, 59, 121 citizenship, 48, 49, 51 civil rights, 23, 40, 45, 58, 70, 71, 133, 138 C Civil Rights, 54, 61 Civil Rights Act, 54, 61 calculus, 70, 82 civilian, 97 Cambodia, 4 class size, 64 Canada, 19, 21, 27, 139 classes, 60, 66, 71, 138 cancer, 24, 97 classical, 53 candidates, 47, 58 classification, 2, 4, 5 capitalist, 15 classroom, 45 cargo, 108, 110 clines, 5 Caribbean, 111 clinics, 79 Caribbean nations, 111 cluster analysis, 7 case study, 138 clusters, 5 cast, ix, 47, 71 CNS, 120 casting, 28 coding, 6, 8 CAT, 75, 76 cognition, 132 categorization, 1, 2 cognitive ability, 132 category a, 26, 34 cognitive development, 132, 137 cattle, 103 cohort, 73, 83, 101, 102, 133 Caucasian, 32 college students, 54 causation, 4, 126, 136, 139 colleges, 22, 47, 63, 64 CBS, 125 colors, 5, 94 cell, 7, 10 commerce, 114 censorship, 17, 41, 135 commodity, 80 Census, 17, 18, 25, 27, 49, 50, 59, 60, 61, 62, 81, 96, communication, 32 127, 130, 137 communities, x, 22, 32, 37, 38, 50, 53, 59, 82, 85, Census Bureau, 49, 60, 61, 62, 81, 96, 127, 130, 137 90, 93, 102 Center for Disease Control and Prevention, 79 community, ix, xii, 17, 20, 22, 37, 38, 39, 40, 43, 44, cerebral cortex, 133 46, 52, 53, 54, 56, 58, 63, 70, 71, 80, 81, 82, 83, cerebrospinal fluid, 128 84, 87, 89, 102, 127, 134 chaos, 52, 55 compensation, 51 cheating, 76 competition, 68, 93, 94, 96, 97, 98, 100, 103, 107, chicken, 54 111, 115, 122, 132, 133 child abuse, 43, 52, 84, 98, 99, 101, 102, 103, 136, competitive advantage, 132

complement, x, 6, 106

137

child maltreatment, 102

complex behaviors, 97	125, 126, 127, 128, 129, 131, 132, 133, 134, 135,
complexity, 67, 68, 106, 125	136, 137, 138, 139
compliance, 51	crimes, ix, x, xii, 15, 16, 17, 18, 19, 20, 22, 23, 24,
components, 14, 84, 100	25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37,
composition, 14, 19, 62, 89, 90, 94, 114	39, 40, 41, 42, 49, 52, 53, 74, 85, 95, 110, 138
computer simulation, 114	criminal activity, 19, 21, 23, 26, 29, 49, 50, 73
concealment, 36	criminal acts, 16, 29, 58
concentration, 91	criminal behavior, x, xi, xii, 5, 8, 13, 15, 16, 17, 18,
concrete, 1	19, 20, 21, 22, 23, 25, 27, 43, 44, 57, 58, 59, 60,
conduct disorder, 101	71, 73, 74, 75, 83, 84, 98, 101, 105, 110, 132,
confidence, 95, 97	133, 137, 138
conflict, 74, 89, 107, 115, 130	criminal gangs, 38
conformity, 86	criminal justice, 1, 21, 23, 27, 33, 86, 95, 121, 125,
confounding variables, 24	130, 131, 135, 136, 138, 139
conscientiousness, 11, 58, 60, 69, 71	criminal justice system, 1, 21, 27, 121, 130, 131, 138
consciousness, xi	criminal violence, 77
consensus, 22, 98	criminality, 1, 15, 17, 73, 74, 123, 124, 127
conservation, 130	criminals, x, 15, 37, 52, 57, 58, 74, 75, 110
conspiracy, 41, 54, 69	criminology, 13, 14, 21, 29, 44, 121, 122, 123, 125,
constraints, 59, 67, 96, 98, 106	127, 131, 137, 139
construction, 1	critical period, 68
constructionist, 16	criticism, 20, 54, 105
constructivist, 120, 132	cross-cultural, 85
consumers, 15	cultural differences, 91, 105
continuity, 78, 79, 109	cultural practices, 16
contracts, 45, 46	cultural values, 52, 53
control, 4, 20, 25, 51, 67, 80, 84, 102, 111, 125, 136	culture, xii, 39, 40, 50, 52, 60, 66, 69, 74, 78, 93, 99,
control, 4, 20, 25, 51, 67, 80, 84, 102, 111, 125, 136 conversion, 44	culture, xii, 39, 40, 50, 52, 60, 66, 69, 74, 78, 93, 99, 105, 106, 120, 121, 139
conversion, 44	105, 106, 120, 121, 139
conversion, 44 conviction, 101, 102	105, 106, 120, 121, 139 curiosity, 34
conversion, 44 conviction, 101, 102 cooling, 29	105, 106, 120, 121, 139
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86	105, 106, 120, 121, 139 curiosity, 34 customers, 47
conversion, 44 conviction, 101, 102 cooling, 29	105, 106, 120, 121, 139 curiosity, 34
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135	105, 106, 120, 121, 139 curiosity, 34 customers, 47
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63	105, 106, 120, 121, 139 curiosity, 34 customers, 47
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41	105, 106, 120, 121, 139 curiosity, 34 customers, 47 D danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Darwinism, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Dawinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Dawinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108	105, 106, 120, 121, 139 curiosity, 34 customers, 47 danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108 credit rating, 47	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113 degradation, 50
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108 credit rating, 47 creep, 67	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113 degradation, 50 delinquency, 22, 58, 77, 83, 89, 90, 92, 119, 126,
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108 credit rating, 47 creep, 67 crime, iv, ix, x, xi, xii, 1, 13, 15, 16, 17, 18, 19, 20,	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113 degradation, 50 delinquency, 22, 58, 77, 83, 89, 90, 92, 119, 126, 128, 129, 133, 135, 136, 137
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108 credit rating, 47 creep, 67 crime, iv, ix, x, xi, xii, 1, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 33, 34, 35, 36,	105, 106, 120, 121, 139 curiosity, 34 customers, 47 danger, 107 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113 degradation, 50 delinquency, 22, 58, 77, 83, 89, 90, 92, 119, 126, 128, 129, 133, 135, 136, 137 delinquent behavior, 92
conversion, 44 conviction, 101, 102 cooling, 29 copulation, 75, 86 correlation, 8, 57, 59, 63, 64, 65, 67, 68, 83, 84, 127, 135 correlation coefficient, 63 correlations, 64, 83, 84, 85, 102, 114 corruption, 37 costs, 59, 65 counsel, 1 counterfeiting, 36 couples, 114 courts, 23, 37, 138 covering, 41 creativity, 68 credentials, 4, 63, 79 credit, 36, 37, 47, 70, 108 credit rating, 47 creep, 67 crime, iv, ix, x, xi, xii, 1, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 48, 49, 52, 53, 54, 57,	105, 106, 120, 121, 139 curiosity, 34 customers, 47 Darwinism, 100, 137 dating, 80 death, 35, 52, 53, 56, 93, 100 death penalty, 52 deaths, 87 debt, 51 decisions, 46, 82 defendants, 52 defense, 22, 93 deficit, 86, 127 deficits, 92 definition, 4, 6, 36, 56, 66, 113 degradation, 50 delinquency, 22, 58, 77, 83, 89, 90, 92, 119, 126, 128, 129, 133, 135, 136, 137

democracy, 15

demographic characteristics, 37 drug addict, 77 demographic data, 91 drug addiction, 77 demographic structure, 130 drug dealing, 90 demographics, 19, 121, 128 drug trafficking, 38 denial, 3, 5, 13, 60, 63, 132 drugs, 16, 20, 21, 54, 77, 87 density, 24, 100, 136 dust, 5, 71 Department of Health and Human Services, 59, 137 Department of Justice, 120, 122 E depression, 129 deprivation, 48, 98, 137 earth, 5 desert, 80 East Asia, 25, 50, 111 destruction, 95 eating, 55 detection, 29 ecological, 6, 8, 11, 25, 76, 81, 85, 89, 90, 91, 121 detention, 57 ecologists, 92 determinism, xi, 112 ecology, xii, 43, 80, 89, 90, 121, 123 devaluation, xii, 22, 69 economics, 41, 46 developing brain, 68, 100, 101 education, vi, 61, 63, 69, 125, 128, 135 dichotomy, 75 egalitarianism, 4 diesel, 71 egg, 109 differentiation, 5, 14, 113, 116 egoism, 75, 120 diffusion, 108 elaboration, 116 dignity, 55 election, 41, 45 dimorphism, 132, 133 elementary school, 71 disability, 33 elephant, ix, 43 disaster, 58 elk, 118, 138 discipline, x, xi, 38, 39, 68 emancipation, ix, 51, 52, 56, 78 discomfort, x, 45 embezzlement, 36 discourse, 13, 17 embryo, 10 Discover, 2, 122, 135 emotional, 16, 82, 95, 100, 112 discretionary, 22 emotional experience, 100 discriminant analysis, 11, 13 emotional reactions, 16 discrimination, 25, 44, 45, 47, 48, 49, 54, 60, 65, 111 emotionality, 98 discriminatory, 60 emotions, 16 diseases, 97 empathy, 73, 74, 75, 111 dislocations, 49 employees, 36, 52 disorder, 122, 132, 136 employers, 52, 94 dispersion, xiii employment, 49, 57, 58, 59, 61, 62, 63, 65, 71, 77, disposition, 102 81, 82, 125, 138 disputes, 38, 59, 90, 94, 118 empowered, 55 distribution, 5, 6, 38, 97 endocrine, 99 diversity, xi, 1, 16, 118, 124, 127, 134 energy, 74, 109, 110, 111, 116 divorce, 124 England, 20, 25, 122, 125, 134 dizygotic, 110 Enron, 36 DNA, 7, 9, 10, 14, 117, 118, 120 enterprise, 37, 43, 131 dogmas, 135 enthusiasm, 90 dogs, 117, 131 entrepreneurship, 68 domestic violence, 18, 22, 52, 101, 133 environment, ix, x, 4, 6, 55, 66, 67, 75, 76, 79, 82, domestication, 108, 114, 116 84, 89, 96, 97, 98, 100, 102, 109 dominance, xiii, 93, 94, 96, 102, 108, 111, 115, 120, environmental advantage, 67 130, 133 environmental conditions, 4, 68, 75, 80, 114 dopamine, 8, 101, 112, 121, 123, 136 environmental context, 97 DRD4 gene, 8, 9 environmental effects, 67, 98, 123 dream, 4, 121, 123, 126 environmental factors, xi, 12, 67, 68, 97, 112

federal courts, 37

environmental influences, 67	feedback, 96
environmentalism, x	feelings, 13, 53
enzymes, 112	feet, 9
epidemics, 90	felony, 30, 49, 56
epidemiology, 129	females, 10, 17, 19, 20, 22, 27, 57, 62, 71, 74, 75, 76,
epistemology, 14	78, 79, 80, 81, 82, 83, 85, 86, 87, 94, 95, 107,
equality, 34, 130	111, 115, 116, 131
equilibrium, 116	femininity, 137
estimating, 114	fertility, 109, 111, 120
estrangement, 135	fetal, 115
ethnic groups, xii, 4, 8, 10, 14, 17, 20, 25, 38, 45, 46,	fetal brain, 115
48, 49, 58, 60, 62, 82, 90, 91, 129	fetuses, 87
ethnicity, 9, 27, 119, 125, 136	Fidel Castro, 41
ethnocentrism, 44	fidelity, 75, 81
etiology, 75	fighters, 30
Eurocentric, 45, 47, 70	finance, 64
Europe, 21, 94, 113	fines, 51
European Americans, 24	fingerprints, 2
Europeans, 2, 6, 27, 107, 111	Finland, 133
evil, 16, 127	fire, 30, 100, 123, 139
evolution, 6, 13, 74, 105, 106, 107, 111, 112, 113,	firearms, 53
114, 115, 116, 117, 121, 122, 126, 134, 135, 139	fires, 30
evolutionary process, 86, 106, 110, 115, 117	firms, 36
exclusion, 71	fish, 116
excuse, ix, 53	fitness, 86, 93, 109, 112, 114
execution, 112	fixation, 14, 113, 114
exercise, 5, 10, 22, 51, 95 expenditures, 64	flood, 114 flow, xiii, 14, 52, 74, 113, 114
exposure, 33, 58, 85	fluid, 66, 68, 128
extraversion, 111, 122	fluid intelligence, 66
eyes, 20	Flynn effect, 67
-, -,	focusing, x, 43
	folklore, 52
F	food, 108
6.1. i. 77	Ford, 36
fabric, 77	forensic, 7, 134
failure, ix, 11, 45, 52, 53, 54, 66, 69, 70, 76, 77, 136	forgery, 20, 36
fairness, 46 faith, 45, 53, 57, 69	forgetting, 68
family, 18, 25, 30, 38, 46, 49, 59, 60, 61, 62, 76, 77,	fossil, 105, 112, 113
78, 79, 82, 84, 85, 86, 89, 90, 94, 99, 107, 111,	founder effect, 107
122, 124, 125, 126, 130, 131, 132, 133, 134, 135	Fox, 18, 29, 94, 98, 122, 124, 129
family behavior, 131	France, 78, 114
family income, 25, 49, 59, 60	Franklin D. Roosevelt, 61
family relationships, 111	fraternal twins, 68
family structure, 61, 76, 78, 84, 94, 122, 126, 131,	fraud, 20, 29, 36, 37, 121
133, 134	Freddie Mac, 47, 135
family violence, 99	freedom, 81, 125, 138
fatherhood, 84, 135, 136	Freud, 13
FBI, 18, 25, 26	friendship, 94 friestration, 53, 60, 84, 98
fear, 19, 23, 39, 44, 45	frustration, 53, 60, 84, 98 fuel, 96, 97
fears, 41, 46	funding, 63
Federal Bureau of Investigation, 124	futures, xii, 58, 102
federal courts, 37	1444100, A11, 50, 102

G

Gallup poll, 17 gambling, 16, 25, 38 games, ix gamete, 11, 12, 110 gangs, 30, 38, 84, 94, 119, 131 gas, 96, 97 gender, xii, 9, 10, 33, 74, 78, 79, 82, 110 gender differences, 10 gender role, 79 gene, 2, 5, 8, 9, 10, 12, 13, 14, 67, 84, 97, 98, 101, 102, 111, 112, 113, 114, 120, 123, 128, 136 gene pool, 2, 67, 113, 114 general intelligence, 68 generation, 44, 49, 84, 93, 114, 117, 120, 130 genes, x, xi, 2, 3, 4, 6, 7, 8, 9, 10, 11, 66, 67, 68, 74, 75, 76, 81, 82, 84, 86, 99, 106, 107, 108, 112, 113, 116, 117, 121, 125, 126 genetic diversity, 118, 127 genetic drift, xiii, 107, 113, 114, 116 genetic factors, 84 genetic marker, 6, 7 genetic traits, 78 genetics, x, xi, 3, 4, 13, 14, 75, 108, 126, 132, 136, 137, 138 genocide, 3 genome, x, 9, 10, 14, 75, 124 genomic, 117 genomics, 132 genotype, 121 genotypes, 68, 102 genre, 36 geography, 70, 107, 112, 121 Georgia, 31, 66, 91 gestation, 110 gifted, 67, 70 girls, 82, 86 GNP, 83 goals, 9, 15, 86, 94, 98 God, 4 gonadotropin, 87, 129 gonads, 87 gonorrhea, 79 government, iv, 19, 44, 46, 47, 54, 86 GPA, 9 grades, 24 grants, 38, 54 gravity, 14, 135 gray matter, 68 Great Britain, 19, 83, 84 Great Depression, 58 group identity, 34

group membership, 119 group size, 118 group variance, 10 grouping, 7 groups, xi, xii, xiii, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 17, 19, 20, 22, 24, 25, 27, 28, 34, 37, 38, 39, 44, 45, 46, 48, 50, 51, 58, 59, 60, 62, 63, 68, 69, 76, 77, 81, 82, 84, 89, 90, 91, 96, 105, 108, 109, 110, 112, 113, 114, 116, 124, 129, 130 growth, 58, 109, 116 guerrilla, 30 guidelines, 14 guilt, 46, 53, 69, 92, 124 guilty, 21, 32, 52 Guineans, 108 guns, 29, 108

Н

handicapped, 86 handling, 20, 35 hands, 29, 53, 70, 93 haplotype, 124 harassment, 49 hardships, 49, 71 Harlem, 38, 77 harm, 15, 16, 45, 101 Harvard, 122, 127, 132, 139 hate, xii, 18, 29, 33, 34, 35, 37, 42, 132, 137 hate crime, xii, 18, 29, 33, 34, 35, 37, 42, 132, 137 head injuries, 99 health, 55, 123, 138 Health and Human Services, 59, 137 hearing, 45 heart, 77, 117 heat, 24 height, 9 helplessness, 16, 50 heredity, 122, 139 heritability, 67, 68, 69, 76, 96, 97, 126 heroin, 38 herring, 2, 27 heterogeneous, 89 heterozygosity, 14 high risk, 92, 98 high school, 22, 62, 63, 70, 71 higher education, 24 high-risk, 47, 92 hip, 65, 90 hips, 108 hiring, 45, 46 Hispanic, 18, 26, 27, 33, 34, 46, 58, 59, 62, 94, 99, 127

Hignories 18 26 27 24 27	
Hispanics, 18, 26, 27, 34, 37	I
HIV, 79, 126 HIV infection, 79, 126	
	Idaho, 121, 132
holism, 124 holistic, xi	identification, 21
	identity, 34, 79, 95
homelessness, 77	ideology, 12, 14, 43, 44, 51, 120, 129, 138
homicide, 17, 18, 19, 22, 24, 29, 44, 50, 53, 85, 99,	Illinois, 35, 64, 135
101, 102, 121, 127	illiteracy, 24, 49, 63
homicide rate, 18, 19, 24, 50, 99	images, xiii, 39, 43, 103
homicide rates, 18, 19, 24, 50, 99 hominids, 113	imaging, 68
homogeneity, 90	immigrants, 49, 66, 105
homozygosity, 14	immunity, 52
honesty, 49	imperialism, 5
	implementation, 45
hormone, 87, 97, 110, 139	imprinting, 107
hormones, xi, 87, 100, 112	imprisonment, 19, 51
hospital, 37	impulsive, 84, 125
host, 24, 76 hostile environment, 55	impulsiveness, 8, 92, 101, 111
hostility, 51	impulsivity, 75, 101, 127
household, 32, 50, 59, 62, 131	in situ, 50
household composition, 62	in utero, 87
household income, 50, 59	inbreeding, 113
households, 59, 62, 85, 95	incarceration, 58
housing, 24, 25, 46	incentive, 122
human, x, xi, 2, 3, 4, 5, 7, 9, 10, 11, 12, 44, 49, 50,	incentives, 89
53, 57, 68, 75, 76, 77, 80, 89, 90, 92, 93, 94, 95,	inclusion, 25, 49
99, 102, 105, 106, 107, 109, 110, 111, 112, 113,	income, 9, 24, 25, 47, 49, 50, 58, 59, 60, 61, 62, 63,
114, 115, 116, 117, 118, 121, 122, 123, 124, 125,	85, 90, 95, 134
126, 127, 128, 129, 130, 131, 132, 133, 134, 136,	income inequality, 25
139	incomes, 49, 63
human animal, 122	independence, 11, 38, 79, 106
human behavior, x, 106, 111, 117	Indian, ix, 43, 48
human brain, 68, 99, 125	Indiana, 127, 137
human condition, xi	Indians, 20, 27, 48, 50, 99, 111
human development, 116	indication, 30
human dignity, xi, 4	indicators, 12, 45, 65, 79, 91
human genome, 124	indices, 132
human nature, 4, 13, 76, 106, 132, 136	individual character, 91
human rights, 4	individual characteristics, 91
humanity, 13, 44, 59, 135	individual differences, x, xi, xii, 60, 91, 102
humans, xi, xiii, 1, 5, 9, 10, 11, 16, 73, 74, 76, 80,	indoctrination, 54
89, 98, 106, 107, 110, 112, 113, 116, 129, 133,	industrial, 61
136	inequality, 55, 120, 121, 127, 134
humiliation, 50	inertia, 20
hunter-gatherers, 111	infancy, 68, 100
hunting, 39, 111, 112	infants, 99, 100, 112, 115, 116, 127
husband, 112	Infants, 100
hydrogen, x	infection, 79, 126
hyperactivity, 101, 136	inferiority, 44, 53
hypersensitive, 93	inflammatory, 1
hypothesis, 23, 24, 56, 91, 116, 129, 132, 133, 134,	inhibition, 97
137	inhospitable, 80
	initiation, 94

injunction, 5 judicial branch, 61 injury, 18, 93, 101 jurisdiction, 32 injustice, 48, 54, 55 jurors, 52 inmates, 51 jury, 121 insight, 68, 105 justice, x, 23, 33, 34, 41, 46, 86, 95, 103, 121, 122, instability, 77, 109 123, 125, 132, 135, 136, 137, 138, 139 institutionalization, 45 juveniles, 23 institutions, 46, 51, 71, 81, 89, 94, 102 insults, 30, 102 K insurance, 36, 59 insurance fraud, 36 K-12, 65 intangible, 93 kidnapping, 30 integration, 44, 61 killing, xii, 29, 31, 32, 39, 40, 56, 82, 94, 132, 137 integrity, 14, 39 King, 16, 39, 77, 79, 82, 128 intellectual potential, 68 intelligence, 4, 12, 58, 60, 66, 67, 68, 73, 76, 86, 107, 108, 115, 117, 124, 125, 129, 134 L intentions, 63, 136 interaction, 66, 67, 94, 102, 112 labeling, 15, 47 interactions, 51, 102 labor, 51, 132 interest groups, 130 lactase, 2 interference, 53 lactose, 2, 4 intergenerational, 67, 68, 84 land, 49, 59, 107, 108 interpersonal contact, 19 language, 2, 3, 40, 66, 70, 71 interpersonal relations, 75 large-scale, 5, 84 interpersonal relationships, 75 laundry, 45 interrelationships, 89 law, 15, 37, 38, 39, 40, 45, 46, 51, 55, 58, 62, 70, 93, intimacy, 76 94, 101, 122, 128, 138 intimidation, 51 law enforcement, 15, 37, 38, 40, 45, 46, 51, 93, 122 intracranial, 68 laws, xii, 45, 51, 52, 58, 60, 78 intrinsic, 90, 109 leadership, 38, 69, 71 inventions, 56 learning, xi, 69, 101 investment, 74, 75, 82, 83, 109, 110, 112, 115, 116, learning disabilities, 101 121, 124, 136 lending, 36, 46, 120 IQ, vi, 4, 9, 24, 65, 66, 67, 68, 69, 71, 84, 100, 123, liberal, ix, x, 14, 16, 34, 41, 45, 54, 63, 77, 79, 134 124, 127, 128, 134, 135 liberty, 52 irritation, 98 life cycle, 130 Islam, 31 life expectancy, 110 Islamic, 32 life forms, 106 isolation, 6, 14, 84, 99, 114, 116, 118 lifespan, 101 lifestyle, 56, 62, 84, 112, 139 lifestyles, 90 J lifetime, 136 likelihood, 62, 84, 98, 120 Jamaica, 111 linkage, 124 Japanese, 2, 7, 25, 91, 98, 124 literacy, 51, 61 Java, 113 livestock, 112 Jews, 2, 8, 49, 50, 69, 91 living arrangements, 137 job performance, 68 loans, 47 jobs, 28, 46, 59, 61, 71, 101 locomotion, 116 journalism, 41

locus, 123

long period, 116

London, 19, 20, 78, 121, 122, 135, 138, 139

journalists, 41

judgment, 117

judge, 16, 37, 64

longitudinal studies, 83	medical care, 87
longitudinal study, 128	medicine, 70
Los Angeles, 23, 34, 39, 95, 120, 137	melanin, 70
Louisiana, 31	membership, 95
love, 80, 86, 124, 130, 137, 138	memory, 120
low risk, 92	men, ix, xii, 10, 30, 32, 33, 40, 43, 53, 58, 61, 73, 74,
low-level, 81, 82	75, 77, 79, 80, 81, 82, 84, 86, 90, 93, 94, 95, 103,
loyalty, 39, 53	111, 127, 128, 130, 133, 139
lying, 101	menarche, 75, 76, 82, 133
	Mendel, 3
M	mental ability, 108, 127
	mental health, 136
machines, 138	mental health of children, 136
Madison, 123	meritocratic, 68
magnet, 64, 65, 71	messages, 45, 60
magnetic resonance, 68	metabolite, 98
magnetic resonance imaging, 68	metabolites, 128
mail fraud, 37	methodological implications, 128
mainstream, xii, 40, 51, 53, 79, 93, 118	metropolitan area, 133
maintenance, 11	Miami, 39
maladaptive, 52, 55, 74, 107	middle class, 61, 63, 70, 138 Middle East, 129
male bias, 27	migrant, 89, 114, 130
males, xiii, 10, 17, 18, 20, 22, 24, 27, 31, 35, 40, 50,	migrants, 114
54, 58, 62, 73, 74, 75, 76, 77, 79, 80, 81, 82, 83,	migration, 112, 113, 116, 121
85, 86, 93, 94, 95, 96, 97, 98, 99, 102, 103, 107,	militant, 30
111, 112, 115, 116, 130, 133, 135, 139	mimicry, 99
malfeasance, 48, 117	Minnesota, 125
maltreatment, 99, 101, 102, 103, 121, 126, 137, 139	minorities, 27, 45, 47, 48, 69, 125, 128
mammals, 10	minority, 7, 25, 26, 34, 41, 45, 47, 48, 56, 64, 106,
management, 130	129
Manhattan, 49	Missouri, 64, 71, 130
mantle, 69	MIT, 121
manufacturing, 38, 70	mitochondria, 7, 118
MAO, xiii, 101, 102, 112	mitochondrial, 7, 127
marketplace, 63	mobility, 61, 68, 80, 92, 134
marriage, xii, 44, 57, 78, 79, 80, 81, 83, 123, 128,	model minority, 25
139	modeling, 99
marriages, 120, 132 married women, 85	models, 25, 85, 89, 97, 112, 130
Marx, 30, 32	modern society, 86
Marxist, 4	modus operandi, 40
masculinity, 56, 81, 95, 120, 126, 137	momentum, 67
Massachusetts, 79	money, 36, 46, 58, 62, 64, 65, 89
maternal, 7	monkeys, 98, 128, 133
mathematics, 2	monoamine, 101, 138
matrix, 136	monoamine oxidase, 101, 138
maturation, 11, 12, 110, 135	monozygotic twins, 110
meanings, 1, 13	mood, 93
measures, 6, 11, 54, 83, 91, 92, 96, 111	morality, 53, 80, 85, 102
meat, 111	morphological, xiii, 5, 100, 105, 111, 115, 117
media, xii, 4, 32, 35, 39, 40, 41, 42, 87, 125, 131,	morphology, 2, 6, 7, 11, 12, 107, 117
135, 137	mortality, 81
median, 49, 50, 59, 60, 69, 85	mortality rate, 81

mortgage, 46, 47, 120 motherhood, 62 mothers, 78, 80, 82, 83, 84, 127, 131, 136 motion, 10, 115 motivation, 24, 29, 33, 74, 122, 131 motives, 35 motor vehicle theft, 17, 18, 27 movement, 58, 71, 138 MRI, 68 mtDNA, 118 multiple regression, 83, 85 multiples, 26 multiplier, 67 multiplier effect, 67 murder, 16, 17, 18, 19, 21, 25, 26, 27, 29, 30, 31, 32, 33, 35, 37, 49, 53, 85, 87, 94, 124, 127, 129, 133 music, 82, 93 Muslim, 30 Muslims, 32 mutations, 6, 113 myopic, 22

Ν

naming, 2 narcissistic, 95 nation, 62, 64, 126, 136 National Academy of Sciences, 66, 133, 135 National Center for Education Statistics, 64, 131 National Crime Victimization Survey, 22 National Incident-Based Reporting System, 23 National Incident-Based Reporting System (NIBRS), 23 national origin, 33 nationalism, 3 nationality, 112 Native American, 27, 37, 48, 59 Native Americans, 27, 37, 48 native population, 48 natural, xiii, 6, 8, 9, 11, 55, 69, 74, 75, 76, 89, 93, 96, 98, 100, 106, 107, 108, 109, 112, 113, 114, 115, 117, 124, 127 natural disasters, 109 natural selection, 6, 8, 9, 11, 74, 75, 76, 93, 96, 98, 100, 106, 107, 108, 112, 113, 114, 115, 117, 127 NCVS, 22, 23 negative relation, 65, 79 neglect, xiii, 17, 39, 43, 52, 82, 84, 98, 99, 100, 101, 102, 103, 110, 125, 137 negligence, 20 negotiation, 128 nerve, 100 network, 12, 68

neural network, 68 neural networks, 68 neurobiology, 136 neurohormonal, 73, 74, 116 neuron death, 100 neuronal loss, 100 neurons, xi, 100 neuropsychological tests, 136 neuroscience, 4 neuroscientists, 100 neurotransmitter, 8, 97 neurotransmitters, 100, 101, 112 New Jersey, 37, 38, 63, 64, 65, 122, 138 New Orleans, 30, 46 New York, 38, 40, 41, 49, 83, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139 New York Times, 41 New Zealand, 84, 101, 102 newspapers, 41 Newton, 32, 131 NIBRS, 23 nightmares, 3 non-human, 98, 105, 107, 133 non-human primates, 98, 133 non-random, 11, 114 norepinephrine, 128 normal, 30, 75, 86, 136 normative behavior, 81 norms, 52, 89 North America, 27 Norway, 7 nuclear, 76, 78, 79 nuclear family, 76, 78 nucleotides, 10 nucleus, 76 null hypothesis, 24

0

objectivity, 41
obligate, 74
observations, 17, 79
occupational, 49, 60, 61, 63, 68
occupational mobility, 61, 68
offenders, 18, 19, 20, 22, 26, 30, 37, 138
Office of Juvenile Justice and Delinquency
Prevention, 132
Office of Personnel Management, 46
Ohio, 13, 32

nurse, 35

nurturance, 73

nutrition, 67, 87

personal problems, x personal responsibility, 44, 71

old-fashioned, 44	personality, 12, 52, 67, 69, 76, 84, 86, 119, 121, 122,
online, 120	128, 130
opposition, 45, 48, 127	personality factors, 69
oppression, 19, 44, 69, 91	personality traits, 67, 119
oral, 127	phenomenology, 102
Oregon, 64	phenotype, 122
organ, 100	phenotypes, 7, 67
organism, 10, 11, 100, 107, 117	phenotypic, 67
organized crime, xii, 29, 37, 38, 39, 121, 122, 129,	Philadelphia, 40, 50, 79, 123, 129
134	Philippines, 21
outliers, 114	philosophy, 44, 52
ovary, 11, 109	Phoenix, 23
oversight, 91	physical abuse, 101
oxytocin, 116	physical aggression, 101
,	physical attractiveness, 137
	physical environment, 7, 13
Р	physicians, 37, 79
	physics, 14
Pacific, 25, 37, 59, 60, 99, 127	physiological, xiii, 5, 11, 16, 94, 100, 106, 109
Pacific Islander, 25, 37, 59, 60, 99, 127	physiology, 24, 97, 110, 124, 125
Pacific Islanders, 25, 37, 99	pigs, 30
Panama, 108	plants, 108
paradox, 67, 130	plastic, 68
parameter, 66	plasticity, 68, 100, 124
paranoia, 55	play, ix, 13, 94, 105
parental care, 11, 109	pleasure, 74
parenthood, 62, 84, 99	Pleistocene, 76, 94, 118
parenting, xii, 63, 73, 74, 75, 76, 80, 81, 84, 86, 110,	pluralism, 15
111, 112, 120, 130	poisonous, 87
parents, xii, 58, 63, 67, 68, 76, 82, 84, 99, 102, 126,	police, xii, 19, 20, 22, 23, 29, 30, 32, 33, 34, 37, 39,
127	40, 46, 52, 53
Paris, 78	political parties, 47
passive, 67, 84	political power, 46
paternal, 75, 81, 102, 109, 111, 112, 115, 124 paternity, 74	politicians, 20, 41, 42, 63
pathologists, 49	politics, 35, 138
pathology, x, 16, 77	pollution, 37
pathways, 100, 102	polymorphism, 14, 114
patients, 24	polymorphisms, xii, 7, 10, 14, 98
patterning, 21, 135	pools, 19, 71, 113
pediatric, 99	poor, xii, 6, 58, 60, 63, 65, 70, 80, 90, 93, 109
peer, 98, 129	population, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 17,
peer review, 129	18, 19, 20, 23, 24, 25, 26, 27, 30, 31, 33, 34, 37,
peers, 91, 93, 105	41, 47, 48, 49, 52, 59, 61, 64, 66, 67, 79, 80, 83,
pelvic, 115, 116	85, 86, 99, 107, 108, 109, 112, 113, 114, 118,
penalties, 33	119, 126, 133, 138
penalty, 52	population density, 83
Pennsylvania, 91, 118, 138	population growth, 109
perception, 40, 55	population size, xiii, 25, 85
perceptions, 20, 22, 31, 41, 54, 55	positive relation, 64
permit, 63	positive relationship, 64
personal communication, 32	postmodernism, 13, 14
personal problems, x	posture, 115

poverty, xii, 24, 25, 30, 33, 43, 57, 58, 59, 60, 61, 62, 64, 65, 68, 70, 71, 77, 90, 91, 99, 125	prostitution, 16 protection, 53, 79, 95, 116
poverty line, 61	protective factors, 138
poverty rate, 57, 60, 61, 62, 65	protein, 8, 124
power, x, 13, 15, 17, 22, 25, 46, 52, 53, 80, 99, 107,	prototype, 38, 78
121, 122, 128, 131	proxy, 19
power relations, 13	prudence, 17
powers, 78	pruning, 100
pragmatic, xii, 4	psychiatric diagnosis, 101
predators, 107, 116	psychologist, 11, 70
predictive validity, 66	psychology, x, 52, 71, 105, 117, 120, 123, 128, 137,
predictor variables, 11	139
predictors, 85	psychopathology, 98, 132
preference, 19, 44, 45, 46	psychopaths, 74, 75, 126
preferential treatment, 46	psychopathy, 75
pregnancy, 86, 90, 119, 133	psychophysiology, 132
pregnant, 87	puberty, 75
prejudice, 49	public education, 63
premiums, 59	public interest, 40
president, 47	public policy, 132, 135, 138
President Bush, 123	public schools, 64, 69
President Clinton, 35, 41	punctuated equilibrium, 116
presidential elections, 41	pupil, 63, 64, 65
pressure, 8, 23, 47, 60, 116	putative cause, 105
prestige, 53, 94	
prevention, 20, 136, 139	
: 101	Q
primary care, 101	
primary care, 101 primate, 9, 98, 105, 116, 120, 122, 139	
	quantum, 14, 135
primate, 9, 98, 105, 116, 120, 122, 139	quantum, 14, 135 quantum gravity, 14, 135
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138	quantum, 14, 135 quantum gravity, 14, 135
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem solving, 69 production, 11, 12, 100, 109, 110	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34,
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32 property, 21, 25, 27, 36, 45, 64, 112	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134 racial groups, 4, 5, 12, 24, 27, 34, 44, 69, 105, 110
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32 property, 21, 25, 27, 36, 45, 64, 112 property crimes, 25, 27	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134 racial groups, 4, 5, 12, 24, 27, 34, 44, 69, 105, 110 racial issue, 1, 86, 117
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32 property, 21, 25, 27, 36, 45, 64, 112 property crimes, 25, 27 property taxes, 64	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134 racial groups, 4, 5, 12, 24, 27, 34, 44, 69, 105, 110 racial issue, 1, 86, 117 racial minorities, 46
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem behaviors, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32 property, 21, 25, 27, 36, 45, 64, 112 property crimes, 25, 27 property taxes, 64 proposition, 59, 61	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134 racial groups, 4, 5, 12, 24, 27, 34, 44, 69, 105, 110 racial issue, 1, 86, 117 racial minorities, 46 racial preferences, 45
primate, 9, 98, 105, 116, 120, 122, 139 primates, 132 prisoners, 138 prisons, 39, 51, 81 private, 46, 79 private sector, 46 proactive, 22 probability, xi, 17, 33, 58, 74, 75, 81, 82, 83, 84, 99, 102, 116, 122 problem behavior, 96 problem solving, 69 production, 11, 12, 100, 109, 110 profit, 37 profits, 46, 51 progenitors, 79 progeny, 78, 109, 113, 114 program, 44, 64, 68, 131, 134 programming, 112 propaganda, 32 property, 21, 25, 27, 36, 45, 64, 112 property crimes, 25, 27 property taxes, 64	quantum, 14, 135 quantum gravity, 14, 135 questionnaires, 22 quotas, 133 R race, 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24, 27, 28, 29, 31, 32, 33, 34, 35, 39, 40, 41, 43, 44, 45, 46, 47, 50, 54, 58, 59, 62, 66, 71, 75, 85, 95, 105, 108, 110, 111, 112, 114, 115, 116, 117, 120, 121, 125, 126, 128, 129, 130, 132, 133, 134, 136, 137, 139 racial categories, 5, 7, 9, 13, 21 racial classifications, 2, 5, 6 racial differences, ix, 10, 12, 16, 20, 22, 24, 27, 34, 37, 57, 60, 79, 96, 97, 98, 109, 110, 115, 117, 134 racial groups, 4, 5, 12, 24, 27, 34, 44, 69, 105, 110 racial issue, 1, 86, 117 racial minorities, 46 racial preferences, 45 racism, ix, xi, xii, 13, 22, 39, 41, 43, 44, 45, 46, 47,

rain, 10 risk, 46, 47, 59, 76, 82, 83, 84, 85, 86, 92, 93, 95, 98, random, 12, 31, 33, 34, 39, 110, 113, 114 99, 102, 133, 138, 139 randomness, 33 risks, 93, 98 range, 2, 10, 11, 22, 37, 66, 67, 91, 109, 110, 113 robberies, 36, 59 rape, 16, 17, 18, 19, 21, 23, 25, 27, 30, 35, 49, 57, robbery, 18, 20, 22, 23, 24, 26, 27, 29, 30, 49, 85, 85, 93, 101, 128, 135 rapists, 18, 19, 53, 85 Robbery, 17 rural, 24, 66, 79, 127 reality, x, 1, 2, 3, 7, 14, 15, 16, 22, 23, 24, 31, 47, 55, 82, 97, 119, 124, 131, 134, 137 rural areas, 24 reasoning, 37 Rwanda, 3 rebelliousness, 96 recall, 45, 100, 109 S receptors, 97, 116 reciprocity, 96, 126 sabotage, 69, 130 reconcile, 67 Saddam Hussein, 41 record keeping, 122 sadness, 16 recreational, 64 safety, 103, 112 rectification, x salaries, 64, 65 recycling, 101 sample, 14, 24, 56, 67, 85, 97, 103, 135 reductionism, x sanctions, 47 reflection, 41, 82 SAT scores, 9, 63, 64 regression, 25, 63, 64 satisfaction, 1, 51 regular, 65 scaffolding, 1, 44 regulation, 9 scams, 36 rejection, 55, 69, 101 scandal, 36 relationship, x, 11, 52, 54, 59, 60, 63, 64, 65, 73, 79, school, 22, 57, 61, 62, 63, 64, 65, 69, 70, 71, 89, 122, 80, 84, 97, 101, 108, 111, 119, 121, 123, 126, 125, 131, 135 135, 139 school performance, 65, 70, 122 relationships, xii, 75, 78, 79, 80, 82, 89, 111, 130 scores, 9, 63, 64, 66 relatives, 78 search, 25, 60, 93, 95, 105 relevance, 102 searching, 24 reliability, 20, 68, 96 second generation, 66 religion, 3, 33 secondary sexual characteristics, 103 religiosity, 123 secretion, 98 replication, 119 secular, 4 reporters, 41 securities, 37 repression, 71 security, 59, 79, 95 reproduction, 9, 83, 107 sedentary, 8, 108 reproductive age, 74, 109, 116 segregation, 19, 44, 79, 91 reputation, xi, 9, 49, 50, 93, 94, 95, 103 self-control, 86, 97, 98, 126 resentment, 60, 62 self-esteem, 44, 70, 93, 95, 97, 120 reservation, 50 self-image, xiii reservoir, 39 self-report, xii, 21, 22, 25, 27, 92, 98, 102 residential, 19 self-report data, xii, 22, 92 resistance, 44, 52, 54, 56, 107 self-reports, 22 resources, 11, 16, 63, 65, 69, 74, 75, 76, 79, 80, 81, self-worth, 94, 95 82, 85, 98, 109, 110 semantic, 2, 13 retaliation, 52 sensation, 8, 111, 127 retention, 100 sensation seeking, 8, 111 Reynolds, 80, 122 sensitivity, 20, 102 rhetoric, 53 sentences, 53 rhythm, 82 sentencing, 51 separation, 113

serial killers, 29, 31, 32, 33, 40, 126	social environment, 67
serial murder, 18, 29, 31, 36, 40, 127	social group, 96
serotonin, xiii, 96, 98, 101, 112, 120	social ills, 24
Serotonin, vi, 96, 97, 102	social institutions, 4
serum, 128	social justice, 41
SES, 66, 68	social life, 53
settlers, 48	social order, 79
sex, xii, 10, 18, 30, 73, 74, 80, 81, 82, 83, 85, 86, 87,	social organization, 12, 76
95, 107, 111, 119, 120, 122, 125, 127, 130, 131,	social policy, 125
135, 136, 137, 139	social psychology, 44, 120, 128
sex ratio, xii, 73, 80, 81, 82, 83, 85, 86, 87, 119, 122,	social relations, 55
125, 130, 131, 135, 136, 137	social sciences, 15, 28, 129
sexual abuse, 101	social status, 120
sexual activity, 75, 93, 110	social structure, 130
sexual assault, 137	social support, 83, 99
sexual behavior, 11, 73, 129, 133, 134, 137	socialization, 12, 133
sexual dimorphism, 115, 118	socially responsible, 76
sexual intercourse, 82, 133	sociocultural, x
sexual orientation, 33	socioeconomic, 83, 90, 120
sexuality, 80, 83, 87	socioeconomic status, 90
sexuality, 12, 73, 75, 79	sociological, 57, 69, 89, 123
sexuality, 81	sociologist, ix, x, 16, 77
sexuality, 120	sociologists, x, 5, 57, 105, 137
sexually transmitted disease, 79	sociology, 124
sexually transmitted diseases, 79	South Africa, 80
shame, 15	South America, 8, 81
sharing, 58, 62	South Asia, 20
shelter, 10	South Carolina, 63, 65, 138
shocks, 133	South Dakota, 118
shortage, 81, 82	Soviet Union, 4, 86
short-term, 58, 75	special education, 65
shy, 3, 17	speciation, 113, 116
sibling, 32, 84	species, xiii, 2, 3, 5, 9, 10, 11, 14, 73, 74, 75, 76, 80,
sign, 103	86, 93, 96, 105, 106, 107, 108, 109, 110, 115,
signals, 94	116, 117, 118, 133
signs, 61	spectrum, 5
similarity, 9, 35, 76, 84, 136	speed, 12, 110, 117
single nucleotide polymorphism, xii, 10	spheres, 90
skills, 58, 63, 65, 66, 106	spouse, 101
skin, 2, 6, 16, 35, 113	St. Louis, 65
slave trade, 122	stages, 116
slavery, ix, xii, 43, 48, 49, 50, 51, 52, 53, 55, 61, 77,	standard deviation, 65, 114
78, 79, 80, 86, 91, 95, 105, 125, 129, 131	standards, 28, 46, 47, 53, 56, 107, 108
slaves, 50, 51, 52, 56, 78, 79	starvation, 90
smoking, 21, 133	state legislatures, 47
smoothness, 5	statistical analysis, 13
SNPs, xii, 10, 14	statistics, 18, 19, 20, 21, 22, 25, 26, 27, 34, 77, 114,
sociability, 111	132
social change, 133	statutes, 56
social class, 5, 63	steel, 108, 123, 129, 134
social construct, xi, 1, 2, 10, 13, 15, 16, 119, 127	stereotype, 44
social control, 89	stereotypes, 16, 44, 49, 56
social development, 100	stigma, 77

stigmatized, 17, 41	targets, 48, 49, 53
stimulus, 100	task force, 131
storage, 108	taxes, 49, 51, 64
strain, 60, 62, 119, 137	taxonomic, 2
strategies, xii, 11, 55, 73, 74, 75, 79, 80, 82, 86, 109,	taxonomy, 11
110, 112, 120, 121, 123, 129, 130, 137	teachers, 65, 67, 70
stratification, 120, 137	Ted Bundy, 32
strength, 9, 100, 115	telemarketing, 36
stress, 80, 100, 125, 132, 139	television, 33, 40, 41, 42, 71
stressors, 75	television stations, 41
structuring, 38	temperament, 12, 60, 84, 117
student achievement, 135	temperature, 71
students, 24, 54, 63, 64, 65, 70	temporal, 35
subjective, 54, 80, 108	tenure, 28
Sub-Saharan Africa, 78	territory, xi, 95, 112
substance abuse, 81, 101	test scores, 65
substances, 98	testes, 10
suburban, 64	testosterone, xiii, 24, 96, 97, 98, 102, 103, 111, 112,
suffering, 95, 103	120, 123, 126, 128, 133
suicidal, 20	Testosterone, vi, 96, 97, 120, 124, 129, 130
suicide, 29	testosterone levels, 24, 96, 97, 103, 123, 133
summaries, 103	Texas, 30, 31, 35
superiority, 3, 4, 44	textbooks, xii, 139
	theft, 16, 17, 18, 20, 27, 29, 36
supervision, 85, 92	
supply, 44, 51, 79, 80 suppression, 128	thermodynamics, 55 thinking, 10, 16, 65, 105, 124, 134
Supreme Court, 51, 71	Thomas Hobbes, 103
surgery, 70	threat, 47, 52
surplus, 86	threatened, 120
surprise, 99	threatening, 3
survival, 6, 9, 55, 79, 107, 109, 114, 117	threats, 37, 41, 96, 100
surviving, 116	thresholds, 100
susceptibility, 75, 120	time frame, 32
suspects, 22	time periods, 21, 67
switching, 9	time use, 7
symbiotic, 89	tissue, 97
symbolic, 44	Togo, 21
symbols, 66	tolerance, 2, 4, 34
sympathy, 71	torture, 32, 35
symptoms, 17, 69, 101	trade, 49, 110, 122
synapse, 135	trade-off, 110
synapses, 129	tradition, 2, 52, 53, 60, 89
synaptic gap, 100	training, 30, 46
syndrome, 56, 138, 139	traits, ix, xi, xii, xiii, 4, 6, 8, 11, 12, 17, 44, 60, 66,
synthesis, 118	73, 74, 75, 84, 86, 89, 90, 91, 96, 100, 101, 107,
syphilis, 79	108, 109, 110, 111, 112, 117, 127
	trajectory, 58, 67, 68
Т	transactions, 101
<u>-</u>	transcendence, 71
tactics, 74, 75, 86, 117, 128	transformation, 116
Taiwan, 7	transformations, 116
tangible, 30, 60	transition, 5, 115
tar, 17	translation, 71
*	

transmission, 84 trauma, 132 traumatic experiences, 100 travel, 10, 45 trial, 39, 42 tribal, 78, 81 tribes, 78 triggers, 74, 97 truancy, 21, 65 truism, 10, 12 trust, 36, 37, 131 tuberculosis, 49 tumor, 30 twinning, 110 twins, 126, 136 typology, 121

U

UCR, 17, 18, 22, 23, 25, 26, 29, 33, 34, 36 ultraviolet, 5 unemployment, 24, 25, 76, 77, 83, 92, 127, 137 unemployment rate, 77, 83 UNESCO, 3, 13, 14 Uniform Crime Reports, xii, 29, 124 unions, 111 United Nations, 71 United States, iv, v, xii, 15, 17, 18, 19, 20, 25, 26, 27, 29, 31, 32, 37, 38, 45, 47, 49, 50, 51, 52, 54, 59, 60, 61, 62, 68, 71, 78, 80, 83, 90, 94, 105, 126, 127, 128, 129, 130, 137, 139 universality, 136 universe, 13 universities, 12, 46, 63, 64, 70 upward mobility, 92 urban areas, 24 Utah, 63, 64, 65

٧

vacuum, 89
validation, xiii, 94, 95, 103
validity, xii, 14, 66
values, xii, 7, 11, 14, 44, 45, 50, 52, 53, 55, 56, 69, 79, 89, 93, 95, 114
vandalism, 59, 101
variability, 9, 22
variables, 11, 12, 13, 22, 24, 57, 60, 64, 68, 83, 85, 110
variance, 9, 10, 14, 66, 68, 83, 105

variation, 1, 5, 7, 9, 10, 14, 24, 43, 66, 74, 83, 85, 97, 100, 112, 113, 114, 115, 116, 118, 119, 120, 121, 129, 130, 133, 134, 137, 138 vector, 107 vehicles, 114 vein, 68 venereal disease, 49 vessels, 114 veterans, 97, 130 victimization, xii, 18, 20, 22, 48, 69, 85, 91, 128, 136 victims, xiii, 16, 17, 18, 19, 20, 22, 29, 31, 32, 33, 34, 35, 36, 40, 41, 42, 44, 52, 53, 54, 69, 102, 103, 126 Victoria, 116 violence, 20, 34, 50, 53, 55, 56, 85, 90, 93, 94, 95, 96, 97, 98, 99, 101, 102, 103, 119, 120, 121, 124, 126, 128, 131, 135, 136, 138, 139 violent, ix, xii, 17, 19, 21, 23, 25, 27, 30, 34, 38, 49, 50, 52, 55, 74, 81, 83, 85, 91, 93, 94, 95, 96, 97, 98, 99, 101, 102, 115, 119, 122, 129, 130, 131, 134, 137 violent behavior, 30, 96, 99, 102 violent crime, ix, 17, 21, 23, 25, 27, 34, 50, 74, 85, 96, 101, 102, 119, 122, 129, 130, 131, 134 violent crimes, 21, 25, 27, 34, 74, 131 virus, 54 vocabulary, 13 vocational, 65 voice, 103 voicing, 7 voters, 47 vulnerability, 98

W

Wall Street Journal, 127, 129 war, 3, 38, 61, 82, 95 warfare, 30, 38, 81 warrants, 35 water, x weakness, 54 wealth, 94 weapons, 29 welfare, 59, 77, 85, 92, 121 West Africa, 78 West Indies, 111 Western societies, 76, 95 white women, 19, 35, 82 Wilson, 21, 22, 54, 87, 96, 110 wine, 133 winter, 139 wire fraud, 36

Wales, 20

Wisconsin, 123
wives, 49, 53, 84, 90, 103, 111
women, xii, 19, 22, 30, 31, 32, 35, 40, 73, 78, 79, 80, 81, 82, 83, 85, 111, 125, 127, 132, 133, 138
work ethic, 71
workers, 41, 61, 68
workforce, 46, 60, 65
workplace, 18, 63
writing, ix, 28, 31, 77, 108
Wyoming, 118

Υ

Y chromosome, 10 Yellowstone National Park, 118 yield, 22 young men, 58, 93, 94, 95 Yugoslavia, 3

Ζ

X

zygote, 110

xenophobia, 3, 44