CONTENTS

Preface vii

I. INTRODUCTION

1. Lives through Time 3

II. THE CHILD AS THE FATHER OF THE MAN

2. Moving Against the World, Moving Away from the World 29
3. To Be or Not to Be Self-Controlled 52
4. ADHD in Childhood and Adulthood 71

III. THE FAMILY

5. Why Parents Parent the Way They Do 91
6. Troubled Families and Bad Boys 111
7. Early-Maturing Girls, Troubled Families, and Bad Boys 131

IV. BEYOND THE FAMILY

8. Good News and Bad News about Day Care 153
9. What about Neighborhoods? 178
10. Bullying 199
11. Early and Persistent Cannabis Use 219
<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. GENETICS</td>
</tr>
<tr>
<td>12. Is Smoking in Our Genes? 235</td>
</tr>
<tr>
<td>13. Genetics of Life Success? 254</td>
</tr>
<tr>
<td>15. Life Stress, Genotype, and Depression in Young Adulthood 287</td>
</tr>
<tr>
<td>16. Epigenetics, or Genes as Dependent Variables 300</td>
</tr>
<tr>
<td>VI. AGING IN MIDLIFE</td>
</tr>
<tr>
<td>17. Childhood Adversity and Physical Health in Midlife 323</td>
</tr>
<tr>
<td>18. Biological Embedding of Childhood Adversity 338</td>
</tr>
<tr>
<td>19. Aging Fast, Aging Slow 357</td>
</tr>
<tr>
<td>VII. CONCLUSION</td>
</tr>
<tr>
<td>20. Miles to Go Before We Sleep 373</td>
</tr>
</tbody>
</table>

*Bibliography* 389

*Index* 399
The first time I met Terrie Moffitt was in the late 1980s, during a visit to a city in northern Finland where both of us were attending an international conference on human development. Temi, as she likes to be called, was sitting at the hotel bar, talking to Avshalom Caspi, whom I knew—but more as a younger colleague than a close friend, as he and Temi would become. As I approached Avshalom, who was deep in conversation with Temi, I overheard them discussing pubertal development. In my impulsive New York manner, I butted in and said, “Hi, Avshalom, I’ve got a hypothesis about puberty for you.”

I had recently become enamored with evolutionary biology’s argument that the purpose of life is to pass on genes to the next generation and future descendants (grandchildren, great-grandchildren, and so on). Although this idea is central to the thinking of virtually all biological scientists studying nonhuman life, it remains foreign to most students of human development, especially those investigating whether and how experiences in the family affect the developing child. Their more traditional frame of reference emphasizes health, happiness, and well-being, leading most developmental scholars to view life in terms of healthy versus unhealthy or “optimal” versus compromised development rather than in terms of reproductive success.

Although I was intrigued by evolutionary thinking, I struggled to come up with a hypothesis that, if confirmed, would convince me—and, I hoped, others—that an evolutionary perspective had much to offer students of
human development. This led eventually to the hypothesis that I shared with Temi and Avshalom, which no traditional development perspective had ever stimulated or could account for if true: Because growing up under adverse conditions increases the risk of dying or having one’s development compromised before reproducing, adverse childhood experience should accelerate pubertal development and thereby sexual maturation and fertility. In other words, family economic and social conditions should regulate physical development—by influencing the timing of puberty—not just, as has long been appreciated by traditional developmental reasoning, psychological and behavioral development.

I knew immediately after sharing my hypothesis with Avshalom and Temi that I would become fast friends with both of them, though perhaps Temi in particular. Why? Because of how the person who turned out to be Avshalom’s fiancée responded to my potentially outrageous proposition that family processes would influence pubertal development. Temi didn’t make a face that said “who is this impolite guy interrupting our conversation?”—a response that my New York style had provoked before. Nor did she, as so many others had, dismiss the idea out of hand because it challenged sacred theoretical cows about who was healthy, what was optimal development, and thus the fundamental nature of human development. (Sadly, academia is far less open-minded than many presume.) Rather, Temi responded enthusiastically and open-mindedly by immediately saying, “We can test that!” And so we did, as detailed in Chapter 7, using data from the Dunedin Multidisciplinary Health and Development Study, the focus of most of this book.

It is critical to appreciate that neither Temi nor Avshalom was embracing my evolutionary perspective or the puberty hypothesis it yielded. Instead, they evinced a scientific mind-set, agreeing that “it’s a potentially interesting, certainly provocative idea, and one that can be subject to empirical evaluation.” I was, of course, both eager to see the hypothesis tested and anxious that I could be proven wrong. But, like my newfound friends, I live in a scientific world—the empirical chips would fall wherever they might and that would be that. After all, what was the worst that could happen? I could be wrong!

Anyway, this was the beginning of a long-lasting and lovely friendship. As I came to follow my friends’ and colleagues’ work, I kept feeling that however much (deserved) attention it received in the most prestigious schol-
arly journals and however many journalists wrote about it in newspapers, magazines, and social media posts, too few people understood and appreciated the scope of their many contributions to our understanding of how we develop. I kept hoping that a Pulitzer Prize–winning science writer would come along and write a popular book about their research. I had no doubt that such a book could prove to be a great seller, but as the years went by and no such professional writer materialized to harvest the fruits of Avshalom and Temi’s (and their collaborators’) labors, I decided that I would try my hand at it. I appreciated that I was not the writer I was hoping for, so I proposed to my friends that I would write what I hoped would be an engaging book summarizing for a lay audience many—but by no means all—of their contributions. I wanted to share the insight, even excitement, that comes from investigating how humans develop, while also informing readers how such work is done. That is why I initially thought we would use as the title for the book *Adventures in Human Development: How We Become Who We Are*. I decided that a book that didn’t require the reader to read the chapters in order might be the best way to realize these goals. Not only would it be doable for the writer, but more importantly it could prove attractive to today’s readers, whose attention spans seem to be growing shorter and whose interests are not the same.

My original intent was to be the “voice” of Moffitt, Caspi, and their friend and collaborator Richie Poulton, now my friend, too, but as the proposal for the volume developed, it seemed reasonable to make two slight modifications to the original plan. First, in addition to sharing work on the Dunedin Multidisciplinary Health and Development Study, based in New Zealand, which I was involved in to a very limited extent (covered in Chapters 5 and 7), it seemed appropriate to include some of Moffitt and Caspi’s other groundbreaking research by drawing on their UK-based Environmental-Risk Study (see Chapters 9, 10, and 17). Second, it dawned on me that a project that I worked on with many others over the course of almost twenty years might be worth covering, too. That is why Chapter 8 addresses the effects of day care on child and adolescent development, a topic not investigated by my coauthors, and why Chapter 7, focused on family influences on female pubertal development, also includes evidence from this third research project.

Given that I was the principal writer of this volume—but writing about work carried out almost entirely by others—we all agreed that writing in the
first person plural made the most sense. All of us contributed to the birth of the research ideas in this book, in many late-night sessions of idea bouncing, and, of the hundreds of research reports on numerous topics related to human development emanating from the Dunedin and Environmental-Risk studies, I decided which to cover.

In view of all this, my wife asked me one day why I was taking the time to write a book about the work of others, good friends though they are. My best answer was that this effort was—and remains—a “labor of love.” I wanted to convey my fondness for my colleagues, my admiration of their dedication to their science, the insight that their research has generated about how humans develop, and my strong feeling that others should come to know and thereby appreciate their many outstanding accomplishments. I certainly hope this volume serves the latter purpose; it has already served the former ones.

Jay Belsky
December, 2019