I

INTRODUCTION AND OVERVIEW

1 Introduction and Overview

P. Lindsay Chase-Lansdale, Kathleen Kiernan,
and Ruth J. Friedman

How much change is possible over a lifetime and across generations? What is realistic in what we can do to promote healthy human development in our nations? These questions captivate societies. They motivate policy makers, teachers, community leaders, service providers, and advocates as well as researchers. These questions have also motivated our volume.

To answer these questions, one must first define human development. By human development, we mean the ways in which children grow to become healthy, educated, and productive members of societies and nations. Moreover, human development continues throughout adulthood and into old age as adults focus on these same goals as well as provide leadership, inspiration, care, training, and support for the next generation. As illustrated in this volume, we highlight three important dimensions of human development: human capital, partnership behavior, and psychological well-being.

We have chosen these dimensions because they represent widespread goals in society. How can individuals reach their full potential? Such a goal involves educational attainment and the development of earning power. It also involves the formation, maintenance, and growth of healthy, committed adult partnerships, usually marriage. A third part of this goal is the development of psychological health and the rearing of healthy children who ultimately become successful adult members of society themselves.

The purpose of this volume is also to examine the potential for change across generations and during the life course. We use a multidisciplinary approach to address the three key domains of human development. The volume reviews what is known about these domains in order to develop an integrative and multidisciplinary perspective on promoting positive change across the lifespan.

In the first section, "Human Capital," authors summarize the economic and social opportunities in European and American households and examine the patterns of transmission of human capital across generations. This section also examines the specific problems of low human capital and social exclusion, as well as the potential for increasing human capital.

The second section, "Partnership Behavior," summarizes the patterns of family structure in Europe and the United States and examines how partnership behavior influences children, youth, and families. In the third section, "Psychological Health and Development," authors synthesize what we know about continuity in psychological health and address which environments promote healthy development and how developmental pathways can be changed.

In sum, this volume explores the ways in which both risk and health are each transferred within and between generations and examines what we know about changing the likelihood of risk. Each section and the integrative summary chapter also address how, as scientists, we can inform policy makers about the best practices for promoting well-being across the lifespan.

We have assembled a multidisciplinary group of authors to integrate and build upon the knowledge base of economics, demography, sociology, psychology, and psychiatry. In the social sciences, the question of continuity or change after difficult life circumstances is a potent lens used by different disciplines. Economists and sociologists often focus on poverty, social exclusion, and inequality. These fields examine how human capital can be promoted over time, specifically an individual's ability to become educated and develop earning power. Demographers, psychologists, and sociologists focus on the formation of partnerships and the potential for growth or dissolution, examining how children and families are affected, while psychiatrists and psychologists examine psychological health and its implications for development of children, youth, and adults. The multidisciplinary approach of our volume allows us to capitalize on the different methodologies and foci used by these disciplines, creating a broader and, hopefully, more useful approach to addressing the potential for change and continuity during the life course and across generations.

The scope of this proposed volume is intentionally broad and far-reaching. This is because the goal of the volume – determining what we know about promoting positive change in human lives – requires the synthesis and integration of knowledge across a variety of fields. The volume is based upon a preeminent international conference organized by the editors and sponsored by the Jacobs Foundation in Zurich, Switzerland, in October 2001,

entitled "Well-Being and Dysfunction Across Generations: Change and Continuity."

Organization of the Book

The book opens with an introductory chapter by Avshalom Caspi, a developmental and personality psychologist at the Institute of Psychiatry, King's College, London, and at the University of Wisconsin-Madison. Caspi's chapter discusses the difficulties in disentangling the relative influence of social selection and social causation processes across the life course and across generations. This chapter lays the groundwork for the remainder of the volume by discussing the scientific logic of research programs designed to examine the relation between social circumstance and individual life chances, the challenges in interpreting causation, and the policy implications that can arise from basic science.

The first section, "Human Capital," draws primarily on the fields of economics and demography to examine how human capital can be promoted over time. The chapters in this section address individuals' ability to become educated and develop earning power, particularly within contexts of poverty, inequality, and social exclusion (or low human capital). Brian Nolan and Bertrand Maitre, economists at the Economic and Social Research Institute in Dublin, present comparative data from the European Community Household Panel survey to provide a picture of socioeconomic disadvantage versus opportunity in Europe. Emphasis is placed on distinguishing common features versus major differences across the counties and pointing toward key factors affecting the situation and the opportunities facing different households. They also examine the links between persistent low income and human capital, and they use a dynamic perspective to shed light on the long-term processes that limit opportunities for the next generation.

John Hobcraft, a demographer in the Department of Social Policy and associate of the Centre for Analysis of Social Exclusion at the London School of Economics and Political Science, examines evidence from the National Child Development Study and other studies to identify the key factors and pathways over the life course that lead to adult social exclusion. The difficulties and importance of understanding and incorporating gene-environment influences within this research are also discussed.

Greg Duncan, an economist in the School of Education and Social Policy, Northwestern University, and faculty fellow with the Institute for Policy Research, and Katherine Magnuson, assistant professor in the School of Social Work at the University of Wisconsin-Madison, examine human

capital investments and interventions at various points in the lifespan, distinguishing between the possibilities for enhanced learning through such programs and the economic efficiency of these programs. Particular emphasis is placed on the timing of effective social investments and interventions – childhood, adolescence, or adulthood – for enhancing human capital across the lifespan and across generations.

The second section, "Partnership Behavior," draws on the fields of demography, sociology, and psychology to address the formation of partnerships and the implications for family health. The section examines the potential for growth or dissolution as well as patterns over the generations and how children and youth are affected. Kathleen Kiernan, a demographer at the London School of Economics and Political Science and co-director of the Center for the Analysis of Social Exclusion, presents an overview of international trends in cohabitation, marriage, and divorce and then examines the partnership and parenthood behavior of children in Western European nations and the United States who experienced parental separation during childhood. Analyses of international trends come mainly from the UN Fertility and Family Surveys. In addition, British cohort data are used to examine childhood factors that might explain why the partnership and parenthood behavior of men and women who experience parental separation differ from their peers without this experience.

E. Mavis Hetherington, an emerita developmental psychologist at the University of Virginia, and Anne Mitchell Elmore, a graduate student in the Department of Psychology at the University of Virginia, examine the factors within and outside the family that may modify the influence of divorce and repartnering on the well-being and adjustment of children and adults. In addition to addressing coping patterns and changes in adjustment over time, the intergenerational transmission of relationship instability is examined, with a consideration of the contribution of attitudes toward divorce and remarriage, personality characteristics, partner selection, as well as interpersonal and problem-solving skills in intimate relationships.

Kurt Hahlweg, a clinical psychologist at the Technische Universitat Braunschweig, presents data on the determinants of marital distress and the effectiveness of preventive interventions to reduce relationship problems. The benefits of universal preventive interventions – those that target an entire population – and selective preventive interventions – those that target risk groups, are discussed as potential approaches to promoting healthy development in our nations.

The third and final section of this volume, "Psychological Health and Development," draws on the fields of psychology and psychiatry to examine

the implications of psychological health for the development of children, youth, and adults. This section explores how much change in psychological health is possible during the life course and over generations with particular focus on the likelihood of psychopathology in the context of adverse environments or in families with a genetic history of psychological problems. Sir Michael Rutter, a psychiatrist and founding director of the Social, Genetic and Developmental Psychiatry Research Centre in London, draws together intergenerational and within individual trends in psychopathology. In addition, he summarizes some of the key findings on genetic, biological, and experiential influences that bring about change and continuity in psychopathology.

Michel Duyme, a psychologist who is Director of Research at the Laboratoire de Biostatistique, Epidémiologie, et Recherche Clinique, University of Montpellier, and Louis Arseneault, King's College, London, and Annick-Camille Dumaret, Centre de Recherche Médecine, Sciences, Santé et Société in Paris, examine the potential for change after escaping difficult early life circumstances. Duyme and colleagues present and discuss data regarding the continuity and stability of IQs of children who were severely deprived in early childhood and then adopted later in life. The chapter also addresses the relative effects of environment and genetics as well as the effects of socioeconomic status on children's intellectual development.

Jeanne Brooks-Gunn, a developmental psychologist at Columbia University, presents theoretical perspectives on early development, examining continuity and change as they relate to what is known about prevention and intervention. She also pays particular attention to the elements and characteristics of effective interventions. In addition, the chapter highlights theoretically derived processes that have not been considered in intervention programs but are possible foci for future programs.

In the book's summary chapter, P. Lindsay Chase-Lansdale, a developmental psychologist in the School of Education and Social Policy, Northwestern University, and a faculty fellow with the Institute for Policy Research, and Elizabeth Votruba-Drzal, an advanced graduate student in Northwestern University's Program in Human Development and Social Policy, pull together the lessons learned from the various chapters, highlighting how this research from multiple disciplines provides a more informed understanding of continuity and discontinuity across lives and generations. In addition, they consider new directions for interventions that may enhance human development and provide opportunities for change.

2 Life-Course Development

The Interplay of Social Selection and Social Causation within and across Generations

Avshalom Caspi

Basic and applied scientists who study psychosocial influences on human development confront a similar challenge, which is to conduct research that can achieve two goals. First, we need to conduct research that can separate the effects of persons on their environments (i.e., self-selection processes) from environmental effects on the person (i.e., social causation processes). Second, in order to understand the origins of well being and dysfunction within and across generations, we need to conduct research that can differentiate environmental effects on persons from genetic effects. My aim in this chapter is to articulate why these goals are important, and to illustrate how these goals can be tackled in the service of carrying out policy-relevant research. The chapter is divided into two broad sections. First, I will focus on self-selection processes, where I will emphasize three inter related points, namely (1) that selection effects pose a formidable challenge for policy initiatives, (2) that selection effects have compositional consequences that are important to consider when designing interventions, and (3) that selection effects need to be understood and analyzed, not simply controlled statistically. Second, I will focus on social causation processes, where I will demonstrate that, paradoxically, genetic designs can provide especially valuable information about how socioenvironmental influences shape children's development.

Support for research reported in this chapter was provided by the National Institute of Mental Health (MH49414 and MH45070), the National Institute of Child Health and Development, the William T. Grant Foundation, and the Medical Research Council.

Self-Selection Processes across the Life Course

A long-standing question in the social sciences concerns the source of the relation between social circumstances and individual psychology. Do social circumstances alter individual psychology or do psychological characteristics lead people into their social circumstances? For over fifty years, scientific battles have been waged over these two alternatives. Research in the "selection" tradition argues that people enter environments selectively, sometimes by choice or more often by virtue of constraints imposed by their psychological characteristics. Alternatively, research in the "social causation" tradition argues that socioenvironmental conditions lead people to develop certain unique psychological attributes. These competing explanations have been applied to account for the persistence of observed inequalities in health (both physical and psychological) across the life course (intragenerational continuity) and across generations (intergenerational continuity). Further, these two competing explanations also imply competing recommendations for interventions to enhance health and well-being. Not surprisingly, it is generally agreed that Republicans and Tories favor "selection" arguments and Democrats and Labourites favor "social causation" arguments. Partisanship aside, it is important to appreciate the consequential nature of selection effects.

Selection Effects Pose a Challenge for Policy Initiatives

Let us begin by considering a social problem: There is much concern over the possibility that growing up in single, female-headed households poses a risk to children's well-being, especially when children are raised by young, teen-aged mothers (McLanahan & Sandefur, 1994). What is the solution?

Increasingly, many public and private programs for young parents are stressing marriage. Maggie Gallagher (1999) of the Institute for American Values writes, "More and better progress in reducing teen pregnancy will require returning the idea and ideal of marriage to the center of our national discussion." This idea, and others like it, are motivated by the claim that supportive marriages of biological parents are beneficial to young children. Promoting father involvement is a laudable goal. But if interventions are to prove successful in creating intact families where children will benefit from the involvement of their fathers, we need to know more about what these men are like. That is, which men select themselves out of father involvement?

We set out to examine this question in the context of the Dunedin Study, which is a longitudinal investigation of 1,037 children born in the city of

Dunedin, New Zealand, in 1972–73 (Silva & Stanton, 1996). The children have been assessed repeatedly since birth by a multidisciplinary team of researchers, and we have detailed information about the Study members' life histories, including their psychological make-up. By age 26, many Study members already had their own children, thereby giving us the opportunity to launch an investigation of the parenting behavior of our Study members grown up. We found (Jaffee, Caspi, Moffitt, Taylor, & Dickson, 2001), as have others (e.g., Fagot, Pears, Capaldi, Crosby, & Leve, 1998; Stouthamer-Loeber & Wei, 1998; Thornberry, Smith, & Howard, 1997), that males with a history of conduct disorder fathered more children at a younger age than their peers without a history of conduct disorder. However, we also found that among those men who had fathered a child by age 26, those with a history of conduct disorder spent significantly less time fathering their children. In short, men with a history of conduct disorder fathered children at an earlier age, but they were *not* involved in parenting those children. Moreover, compared to non-fathers and to fathers who lived full-time with their children, we discovered that those fathers who lived only part or none of the time with their children were described by people who knew them well as having significantly more problems with violence (e.g., controlling their temper, getting into fights), more problems with marijuana and alcohol, and more problems with depression.

Given what Jaffee et al.'s (2001) findings reveal about selection effects into father *non*-involvement, it is not immediately clear that simply encouraging young absent fathers to marry their children's mother is in the best interest of those children. Persuading young men and women who have children to marry, or persuading fathers to become involved with their children more generally, may be a step in the right direction for many young parents, but for many others it could be an unhealthy proposition (see also Jaffee, Moffitt, Caspi, & Taylor, 2003). It is critical that we address the myriad problems faced by young absent fathers *before* we encourage them to marry their children's mothers. Otherwise, we may simply exacerbate the difficulties faced by single mothers and their children. It is not cynical to suggest that before promoting particular policies, scientists and practitioners must have a much better appreciation of the powerful selection effects that operate at key transition points in the life course, such as into parenthood.

Selection Effects Have Compositional Consequences

The fact that selection effects have important implications for policy initiatives may be appreciated more clearly by considering that selection effects can have important compositional consequences. To understand what I mean by

compositional consequences, let us consider a different social problem: early school leaving. Using "follow-up" longitudinal analyses, where we trace individuals forward in time, we know that youth with a history of antisocial behavior are significantly more likely to drop out of school. This can be seen dramatically in the Dunedin Study, where we examined the process of educational attainment (Miech, Caspi, Moffitt, & Silva, 1999). For this analysis, we broke overall educational attainment into three separate transitions because the factors influencing educational dropout may differ across educational levels (Mare, 1980). We first examined whether adolescent conduct disorder (prior to age 15) influenced Study members' performance on the New Zealand School Certificate Examinations. Almost all students sit for these national exams by age 16 because they determine promotion in secondary school and technical schools, and passing also helps secure better employment in the labor market. The results showed that adolescents who met diagnostic criteria for conduct disorder were 5 times less likely to earn a School Certificate, even after controlling for family socioeconomic background and the presence of other co-occurring mental disorders. Next, among the subsample who earned a School Certificate, we examined the influence of conduct disorder on the Study members' ability to earn a Sixth Form Certificate, which is comparable to a high school degree in the United States. Adolescents with conduct disorder who earned a School Certificate were 3.3 times less likely to go on to earn a Sixth Form Certificate, after controlling for family socioeconomic background and the presence of other mental disorders. Finally, among the subsample who earned a Sixth Form Certificate, we examined the influence of conduct disorder on the likelihood of continuing to tertiary education at a university. Adolescents with conduct disorder who overcame the odds against them and received both a School Certificate and a Sixth Form Certificate were about 2.5 times less likely to continue to a university education. The reason conduct disorder exerted a relatively smaller influence on predicting university attendance, than on predicting earlier educational transitions, is because there were fewer Study members with severe conduct disorder who were still in the educational system by the time they could "select" themselves into university education. In sum, by the time adolescents with conduct disorder reached adulthood they appeared to have been "selected" into the lower socioeconomic strata through restricted educational attainment (cf. Johnson, Cohen, Dohrenwend, Link, & Brook, 1999; Kessler, Foster, Saunders, & Stang, 1995).

In the previous "follow-up" longitudinal analysis, we traced what happened to youth with conduct disorder. We found that conduct disorder is a statistically significant risk factor for truncated education; that is, it "selects"