Part I

Theoretical and Methodological Approaches:
A Cross-Disciplinary Challenge

1   Theoretical Orientation, Methodological Advances, and a Guide to the Volume

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As noted in the preface, the underlying message of the original volume *Children in Time and Place: Developmental and Historical Insights* stressed the importance of recognizing that children's development is best understood when placed in a specific historical and life course developmental context. The current formulation updates this perspective by focusing more explicitly on the socio-cultural aspects as well.

In this opening chapter we provide a chronology of the relatively recent recognition that an understanding of children's lives across time requires that context in terms of historical time and place also needs to consider culture. Early efforts often failed to recognize this fundamental premise and instead studied children out of context. The emergence of the life course perspective with its recognition of the centrality of changing historical contexts as necessary for an adequate understanding of children's development was a major step forward in theorizing about children's development. Moreover in the past several decades, the life course perspective has also evolved and now recognizes the role of both individual and collective agency in shaping both individual outcomes and those at other levels of analysis (Elder, 1998; Elder et al., 2015). Moreover, as prior work has long recognized (Elder, 1974, 1999) it is increasingly accepted that secular changes co-occur and often come as a package. For example war, famine, migration, and economic hardship generally operate together. We also underscore the increasing appreciation of cross disciplinary dialogue as necessary for understanding issues such as children's genetic influences and how they are constrained in their expression by historical and environmental factors.

Recent Secular Changes

To set the stage for this volume it is worthwhile briefly noting the recent secular changes that have occurred in both North America and in other parts of the world. These changes have been at various levels of society, including social-demographic, economic, cultural beliefs and norms.

3

4   Theoretical and Methodological Approaches

A variety of demographic shifts have occurred over the past several decades.

First, the changing racial/ethnic composition of our society due to changing birth rates and patterns of immigration has shifted many societies from homogeneous on race and ethnicity to a much more mixed ethnic composition. This is particularly evident in the USA where Asian, Latino, and African-American ethnic/racial groups are quickly outpacing Caucasians in their patterns of growth. Similarly, in Europe and Australia, due in part to immigration patterns, there is movement toward more racially and ethnically diverse societies.

A second shift has been the growing levels of economic inequality between rich and poor members of society, which is increasingly divided by social class and has resulted in increasingly "diverging destinies" (McLanahan, 2004) for rich and poor. These inequalities are reflected in a variety of contexts from treatment by legal and court systems, to neighborhood conditions and access to occupational and educational opportunities.

Third, work patterns have shifted from permanent, stable employment to a pattern of less stable and temporary employment, a trend that is especially likely to affect those at the bottom of the economic ladder. Accompanying these changes are shifts toward more automation and the decline in work opportunities, especially for unskilled and less educated workers. A major change has been the shift toward more women in the workplace and the subsequent re-organization of family responsibilities between mothers and fathers.

Fourth, with the advent of new technologies, telecommuting and other forms of distance-based interactions have become more common. Nor have the effects of technological advances been limited to the workplace. New means of communication are producing major changes in the ways we relate and communicate with each other.

Fifth, another demographic shift has entailed the uncoupling of life course transitions. With marriage in decline and cohabitation on the rise, the transition to parenthood is increasingly taking place outside of marriage. And with advances in the new reproductive technology, opportunities for parenthood have expanded to include single individuals, infertile couples as well as gay and lesbian couples, which represents a further uncoupling of reproduction from social institutions such as marriage. Another change is the delay in the timing of entry into either marriage or parenthood with a related shift to more time in formal education. The period of economic dependence on parental economic support has expanded with the increase of boomerang young adults who often return home after completion of formal education.

Sixth, amidst these demographic shifts there has been changing and more positive attitudes and norms concerning patterns of social relations such as same-sex marriage. In addition to these broad changes, there have been more discrete crises that have occurred that merit our attention such as the Great Recession of 2008 and the effects of unrest in Europe and the Middle East that have prompted an increase in the flow of refugees. Our goal is to address some of these recent social changes in the chapters that follow.

Theoretical Advances

Since the original volume, several other theoretical strands have entered the discourse, especially with continued recognition and elaboration of Bronfenbrenner's bio-ecological perspective. It provides a rich language for describing the contexts in which children's development takes place and through which historical effects may be expressed (Bronfenbrenner & Morris, 2006). Related theoretical frameworks such as Relational Developmental systems approaches (Lerner & Overton, 2008; Overton, 2015) have emerged as guides as well. The acceptance of bio-ecological models has resulted in studies of children in which multiple levels of contextual influences are examined. For example, parental relationships with school systems are often examined to better understand this type of cross context influence on children's academic progress (Crosnoe, this volume; Hill & Torres, 2010).

Others examine the links between court decisions concerning post-divorce custody and child outcomes and how changes in legal opinion concerning custody alter children's outcomes (Fabricius et al., 2010). Similarly, studies of the effects of recent supreme court decisions (Obergefell v. Hodges) concerning the recognition of same-sex marriage on family formation and societal attitudes concerning same-sex unions are further examples of this cross context inquiry (Gates & Brown, 2015; Masci & Motel, 2015; Parke, this volume). Links between religious institutions and religious practice and child and adolescent outcomes have been stimulated by this theoretical focus on contexts of development (Elder & Conger, 2000; Holden & Williamson, 2014). Studies of the links among neighborhood characteristics, family child-rearing practices (Leventhal & Brooks-Gunn, 2000; Leventhal et al., this volume) and child outcomes as well as the links between social networks and child well-being (Belle & Benenson, 2014) are other examples of how this multi-level bio-ecological theory has expanded both the contexts that are examined but in addition illuminated the ways in which these levels of context mutually influence each other.

Similarly, there has been an increasing recognition that development is not solely governed by universal principles, but is constrained and informed by cultural contextual factors as well. This Vygotskian-inspired recognition of cultural embeddedness is now firmly entrenched as a necessary aspect of the theoretical developmental dialogue (Rogoff, 2003; Greenfield, this volume). Recent theoretical advances include combining Bronfenbrenner's bio-ecological notions as well as Vygotskian advances in our understanding of the role of cultural factors in understanding development with a historical life course perspective. This cultural awareness is reflected in a general movement away from a strictly western view of development by recognizing both cultural variations in other countries but also the variations that exist within our own country.

In recent years there has been a burst of activity documenting how cultural contexts in other countries shape the trajectories of children's development. For example, compared to the USA, adolescents in China and Japan spend less time with peers and their parents play a more prominent role in their daily lives (Chen, Chung et al., 2011; Rothbaum et al., 2000). Another difference reflected in peer relationships is the particular types of social behavior that the culture values. In traditional Chinese culture, shyness and sensitivity are valued and are believed to reflect accomplishment, maturity, and understanding (Chen et al., 2006, 2009). Similarly there has been increased recognition of intra-country variations based on ethnic origins. For example, in the USA Latino children are more family-oriented and less influenced by their peers than US children and their parents often directly discourage peer interactions (Ladd, 2005; Schneider, 2000).

At the same time there is a growing appreciation that historical shifts in other countries and our own country can significantly modify the ways in which children relate to their peers. As Chinese culture shifts toward a more market-oriented economic model, children's social values, which guide children's peer relationships, are changing. Although Chinese elementary school children accepted peers' shyness as a positive characteristic in 1990, they did not do so in 2002. Instead assertiveness and self-direction were more highly valued attributes in their peers among these later cohorts of children, which are values more aligned with a more competitive economic climate. To illustrate the dynamic nature of social change, it is noteworthy that in rural areas of China shyness is still associated with better social and psychological adjustment and with peer relationships in children (Chen, Wang et al., 2011). This pattern of behavior observed in rural areas will likely change as economic transformation expands from urban to rural areas. A similar pattern of

historically bound change is evident among immigrant populations in the USA as well. As a result of acculturation and adaptation to their new country, many Latino children and adolescents become less family-oriented and more peer-oriented. This retreat from traditional Latino values and increased embrace of mainstream American values is often associated with increases in delinquency and poorer academic outcomes, a phenomenon termed the immigrant paradox (Garcia-Coll & Marks, 2012; Marks et al., this volume). Similarly Mexican-American women's child-rearing attitudes shift toward a more egalitarian stance as a result of acculturation (Parke et al., 2004). As these examples illustrate, we need to consider both cultural contexts and historical changes in secular domains of society.

Finally, there has been an increasing focus not merely on describing social change and its effects on child and adult outcomes, but on exploration of the processes that underlie and possibly account for these changes. Processes that account for or modify these change-based effects are evident throughout these chapters. Just as the descriptive enterprise has benefited from bio-social ecological perspectives with their emphasis on multiple levels of analysis, so has the process-based phase of this endeavor. Investigators are now identifying explanatory processes at multiple levels. For example, Marks and colleagues (this volume) adopt an integrative risk and resilience model for understanding the development and adaptation of immigrant origin children and youth in which macro-level influences such as national policies and conditions are recognized along with microsystem factors such as neighborhoods and social networks and individual coping strategies (Suarez-Orozco, Motti-Stefanidi, Marks & Katsiaficas, 2018). Similarly, Masten et al. adopt a similar risk-resilience approach in which multiple levels of influence are operative and explanatory processes are suggestive at each level and these can modify the effects of the stress-related change on children's adaptation.

In these examples and others in this volume, there is recognition of both individual variability in how particular people respond to these change events, and appreciation of the circumstances that can either ameliorate or worsen the impact of change. Not only are processes associated with macro-level institutional policies being recognized (refugee services, unemployment and retraining programs), but variations in individual capacities for dealing with challenges associated with change such as self-regulation abilities and coping strategies (see Schoon & Brynner and Crosnoe for institutional level examples and Elder & Cox, Masten et al., and Marks et al. for examples of individual level processes). Moreover, these processes are no longer viewed as influences imposed on passive

individuals, communities or societies but actors at various levels through the exercise of individual as well as collective agency shape their own destinies (Bandura, 2000; Elder, 1998). It is also evident that recognition of a systems-level theoretical analysis implies that the success or failure of processes at one level will have a cascade effect on other domains and levels of adaptation (see Masten et al., this volume).

One of the most important advances in our search for processes to explain change-related outcomes has come from the success achieved by both the biological and social sciences in better understanding the role of biological factors (hormones to genetics) in development and adaptation. Just as multi-level environmental contexts are recognized, there is a similar recognition of the multi-level organization of biological contexts as influences on developmental outcomes as well. These levels include genes, epigenetic influences, hormones, autonomic reactivity, homeostatic functions, and biological insults (illness, physical trauma, premature birth) (Feldman, 2019). For example, the genomic revolution has underscored the essential "contextual contribution of social environments" in understanding gene-environment effects across the developmental life course of children and parents (Rutter, 2006). Even genetic and biomarker influences cannot be understood without knowledge of their historical and situational/cultural context (Caspi et al., 2003; Rutter, 2006; Plomin, 2012).

In a well-known study of 1000 young adults, Caspi and colleagues (2003) found that a genetic predisposition for depression resulted in depressive symptoms only when the person had experienced numerous life stressors during the previous few years and had been abused in childhood. They found a significant interaction between a genotype (a genetic predisposition for depression) and a stressful environment, which underscores the importance of recognizing the environmental context as a factor affecting genetic expression. Other examples of this type of gene x environment interaction are available for genetic predisposition for aggression (Brendgen et al., 2011) and drug use (Brody et al., 2009). Similarly, brain imaging studies of humans show more neural activity in the amygdala in response to fearful events for people with a depressive gene (Heinz et al., 2005), an example of the interplay between genetic and neural levels of analysis. Evidence of neurological shifts during the transition to parenthood is another example of the interplay across levels of analysis. For example, when researchers used fMRI (scans of brain activity) to examine the brains of mothers as they listen to their babies cry, they found that the brain areas associated with emotional regulation, planning and decision making showed increased activity – possibly as a way to prepare the mother for the tasks and responsibilities of parenting

(Lorberbaum et al., 1999). Fathers show similar patterns of neural activity in response to infant cries (Seifritz et al., 2003).

These studies suggest that the neural context is another level of analysis that is involved in our efforts to understand parental behavior. Recent work underscores the importance of hormonal level influences on both child and adult behavior patterns and illustrates the interplay between environmental contexts and the development of hormones, which in turn alter development. Children who were reared in Russian or Romanian orphanages before being adopted by US families were less responsive to their adoptive parents than non-institutionalized children reared by their biological parents. Part of the reason for these differences in social responsiveness is the fact that the levels of the hormone oxytocin (often termed the love hormone) were lower in the institutionally reared toddlers. Instead, during social interactions, these infants showed heightened levels of the stress-sensitive hormone cortisol, which is associated with lower levels of emotional regulatory ability (Wismer Fries et al., 2005; see also Masten et al., this volume).

This work provides another example of the ways in which child rearing contexts (home vs. institution) alters hormone development and in turn alters children's ability to development satisfactory social relationships with their caregivers. And parenting is altered by hormones as well. Recent studies of fathers indicate that during the transition to parenthood, men experience a decrease in testosterone, which in turn makes them more sensitive to infant cues such as cries. However, this outcome is evident especially if the father was highly involved as a socially supportive source for his partner during the pregnancy, which again suggests the interplay across biological and social contexts (Storey et al., 2000; see also Parke, 2013 and this volume).

Increased Recognition of the Value of Interdisciplinary Approaches

The unique and overlapping theoretical perspectives of historians, historically-oriented social scientists (anthropologists, sociologists, and developmental psychologists) are highlighted and the value gained by combining these diverse disciplines is emphasized by all contributors to this volume. The authors cover a range of disciplines such as sociology (Crosnoe, Elder), economics (Elder; Schoon & Bynner), cross-cultural studies (Greenfield, Masten), ethnic studies (Marks et al.), demography (Crosnoe), ecologically oriented developmental science (Cox, Leventhal et al., Parke) and biologically oriented developmental scholars (Cox, Greenfield, Masten et al.). To adequately address issues of historical

change and its impact on children, many disciplinary perspectives are necessary.

Methodological Advances

Finally, we examine the unique methodologies offered by a variety of disciplines and make a case for how the integration of these methods will enrich our efforts to better understand children's lives across time as presented in the chapters of this volume. A wide range of methods and research designs are used which represents the increasingly diverse set of methodological approaches currently being employed across disciplines which focus on understanding social change. A plethora of methods is now a common approach to assessing social change with both qualitative and quantitative measurement assessments and a variety of designs often being used together to provide an enriched profile of changing patterns.

To capture historical change, longitudinal methods have been and continue to be the design of choice, although cross-sectional designs to enable in-depth exploration of an outcome associated with a social change such as shifts in school organization or class size (see Crosnoe, this volume). The use of cross-time designs range from classical long term longitudinal studies such as Elder's *Children of the Great Depression* (1974) study in which participants are tracked across wide spans of time that, in turn, capture major periods of secular change such as economic downturn and recovery as well as later events such as World War II (Elder & Cox, this volume). Shorter-term longitudinal designs, which involve assessments before and after briefer social changes, such as the recent studies of the Great Recession (Schoon & Brynner, this volume) or the Midwest farm crisis in the USA (Conger et al., 1994; Elder & Conger, 2000). A major advance in increasing our confidence in the causal factors underlying change has been the use of natural field experimental designs in which naturally occurring change such as the introduction of television into a community and the effects of this social change are monitored across time in comparison with communities who did not experience such changes (MacBeth, 1996; Greenfield, this volume).

Field experimental studies in which a social change is designed and engineered by the investigator is also an increasingly common and powerful approach to assessing the causal links between social change and outcomes. Early experimental field studies of the effects of various forms of TV content (prosocial vs. aggressive) were useful strategies for documenting the impact of TV content on children's social behavior (Friedrich & Stein, 1973; Greenfield, this volume). The Moving to Opportunity project in which families were provided housing in less

poor neighborhoods is an example of a field experimental approach (Gennetian et al., 2012) to the assessment of neighborhood contextual effects on children's development. Similarly, recent field experimental studies in Ethiopia examined the effect of computers distributed to 10- to 15-year-olds on abstract reasoning compared to children without access to computers (Hansen et al., 2012). Other approaches include quasi-experimental studies, such as the provision of housing vouchers without constraints on where families would re-locate (Rabinovitz & Rosenbaum, 2000), represent still another way to assess social change on child and family outcomes.

Considerable statistical advances have been made to minimize the impact of selection effects, which often make correlational studies difficult to interpret. As Leventhal et al. (this volume) argues, "These approaches range from regression analyses that control for individual and family background characteristics related to neighborhood selection (e.g., family income, parent education, race/ethnicity) to more rigorous analytic strategies such as propensity score matching, instrumental variable analysis, or fixed effects" (p. 17).

Sampling strategies have expanded as well. While national surveys such as the National Longitudinal Survey of Youth continue to be widely used strategies to assess social change, especially by sociologists and demographers (Brown, 2017), these approaches are increasingly used by other social scientists such as developmental psychologists as well (Friedman, 2007). And other large-scale databases are frequently used to assess the effects of social change in a variety of countries such as the UK (British Household Panel Study and the UK Household Longitudinal Study), the USA (Panel Study of Income Dynamics), and Germany (German Socio-Economic Panel Study), as well as national longitudinal cohort studies, including the US National Longitudinal Study of Youth, the US Monitoring the Future, and the European Union Statistics on Income and Living Conditions. Oversampling minorities is a common strategy used to assess ethnic variations in response to social change. Clearly we have made major progress in assessing change with respectable generalizability by this movement away from small-scale samples to representative samples.

As several contributors demonstrate, mixed methods are often used in which qualitative strategies such as focus groups, content analyses of media based exchanges between children (Turkle, 2011; see Greenfield, this volume) are combined with observational strategies (Parke, this volume) and in-depth ethnographic work (Edin & Nelson, 2013).

Finally biological measures are increasingly used as part of the assessment battery including genetic analyses, hormonal indices, and