Introduction

This book is about the factors and processes that promote escape from disadvantage. What is it that enables some individuals to overcome adverse childhoods and move on to rewarding lives in adulthood? The study is not about those with exceptional achievements. It is about individuals whose childhood circumstances were characterised by socio-economic hardship, but who developed and maintained good psycho-social adjustment, and who as adults in their early thirties live relatively comfortably. There is increasing evidence from studies across many nations demonstrating the human capacity to overcome even extreme privation and trauma and to show positive adaptation in the face of that adversity, a phenomenon also referred to as resilience (Elder, 1974/1999; Garmezy, 1971; Pilling, 1990; Rutter & Madge, 1976; Rutter, 1998a; Werner & Smith, 1982, 1992). This study will advance our knowledge of resilience by comparing experiences of individuals growing up in a changing socio-historical context.

The focus of the study lies on academic attainment, but also considers behavioural adjustment, health and psychological well-being, as well as the stability of adjustment patterns over time, covering the transition from childhood into adulthood and the assumption of work and family related roles. It is argued that it is the combination of individual resources, the support provided by the family and significant others, as well as experiences and opportunities within the wider environment that facilitate successful adaptation to challenging situations. Life chances and opportunities are shaped by socio-historical and economic circumstances, gender and one's location in the social structure. Therefore, the study sets out to investigate the multiple levels of influence on individual development over time, and to examine the nature of the linkages between experiences of socio-economic adversity, adaptive responses to these experiences and long-term outcomes.

What is unique about this study is that it compares the lives of over 30,000 individuals in two cohorts born twelve years apart, mapping the pathways linking childhood experiences to adult outcomes. The study

draws on data collected for two nationally representative cohort studies, the 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70), two of Britain's key resources for the study of human development. For more than forty years cohort members were followed in their development from birth to adulthood, at a cost of millions of research money, the perseverance and skill of a large team of research staff, the inspiration, foresight and leadership of key investigators associated with the studies through their most formative years, and the commitment of the cohort members to their continued participation.

The comparison of two birth cohorts offers a unique opportunity to gain a better understanding of the context dependency of resilience, and to examine change as an experiment of nature. While cohort members born in 1958 grew up in a period of extraordinary growth and social transformation, a period described by Eric Hobsbawn (1995) as the 'Golden Age' the cohorts born in 1970 experienced their childhood in an evolving new age of uncertainty and instability, portrayed by Hobsbawn as the 'Crisis Decades', including changes in labour market opportunities, changing patterns of educational participation, patterns of family formation, as well as general well-being and health (these changes will be described in more detail in Chapter 3).

A period of economic depression lasting from 1979 to 1987 and again between 1991 and 1994 brought with it the sharpest rise in umemployment since World War II. Most cohort members born in 1958 completed their full-time education just before the onset of the depression, while the later born cohort reached the minimum school leaving age right in the midst of the depression. The cohort data thus allows the comparison of experiences of individuals born before and after the onset of the 'Crisis Decades', offering the opportunity to investigate how a changing context influences adjustment processes and resilience. Furthermore, the longitudinal approach makes it possible to investigate the antecedents and long-term consequences of different adjustment patterns across the life course.

This is not the first study focusing on the lives of disadvantaged young people, aiming to illuminate the experiences and conditions that enable individuals to successfully withstand potentially devastating effects of adversity over time. Research on resilience has burgeoned over the last thirty years, following early ground-breaking studies of schizophrenic patients and their children. These identified subgroups of individuals who showed relatively adaptive patterns, who managed to achieve competence at school, work, and in social relations including marriage, despite their high-risk status (Bleuler, 1911, English

translation 1978; Garmezy, 1970; Luthar et al., 1997; Masten et al., 1990; Rutter, 1966). This work was carried forward to develop the field of developmental psychopathology, an interdisciplinary approach for the study of human functioning (Cicchetti, 1984, 1990, 1993; Rutter & Garmezy, 1983).

Another milestone in resilience research is Emmy Werner's pioneering series of studies on high-risk children born in Hawaii who were followed from early childhood to now mature adulthood (Werner & Smith, 1977). Despite being exposed to serious risk factors, such as perinatal stress, poverty, parental psychopathology and disrupted family environments, one-third of these high-risk children made satisfactory adjustments in adult life (Werner & Smith, 1982, 1992, 2001).

Vital insights into the factors and processes involved in individual variations in response to exposure to risk were gained by the landmark studies conducted by Michael Rutter, comprising among others a comparative survey of all ten-year-old children living in an inner London borough and children of the same age with homes on the Isle of Wight (Rutter et al., 1970; Rutter et al., 1975a; Rutter et al., 1975b; Rutter et al., 1975c), a follow-up study of girls reared in institutions (Rutter & Quinton, 1984) and a follow-up study of Romanian orphans who had been brought to England before the age of two years (Rutter, 1998b). These investigations demonstrated the importance of long-range longitudinal research for investigating the experiences contributing to the emergence of resilience in adverse circumstances, laying the foundation for the study of the origins and course of individual patterns of adaptation in the face of socio-economic adversity.

Of particular importance for the approach adopted in the present study is the seminal work of Glen Elder on *Children of the Great Depression* (1974), in which he identified the profound effects of historical change on human development. By comparing the experiences of children born in Berkeley and parts of Oakland, California, in the early and late 1920s, he could show that children born at the beginning of the 1920s were not as susceptible to the effects of family disruption and hardship caused by the Great Depression as children born in the late 1920s (Elder, 1974/1999). The findings illustrate that developmental processes should be viewed not only in relation to individually lived time, but also in relation to the socio-historical context in which they take place. With his theory of the life course (Elder, 1985, 1994, 1998) is offering an approach towards a contextual understanding of developmental processes, which has inspired the current study.

Outline and structure of the book

Key assumptions underlying the conceptualisation and operationalisation of resilience are discussed in Chapter 1. A theoretical framework conceptualising the dynamic interactions between individual and context is outlined and developed in Chapter 2. In Chapter 3, the specific socio-historical conditions experienced by cohort members born in 1958 and 1970 are described. The developmental-contextual model of adjustment, which has been formulated in Chapter 2 is then tested, examining the context, timing and duration of risk effects in shaping individual development over time (Chapter 4), the protective factors and processes facilitating adjustment in the face of adversity (Chapter 5), the stability of early adjustment over time (Chapter 6), as well as the role of life plans in moderating the experience of early social disadvantage (Chapter 7). The findings are critically reviewed (Chapter 8), and their implications for interventions and social policy are discussed in Chapter 9.

A detailed description of the two birth cohorts and the different sweeps of data collection is given in Appendix A. Issues related to response bias and the handling of missing data are discussed in Appendix B, and a description of measures and test instruments used for analysis can be found in Appendix C.

1 Risk and resilience: definitions

> What we really want to understand are the processes of human development in different times and places, for individuals with varying risks and assets, and for individuals developing in a variety of social contexts.
> (Rigsby, 1994, p. 91)

Why study the occurrence of resilience, and how to conceptualise and measure the phenomenon? In this chapter, issues concerning the definition and operationalisation of resilience will be reviewed and discussed. The concept of resilience is examined, laying out underlying assumptions about the processes and conditions that are assumed to give rise to the manifestation of resilience. Concerns regarding the value of the concept, the way it is measured, and how it had been used in the explanation of behaviours and outcomes will be addressed.

Why does the study of resilience matter?

A growing concern in social policy over the last decade has been the increasing marginalisation of less privileged individuals and relatively disadvantaged social groups. The foundations of 'social exclusion' processes are laid down early in life through exposure to socio-economic risk factors identified with adverse circumstances at home and at school (Atkinson & Hills, 1998; Bynner, 2001a; Duncan & Brooks-Gunn, 1997; Luthar, 1999; McLoyd, 1998). Children reared in disadvantaged or deprived circumstances are at increased risk of adverse developmental outcomes ranging from educational underachievement and behavioural problems to adjustment problems in later life, such as low occupational status and poor health (Duncan & Brooks-Gunn, 1997; Essen & Wedge, 1978; Rutter & Madge, 1976). Yet the outcomes of early risk experiences are by no means entirely predictable. Not all individuals experiencing socio-economic adversity fail to achieve, and it is well documented that some children exposed to adverse conditions appear to avoid developing consequent problems of adjustment.

The aim of this study is to gain a better understanding of the factors and processes facilitating or hindering young people in fully developing their potential. Through access to longitudinal data covering the period from birth to adult life, it is possible to analyse the cumulative effect of experiences and circumstances operating over a continuous period of time. Moreover, outcomes assessed early on in the individual's life can be included as factors in processes accounting for what happens later, enabling a better understanding of the vicious and virtuous circles that characterise human development across the life course. By comparing the experiences of two nationally representative birth cohorts, covering the entire life span from birth to adulthood, it is furthermore possible to assess how changing times have influenced individual lives and the ways in which individuals respond to adverse experiences. Knowledge about the factors and processes involved in positive adaptation despite the experience of adversity can bring new impetus to the development of social policies aiming to promote the well-being of disadvantaged high-risk children and their parents.

The particular focus of this study lies on academic attainment in the face of socio-economic adversity. Academic attainment is vitally important in our culture, and success or failure in school can have serious long-term individual and social consequences. Academic or educational attributes, especially as reflected in school qualifications, are becoming increasingly important in securing adult employment, but are also associated with adult health and well-being (Bynner et al., 2000c; Keating & Hertzman, 1999; Shanahan, 2000). Therefore academic resilience, i.e. the development and maintenance of average or above average levels of academic attainment despite the experience of socio-economic adversity has been chosen as a key focus of this study.

Conceptualising resilience

Resilience is generally defined as a dynamic process whereby individuals show adaptive functioning in the face of significant adversity (Luthar et al., 2000; Masten, 1994; Rutter, 1990). The instigation of the concept of resilience during the 1970s brought with it a paradigmatic shift in how scientists began to view the causes and course of development of individuals experiencing significant adversity or trauma, moving away from the constancy model portraying the developmental course as deterministic either through the effects of genetics, or by the predetermining role of early experiences (Clarke & Clarke, 2003; Sroufe & Rutter, 1984). The need for a new orientation arose because of accumulating evidence of studies showing positive developmental outcomes despite

the experience of significant adversity in different contexts (Anthony, 1974; Garmezy, 1974; Rutter, 1981; Werner et al., 1971).

Historically, most studies on the development of at-risk individuals have tried to understand adjustment problems or the reverse: the avoidance of academic failure, behaviour problems, motivational deficits, ill health or mental disorder. A shift of focus from the pathogenic paradigm centring on a deficit or disease model towards a prime focus on adaptive outcomes was advocated by Antonovsky (Antonovsky, 1979; Antonovsky, 1987) who coined the term 'salutogenesis' to describe developmental processes that lead to 'wellness' outcomes. Rather than asking 'What prevents individuals from getting ill?' he asks 'How can individuals become healthier?' Such a 'wellness framework' calls for the study of the health pole of 'the health ease/dis-ease continuum, (Antonovsky, 1979) but also takes into account the social structural sources of the forces that make for well-being (Antonovsky, 1994). The shift of focus from adaptational failures to positive outcomes in adverse conditions also implies a new impetus for research aiming to inform the design of social policy interventions aiming to create opportunities for development and to promote the chance of positive chain reactions.

Central assumptions in resilience research

The concept of resilience has been used to refer to:

(a) a positive outcome despite the experience of adversity;
(b) continued positive or effective functioning in adverse circumstances; or
(c) recovery after a significant trauma (Masten et al., 1999).

Resilience is a two-dimensional construct defined by the constellations of exposure to adversity and the manifestation of successful adaptation in the face of that risk (Luthar et al., 2000; Masten, 2001; Rutter, 1999). Resilience is generally not directly measured. The identification of resilience is based on two fundamental judgments: (a) is a person 'doing ok'? and (b) is there now, or has there been any significant risk or adversity to be overcome? (Masten & Coatsworth, 1998). A central assumption in the study of resilience is that some individuals are doing well, despite being exposed to an adverse risk situation, while others fail to adapt. The very definition of resilience is therefore based on an expectation of successful or problematic adjustment in response to risk factors that are assumed to effect adaptations:

Resilient individuals are those whose adaptations represent extreme positive residuals from a prediction equation where adaptations are predicted from a linear combination of risks and assets. In other words, determination of resilience depends on (a) judgements about outcomes and (b) assumptions about the causes of adaptations that may not have been explicitly described or consciously examined. (Rigsby, 1994, p. 88)

In order to identify resilience it has to be established whether the circumstances experienced by individuals do in fact affect their chances in life. If there is no association between the experience of adversity, access to resources and opportunities, and consequent adjustment, the phenomenon of resilience would be a mere chance event, a random occurrence.

Resilience differs from other terms such as general positive adjustment, or competence, insofar as it takes into consideration the circumstances and processes under which positive adjustment takes place. One cannot talk about resilience in the absence of adversity. Positive adjustment occurring with (versus without) conditions of adversity often has different correlates and thus reflects different constructs (Luthar, 1999). Furthermore, several studies have found varying antecedents of positive adjustment in general versus resilience in the face of adversity (Rutter, 1990).

The two-dimensional definition of resilience brings with it the challenge of defining our understanding of risk and adversity, as well as positive adjustment. It has been argued that the identification of resilience involves value judgments about differences between expected and observed outcomes, as well as the causes of success and failure (Bartelt, 1994; Kaplan, 1999; Masten, 2001; Rigsby, 1994; Ungar, 2004b). In the following, I will review and respond to concerns raised regarding the conceptualisation of risk and adjustment in resilience research.

Identifying risk

The notion of risk used in resilience research stems from epidemiological research, identifying expected probabilities of maladjustment (Cicchetti & Garmezy, 1993; Masten et al., 1990a; Rutter, 1988). Fundamental to the idea of risk is the predictability of life chances from earlier circumstances. Resilience has been attributed to individuals who beat the odds, who avoid the negative trajectories associated with risks even though they:

(a) were members of high-risk groups, such as children from deprived family backgrounds characterised by material hardship and poverty;
(b) grew up in violent or deprived neighbourhoods;
(c) were born with or acquired major disabilities, injuries or illnesses;

(d) have endured stressful experiences, such as individuals from dysfunctional families or children with mentally ill parents; or
(e) have suffered trauma, such as sexual or physical abuse, or exposure to war-time experiences.

Risk or adversity can comprise genetic, biological, psychological, environmental or socio-economic factors that are associated with an increased probability of maladjustment (Luthar & Cicchetti, 2000; Masten et al., 1990b). Premature birth, mental illness in a parent, divorce, family violence, civic unrest or war – many kinds of adversity and their impact on individual adjustment have been investigated (Garmezy & Rutter, 1983; Haggerty et al., 1994; Rolf et al., 1990). A major risk factor however influencing individual adjustment across domains, affecting children's cognitive competences as well as social-emotional functioning, is socio-economic adversity (Duncan & Brooks-Gunn, 1997; Luthar, 1999; Robins & Rutter, 1990; Rutter & Madge, 1976), which has been chosen as the main focus of this book. The term socio-economic adversity is used here as a descriptor of living conditions characterised by low social status, poor housing, overcrowding and lack of material resources.

Variability in risk exposure

While early studies on resilience focused on a single risk factor, such as maternal psychopathology or experience of a stressful life event such as divorce, it soon became apparent that individual risk factors do not exert their effect in isolation, but in interaction with other influences. The relationship between any single risk factor and subsequent outcomes tends to be weak and usually many variables are involved in determining an outcome (Garmezy & Masten, 1994; Rutter, 1979, 1990; Sameroff & Seifer, 1990; Sameroff, 1999). What distinguishes a high-risk individual from others is not so much exposure to a particular risk factor, but rather a life history characterised by multiple disadvantages. Serious risk emanates from the accumulation of risk effects (Robins & Rutter, 1990), and it has been suggested that it is the number of these factors and their combined effect that exert a deleterious impact on developmental outcomes (Sameroff et al., 1993; Rutter, 1979).

Statistical versus actual risk

Concerns have been raised regarding the difficulties in determining whether all individuals identified as resilient have actually experienced

comparable levels of adversity. The issue of defining risk is not a trivial matter, as the risk factor must be a potential cause or precursor of the specified outcome in question and represent a high risk within the sample under consideration. Treating a particular event or experience as reflecting adversity if it shows a significant statistical association with maladjustment or disorder does, however, not account for the many other probabilities of a given event. Risks describe probabilities and not certainties and it has been argued that we have to clearly differentiate between statistical and actual risk (Richters & Weintraub, 1990). Even in circumstances where significant associations have been established between risk exposure and adjustment problems, questions may remain about the specific living conditions of different individuals in a particular sample (Cicchetti & Garmezy, 1993; Kaplan, 1999; Masten, 1994).

Individuals exposed to particular adverse life circumstances are treated as homogeneous groups, despite possible variations in the degree to which their lives are actually shaped by the influence of the particular risk factors in question. Social class, for example, has been widely used as a risk indicator, although it conveys little information about specific experiences to which children within a given level of social class are exposed (Richters & Weintraub, 1990). A child raised by working-class parents will not necessarily experience poor quality care-giving or scarcity of material resources. Moreover, the experience of adversity might only be temporary and not long-lasting. Without more comprehensive information about the risk situation, it cannot be assumed that there actually is a significant risk exposure. The identification of resilience might sometimes be more appropriate for resilient families than for the child within them – or a well-functioning child may not be resilient at all, but may actually have experienced a low-risk situation.

The variability in risk exposure does, however, not necessarily invalidate resilience research based on global risk indices such as social class (Luthar et al., 2000). Knowledge about potential risk factors has been helpful in stimulating research into the processes and mechanisms by which these global risks influence individual adjustment clarifying conditions in which they show their effect and where they don't.

Plurality of meaning

Another related concern addresses the plurality of meaning in evaluations of risk (Bartelt, 1994; Gorden & Song, 1994; Ungar, 2004b). It has been argued that the meaning of the constructs used for the identification of risk as well as the conceptualisation of resilience and