

BIOLOGICAL INFLUENCES on CRIMINAL BEHAVIOR



Gail S. Anderson



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CRC Press
Taylor & Francis Group

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Boca Raton London New York

CRC Press is an imprint of the
Taylor & Francis Group, an informa business

CRC Press
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

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No claim to original U.S. Government works
Printed in the United States of America on acid-free paper
10 9 8 7 6 5 4 3 2 1

International Standard Book Number-10: 1-4200-4331-5 (Hardcover)
International Standard Book Number-13: 978-1-4200-4331-0 (Hardcover)
International Standard Book Number-10: 0-86491-283-8 (Hardcopy SFU)
International Standard Book Number-13: 978-0-86491-283-1 (Hardcover SFU)

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Library of Congress Cataloging-in-Publication Data

Anderson, Gail S. (Gail Scott)
Biological influences on criminal behavior / Gail S. Anderson.
p. cm.
Includes bibliographical references and index.
ISBN 1-4200-4331-5 (alk. paper)
1. Criminal behavior. 2. Human biology--Social aspects. 3. Criminal
behavior--Genetic aspects. 4. Sociobiology. 5. Criminology. I. Title.

HV6115. A644 2006
364.3--dc22

2006049390

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<http://www.crcpress.com>

Dedication

*To my parents, Alec and Pamela Anderson, and
my brother, David Anderson, who have always supported me
in all my endeavors; and to Professor Thelma Finlayson,
my mentor and friend, who has led the way
for women in science.*

Preface

In modern criminology, the main schools of thought focus on social, environmental, material, and psychological factors that can cause crime. Although excellent and persuasive studies have been eloquently presented, as a scientist, I have felt for some time that most studies neglect one important aspect of the equation: the physical persons themselves. Human beings are a complex mixture of upbringing, background, environment, experiences, social structure, *and* biology. My work with criminology has allowed me to see that much research has been done on this biological dimension of criminal behavior. Over the past 20 years, valuable work on genetic background, hormone and neurotransmitter levels, diet, and physical insults such as brain trauma has been accomplished. With few exceptions, most introductory works in criminology seriously neglect this research. It is my hope in writing this book to help right this imbalance. It was written in the hope that through an integration of the biological view with mainstream social, psychological, and environmental views, we can find a new way of studying criminality, and we might gain some positive and useful explanations for criminal behavior.

It must be said at the outset that I do not believe biology causes crime, any more than a particular background, experience, or social environment can cause a crime. However, one would be remiss not to at least consider the physical person when trying to see the entire picture. If we are ever to fully understand behavior, we must look at all the factors that influence it. This text, then, joins with current biological theorists such as Ellis and Walsh, Trasler, Rowe, Raine, Andrews, and Quinsey in introducing criminologists to a new area. Despite the increasing evidence for biological influences on criminality, the number of such publications for students of criminology is remarkably slight. It is almost as if studying this particular influence has been forbidden in criminological texts. Wright and Miller (1998), in their excellent article entitled "Taboo until Today," measured the amount of text written about biological explanations for crime versus other sociological explanations, and found that if biology was mentioned at all, it was given infinitesimal coverage. Although excellent biological studies have been conducted, especially in recent years, they have not been included in mainstream criminology. In part, this is due to a fear of biology as determinism, but it is primarily due

to a lack of understanding. Few scholars have both a criminological and a biological background. If we are to truly understand these valuable studies, strong backgrounds in genetics, neuroscience, and endocrinology, as well as criminology, are an asset. These backgrounds are not often found together. This book was written, then, to help the criminologist navigate an additional and vital new area of study; one with its own complexities and challenges. It does not attempt to suggest that biology plays *the* major role in criminal behavior. It was written with the belief, grounded in research, that something vital can be discovered when we assess all the factors related to the causes of crime; with luck, through this and texts like it, biology will be included in the equation.

One other qualification is necessary before we begin. Although you might think of yourself as a student of social behavior and not a scientist, you should be able to gain much from this text. You do not need to be a biologist to understand the concepts developed in *Biological Influences on Criminal Behavior*; in fact, you are not required to have any scientific background. The basic biological principles you need are explained so that you can understand the concepts discussed. There is only one real requirement that you must have to read and get as much out of this text as you can: *you must have an open mind*. You must be ready to look at new ideas. If you possess this trait, you can gain much from this text.

Gail Anderson

Simon Fraser University, 2006

Acknowledgments

This text has its own history of development. It began as a series of lectures in my fourth-year seminar classes in the School of Criminology at Simon Fraser University in British Columbia. It progressed from there to a study guide, and finally, after much editing and revision, to its current shape as an introduction to biological influences on crime. I must thank the many people who have helped me work on this text and the many students who have shaped its approach. This book would not have been possible without the assistance and engagement of my students, both graduate and undergraduate. Their critical comments and questions helped the formation of this book. I would also like to thank Dr. John Whatley of SFU Publications for encouraging me to write this book in the first place and for his continued enthusiastic support.

Gail Anderson
Simon Fraser University, 2006