

Chapter 1

An Ecological-Systemic Framework: An Overview of Child and Adolescent Development in Adverse Contexts



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Introduction

Children and adolescents all around the world and in Latin America represent almost half of the population (PAHO, 2021; WHO, 2021). According to the National Population Council (CONAPO, 2015), in Mexico, adolescents embody the broad part of the population pyramid. Although children and adolescents are considered a healthy group, they are considered an at-risk group regarding mental health. They are two of the most critical cycle life stages characterized by neuropsychological processes that are developing linked to a set of changes that occur simultaneously (e.g., biological, psychological, social) moving to the subsequent stage of development. Therefore, research into development during childhood and adolescence can be better understood assuming an integral and systemic perspective of human development, explaining some of the personal and family proximal factors, and also including other kinds of distal factors such as poverty, health, and education policies, that could represent a serious risk to the well-being and healthy development of children and adolescents in Latin America.

Regarding the trajectories of children and adolescents in adverse situations, poverty is an important issue owing to its association with multiple adversities and the negative consequences in the short, medium, or long term in their development and mental health. Recently, the president of the World Bank declared that poverty has suffered the worst increase in generations (World Bank, 2021a). Global extreme poverty is expected to rise in 2021 for the first time in over 20 years owing to the disruption of the COVID-19 pandemic (World Bank, 2021a). The global extreme

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poverty rate fell to 9.2% in 2017, from 10.1% in 2015. In 2018, four out of five people below the international poverty line lived in rural areas. Half of the poor in the world are children and adolescents. About 70% of the global poor aged 15 and over have no schooling or only have some basic education. A recent study by Santos and Villatoro (2018) showed that out of 17 countries in Latin America (e.g., Nicaragua, Mexico, Chile, Costa Rica, Brazil), 3 present poverty incidence that exceeds 70%, in 3 additional countries the percentage is around 60%, whereas in 5 countries (including Mexico and Colombia) the poverty incidence was between 30% and 40%, followed by Brazil and Costa Rica. Moreover, the economic crisis due to the COVID-19 pandemic has increased unemployment rates and economic pressure, and the number of people living under poverty conditions, and probably will increase more in the next few years. An estimated 356 million children and adolescents live in extreme poverty (UNICEF, 2021). The urban settings may be the most affected as well as LMICs such as those of Latin America (World Bank, 2021b).

The science of development, from a multidisciplinary and multisystemic perspective, is focusing on the development of children and adolescents across contexts and cultures (Lerner et al., 2012; Masten, 2021; Ungar, 2021). Poverty implies a risk context, with a powerful influence on physical and socio-psychological development. Early childhood, particularly the first years, is the basis for the long-term cognitive, socio-emotional, and physical development, which can be affected by many risky environmental and social factors, such as stress, socioeconomic status, and the relationship with caregivers and parents, which play a central role in childhood and adolescence (Shaffer et al., 2013; Steele et al., 2016). There is evidence of the negative impact of poverty and economic pressures on brain development when stressful experiences occur in early childhood and adolescence (Buckley et al., 2019; Cicchetti & Handley, 2019). However, neural plasticity studies highlight that children's and adolescents' developmental trajectories can be changed, showing normal development and resilience, depending on the level of risk or adversity (Cicchetti, 2015; Haft & Hoelt, 2017). For example, children can recover from the lack of stimulation in their early years, presenting a positive development and outcome, despite the early adverse experiences with mothers with early stimulation programs (Masten, 2021; Masten et al., 2013). Therefore, based on research, the ecological systemic perspective represents a positive and optimistic conceptual framework regarding the development of children and adolescents growing up in adverse conditions, providing theoretical and methodological models based on scientific evidence with the practical implication for the designing of intervention in multiple settings.

In short, "Developmental Science" can be considered to be a wide cross-disciplinary field aimed at understanding the developmental trajectories and outcomes across the life span. Based on the general systems theory and the ecological model assumptions (Bronfenbrenner, 1979; Von Bertalanffy, 1972), the developmental ecological systemic perspectives (e.g., Cicchetti, 2010; Masten, 2014; Sameroff, 2010), suppose that developmental trajectories and outcomes of children and adolescents result from the interplay of individual ecological systems. It is important to analyze findings in the field of child and adolescent development

research in Latin America from these perspectives as many children and adolescents are growing up in adverse situations generated by the macro system such as poverty and marginalization. For example, social exclusion, lack of financial resources, and environmental conditions to ensure a healthy mental and physical development for the whole family, are frequently associated with parental neglect or uncaring maternal support, negative parenting behaviors/attitudes, and negative peers in communities. However, developmental trajectories and outcomes can be normal depending on how the risk, promotive, and protective factors are combined, across different ecological systems; thus, resilience outcomes can be expected as reported throughout this book. Moreover, early diagnoses, as well preventive and selective intervention based on evidence at the family, school, and community level, can be designed, promoting, and enhancing competencies in children, adolescents, and families to face adverse situations.

Poverty and Adverse Contexts: Conceptual Definition and Implication for Development

From the field of social and health sciences, poverty has been given many connotations depending on the framework in which it is circumscribed. The World Health Organization (WHO, 2021) defines poverty as a lack of material, social, and educational resources that lead to economic deficiencies that limit people's development. Poverty has been examined from different points of view, for instance, socioeconomic models take up poverty in terms of income, including three broad perspectives of poverty. From a monetary perspective, "have" and the "income," a person is poor only when his or her income level is below the defined poverty line. Thus, poverty implies having less than a reference group, which could also be equated with inequality (Sameti et al., 2012; Smeeding, 2016). This kind of definition refers to at least two concepts of poverty, absolute and relative poverty, the last one reflecting the perception of needs, which starts from the changing nature of needs. To resolve the issue of "relativity" it is important to relate the sufficiency of resources to the average increase or decrease in real income and to consider a psychological approach for a better understanding as poverty cannot be determined by evaluating only average income (Office of Disease Prevention and Health Promotion [ODPHP], 2021). Poverty can also be defined in reference to capabilities, to denote the absence of certain basic competencies to "do well," or the lack of the opportunity to function in an acceptable way with regard to a social parameter, which implies a significant risk to mental health and well-being (UNICEF, 2021). Likewise, poverty implies social exclusion, as deprivation of material resources to access and cover human needs, leading to a lack of opportunities to participate in social activities related to economic and others form of exclusion; thus, unemployment is frequently an indicator of poverty in social and developmental sciences (Elliott, 2016). All these perspectives can be useful when poverty is measured objectively; however, given the multidimensionality of poverty, a subjective measure of poverty is needed

(Smeeding, 2016). Therefore, in the field of human development, “subjective” criteria are frequently used to assess and understand the relationship between poverty and mental health (Urban et al., 2009).

From the developmental science, poverty has been recognized as a broad and multifactorial variable that goes through all ecological systems, from macro-system to micro-system and vice versa; thus, it encompasses many dimensions of children’s and adolescents’ lives (Duncan et al., 2017). The consequences of being poor or having economic strain depend on the degree or kind of “poverty.” There is evidence that any kind of poverty has a negative effect on the development of children and adolescents, given the low opportunities for full, healthy development, for example, for housing, food, education, health, and recreation (Golberstein et al., 2019). Poverty and quality of life are related because of their consequences for child and adolescent development, in the short and medium term, as well as in adulthood, as poverty can be intergenerational, creating a process that Birch called the “poverty cycle” that perpetuates the conditions of poverty associated with negative and maladaptive developmental trajectories, which in turn involve neglected parenting, domestic violence, abuse, among other problems (Cicchetti & Ng, 2014; Garnezy, 1993). On the other hand, subjective perception of poverty plays a central role in mental health and well-being, as needs may be universal and timeless, but the satisfiers (goods and services), are established according to a sociocultural reference group, even though they can be changeable from one source to another and person to person (Wadsworth et al., 2016). Hence, assessing poverty from a subjective perception, involves the appraisal of a person, a family, or a group, regarding a situation, a group, or community standard; thus, this approach seems to be more useful when studying the relationship of poverty to child, adolescent, and family development.

Therefore, poverty as a multidimensional factor can be defined by the objective condition of living, as well as the subjective appraisal that adolescents and families do. Hence, developmental research into poverty and disadvantaged people can be identified based on a set of sociodemographic markers (e.g., employment, occupation, and schooling of parents, as well as quality of housing) associated with socioeconomic status (SES), which is frequently used as an integrative measure of diverse indicators (e.g., parent schooling and occupation) for assessing poverty conditions. Besides, an subjective appraisal of economic strain by children, adolescents, and families can be measured (Conger & Conger, 2002; Perzow et al., 2018).

Studying Adversities in Children and Adolescent Development: Why the Ecological-Systemic Perspective?

In the last few decades, a large body of findings on the child and adolescent development field identified as “Developmental Science” (Lerner et al., 2013; Masten, 2014) has grown, integrating micro-paradigms and theories from a multidisciplinary

perspective, most of them systemic, to understand the developmental trajectories of children and adolescents. Based on the general systems theory (Von Bertalanffy, 1972) and an ecological perspective of human development (Bronfenbrenner, 1979), relational developmental systems represent a “macro-paradigm” and a broad conceptual and methodological framework engages in a comprehensive understanding of child and adolescent development under normative and non-normative circumstances, for instance, the developmental psychopathology perspective (e.g., Cicchetti, 2013; Masten & Barnes, 2018), positive youth development (PYD) (e.g., Lerner et al., 2015), the transactional-ecological perspective (e.g., Felner & DeVries, 2013; Sameroff, 2010), or the developmental organizational model (Flynn et al., 2014). From these perspectives, childhood and adolescence are critical and complex periods of the life cycle characterized by plasticity in a dynamic and interactive process, person, and context. The adolescents must grow in a complex scenario ranging from micro- to macrosystem development; thus, the adolescent outcomes imply interaction across multiple ecological systems (Cicchetti, 2010). The adaptive, or maladaptive, outcomes of children and adolescents emerge from a complex transactional process among multiple ecological levels, from proximal (personal, family, school) to distal systems (neighborhood, socio-political, and cultural contexts), with the family system playing a mediating and moderating role, between more inclusive systems and child and adolescent development (Bornstein & Cheah, 2006; Bronfenbrenner, 1979; Golberstein et al., 2019). In the field of the science of development, the developmental psychopathology model has been defined as the study of the origins and course of individual patterns of maladaptive and normal behavior (Sroufe, 2013). The developmental perspective has been defined as a macro paradigm that involves multidisciplinary conceptual and methodological research aimed at understanding adaptive-maladaptive development resulting from the interplay among the biological, psychological, and contextual systems on the domain of risk and resilience (e.g., Cicchetti, 2013; Masten, 2021; Sameroff, 2013).

Recently, Masten (2021) defined resilience as the capacity of any system, whether relating to an individual or to the community, to adapt efficiently to any situation that threatens its functioning, viability, or development; moreover, it is not necessary to have extraordinary resources in thriving adversity. The current research comprises diverse theoretical and methodological approaches within a broad developmental systemic general perspective, aimed at understanding the mechanism and processes involved in child and adolescent development in diverse risk settings. We can identify the utility of the transactional-ecological approach (Felner & DeVries, 2013) to understand development in social-risky neighborhoods; revisiting Bowlby’s attachment theory (Bowlby, 1958; Salinas et al., 2018), to explain the consequences of early deprivation in childhood for the subsequent developmental periods; the PYD approach (Lerner et al., 2015), which highlights the fact that adolescents can promote their development even in adverse situations. Additionally, the ecological developmental model in maltreated children explains the consequences in the short and long term in pathway development (Michl-Petzing et al., 2019), explaining the interplay of genes and environmental factors in child and adolescent offenders. On the other hand, various multifactorial models from the

ecological systemic approach offer theories concerning youth delinquency (Le Blanc, 2017; Moffitt, 2018). For these approaches, childhood and adolescence can be considered as sensitive periods of development, as stress in childhood and adolescence is linked to subsequent psychological disorders in adulthood; however, the idea that adolescence is a stormy period is debated (Lerner et al., 2012). Therefore, a more positive perspective considers that adolescence is a period of resources and challenges in an interaction scenario influencing health and competent behavior in daily life.

Moreover, the ecological-systemic perspective proposes that trajectories and developmental outcomes of children and adolescents involve transactional processes of genetic, biological, psychological, and sociological factors, within an organizational framework from macro- to microsystems. Poverty is a factor situated in the macro-structure, implying a significant risk to children's and adolescents' well-being (Conger & Conger, 2002; Duncan et al., 2017; Garmezy, 1991; Rutter, 1985), as it is related to adverse events, and situations in a cumulative and cascade risk process, becoming a chronic stressful event affecting their daily lives (Evans & De France, 2021; Golberstein et al., 2019; Rutter, 2006). Thus, proximal and distal ecological systems influence the mental health of children and adolescents through the family system; however, they are capable of responding positively to challenges and adapting positively to critical or adverse situations, i.e., being resilient.

Therefore, poverty can be considered a condition related to both macrosystems and microsystems, given that the large number of negative environmental events involved in many adverse situations impact negatively on the physical and emotional health of children and adolescents (WHO, 2021). However, the growing findings in developmental science demonstrate that many children and adolescents display positive adaptation, despite the risk. Likewise, most of the resilience literature shows that adaptation and resilience are processes (Cicchetti, 2013; Lerner et al., 2013; Masten, 2014) and cannot be considered linear processes. Operational definitions of resilience may involve input, processes, and salient outcomes; thus, most explanatory models of resilience assume that development involves an interplay among diverse, proximal, and distal risk and protective factors across ecological systems (e.g., Ungar, 2021). Some approaches may be more useful in understanding adaptation and resilience in children and adolescents from risky and adverse settings. A compensation model of resilience based on a comprehensive protective-risk model supposes that adolescent outcome resulting from the interplay of individual and contextual risk, promotive, and protective factors (e.g., individual vulnerabilities, level of risk, cumulative stressful events), as some protective factors can play a buffering role from a high-risk setting, moderating the negative effect of risk in the adolescent development (Santiago et al., 2017; Wadsworth et al., 2013). On the other hand, the stress inoculation approach based on what Meichenbaum proposed (Meichenbaum, 1985) has been useful in understanding how some children and adolescents become resilient to adverse situations. It suggests that a few moderate exposures to stressful situations might improve resistance to stress in adolescents and families as it works as a "vaccine," enhancing the resilient potential to display adaptive responses to intense stressful experiences, preparing adolescents to

learn functional strategies to cope with other similar experiences (Felton et al., 2017; Malhi et al., 2019; Rutter, 2013). In addition, the model of cumulative risk cascade (Evans & De France, 2021; Rutter, 2012) supposes that cumulative adverse situations, frequently involving settings of poverty, increases vulnerability, affecting developmental trajectories and adolescent outcomes.

Hence, resilience and adaptation are complex and changing processes over time, contexts, and across diverse domains of development. The concept of adaptation, also, generates controversy, although it can be considered as a fundamental premise to understand the trajectories of positive versus negative development or psychopathology, under ordinary circumstances according to salient developmental tasks (Masten et al., 2008; Masten & Obradović, 2006). Adaptive behavior reflects competence in achieving personal independence and meeting social demands such as academic adjustment and performance (O'Dougherty et al., 2013). Thus, adaptation can also be considered as the ability to function in daily life, which is an important marker of adjustment. For example, in adolescents in out-of-home placements, living skills become an important focus of attention as they transition to independent living. Nevertheless, recent analyses of resilience and positive development and adaptive or positive outcomes from the development science (e.g., Lerner et al., 2019) support the idea that resilience as well as adaptation, working in a continuum resulting from the interplay between individual resources and the context relations in the face of different levels of risk and adversity, considering that risk is also in a continuum from a low to a high level. Resilience is also considered as an outcome of the interplay of risk-promotive and -protective factors across ecological systems; therefore, diverse models of resilience (Masten, 2021; Ungar, 2021) can be the basis for understanding why children and adolescents may display different pathways and outcomes in adverse settings.

Child and adolescent development are a complex process that may present continuities or discontinuities depending on the interaction of both proximal and distal risk and protective factors. Thus, proximal risk factors are directly experienced by the individual, whereas distal factors are risks derived from the context, but mediated through more factors in the proximal systems than family. For example, a proximal risk exposure could be the negative influence of the peer group, whereas a distal risk could be a disadvantage neighborhood given the interplay of individual and context (O'Dougherty et al., 2013).

Pathways to positive adaptive versus maladaptive functioning can be influenced by a complex matrix of the individual's biological and psychological organization, past and current experiences, active choices, social context, timing of adverse events, and experiences (Michl-Petzing et al., 2019). Researchers are looking for the consequences of exposure of early adverse experiences in the pathways of trajectories of child and adolescent development through longitudinal investigation (Cicchetti & Ng, 2014; Sroufe, 2013; Wadsworth et al., 2013); however, cross-sectional research has also been carried out using multivariate analyses, to understand the mechanisms underlying whether the adaptive or maladaptive developmental outcomes of children and adolescents. Likewise, the importance of knowing the situations that imply a significant risk for adaptive development is also emphasized.

In this sense, stressful life experiences constitute a potential threat to the well-being and healthy development of children and adolescents, as they are exposed to stressful and adverse experiences that may include acute traumatic events, chronic stress, social risk, accumulation of stressful life events, malnutrition, which can be considered to include both normative developmental experiences as well as non-normative and stressful events impacting the neurodevelopment, with consequences in multiple biopsychological domains (e.g., executive function, language) (Buckley et al., 2019; Wagner et al., 2016).

What Are We Doing in Latin America and Looking Forward?

The lives of many Latin American children and adolescents are full of adverse and stressful experiences owing to economic inequalities and socioeconomic transformations that have caused the living conditions of the families in which they develop to deteriorate. These macro-structured processes manifest in what is called poverty, which is increasing in Latin America. Based on a developmental perspective, several researchers have taken up specific models and theories on child and adolescent development, most of them from a resilience perspective, trying to understand the consequences of poverty for the development of children and adolescents, owing to the importance of early experiences in infancy for the subsequent childhood and adolescent developmental trajectories and mental health outcomes. Most of the findings in Latin American studies with children, adolescents, and families under risky and adverse conditions, presented throughout this book, show that the family system is an important factor for developmental processes in children and adolescents. They demonstrate that many children and adolescents present resilience, showing good functioning, adaptation, transformation, and recovery from early adverse experiences, as have been reported in the literature, such as neglectful caregivers (Raviv & Wadsworth, 2010), negative parenting (Bornstein & Cheah, 2006; Michl-Petzing et al., 2019), and chronic stresses such as economic strain (Perzow et al., 2018; Wadsworth et al., 2016).

From birth, many developmental processes are related, involving the interplay of individual and context; thus, the relationship between child-caregiver and environment is an important source of stimulation for a child's neuropsychological development, including motor skills, cognitive skills, and socioemotional development. For example, socioemotional processes play a main role in human development, mainly in infancy, early to mid-childhood, and even in adolescence (Thompson, 2014). However, relatively few studies are carried out in Latin America compared with other, high-income countries. Thus, the first part of this book focuses on conceptual and methodological issues of child development from birth to childhood, presenting research findings regarding children and caregivers from different contexts of Latin American countries such as Argentina, Brazil, Chile, and Mexico. For instance, regarding children's development of a background in poverty, Márquez and colleagues in Chap. 2 present findings of a longitudinal investigation carried out

with infants and their caregivers of low SES, aiming to explore the effects of parenting in early infancy. They confirm the association between negative parenting with child impairment development in diverse developmental domains such as language or motor skills, by comparing diverse pathways over time and across different groups of children. However, their results suggest that, considering the Mexican family culture, early intervention, guiding the mother's practices with their children at home, can promote better child development before the second year of life. These results confirm that:

1. Living in poverty condition is a significant risk factor for the early development of children as the previous investigation indicates (Duncan et al., 2017; Masten et al., 2013).
2. The significant influence of caregivers in early stimulation, during at least the first 2 years of a child's life, as research has highlighted (e.g., Bornstein, 2016; Masten et al., 2013; Sroufe, 2013).

These findings are related to those that Peñaloza, Auza, and Murata (see Chap. 3) present regarding children's linguistic development in a risky environment. They use a screening procedure to identify children with Developmental Language Disorder (DLD), working with their parents as informants, throughout a screening process to detect monolingual Spanish-speaking children in diverse settings (Chilean and Mexican contexts) with this problem. They collected information on parental risk perception about their children's linguistic development as parental perception can be a predictor factor in the process of early identification, as well early intervention in children with a language disorder. From a preventive perspective, the need for early detection is emphasized as persistent language problems can exist in infancy and at later developmental stages, which may result in academic failure and school difficulties.

Given the central importance of evaluation and intervention in early developmental stages, in Chap. 4, Querejeta and colleagues, present a review of the main findings in Latin America, specifically Argentina, regarding infant development, including an overview of conceptual and methodological approaches to the study of child development. Moreover, the authors present the most important measures in assessing diverse developmental domains (e.g., emotional, cognitive, motor skills), and some of the findings of their own line of research with children from vulnerable backgrounds, including normal and risk samples of the metropolitan area of Buenos Aires. Finally, considerations about the limitations and challenges of research with this kind of population are also presented.

Based on the similar children's developmental background perspective, the research of Suárez and Alva presented in this book (see Chap. 5) regarding the importance of the evaluation and early detection of childhood developmental difficulties, is consistent with those findings of Peñaloza and colleagues. Thus, they have developed measures for the early detection of specific language difficulties or gaps in small children using the reports of their caregivers, examining the SES influence on linguistic skills. They present an instrument for parents from diverse SES, considering the level of education and SES, including caregivers of low SES. They

corroborate the effect of mothers on the language skills of their infants, and they also present previous research about the development of language skills and other domains in Mexican infants. Suárez and Alva also highlight the importance of caregivers on infant development underlying the convenience of having suitable measures according to cultural contexts, and specific demographic variables of caregivers according to other researchers (e.g., Bornstein & Cheah, 2006).

Many developmental processes are related to each other or are closely interconnected; of them, emotional development plays a central role in the mental health of children and adolescents. Considering that the developmental process takes place in a relational context, early relational experiences between infants and caregivers involve attachment relationships, which in turn are linked to socioemotional development at subsequent stages of life and adaptive-maladaptive pathways and developmental outcomes (Eisenberg et al., 2001; Thompson, 2014). Thus, based on a developmental perspective, in Chap. 6, Oiberman and Lucero present an intervention in early infancy based on developmental bonding and relational theories (Ainsworth, 1969), such as object-relations and bonding theories (e.g., Klein, Spitz, and Winnicott), and Bowlby's theory attachment (Bowlby, 1958), whose purpose is to recover, re-establish, and strengthen the infant-mother bonds by stimulating attachment relations, and in turn, promoting the integral development of children. The authors developed the program "Early Bonding Reanimation" aimed at stimulating bonding in infants with early deprivation of attachment relationships, through the active participation of their caregivers, most of them in a vulnerable situation.

On the other hand, the second part of this book focuses on analyzing the interplay of individual, family, and extra-family influences (e.g., school, neighborhood, and external mentors) in adolescent development. From a developmental ecological-systemic perspective of resilience, research in Latin America, including Mexico, has focused on the interaction of proximal and distal factors, trying to identify individual and contextual factors, involving both adaptive and maladaptive outcomes. Thus, issues linked to personality features, stress-coping processes, self-regulatory processes, such as emotion regulation, as well as family factors, such as attachment, parenting, and social support, have been addressed. For example, in Chap. 7, regarding adolescent development of adverse family and community context settings, Barcelata presents some data derived from studies conducted by her and colleagues with clinical, school, and community samples of poverty and socially risky settings, confirming some of the main assumptions and findings in the resilience field (Felner & DeVries, 2013; Lerner et al., 2012; Masten, 2021; Ungar, 2021) that highlight the fact that development and adolescent outcomes depend on the interplay of multiple individual and contextual factors such as family. Coping and emotion regulation were the main mediating factors between stressful events and adolescent outcomes. Likewise, based on family systemic approaches and family stress models (Bornstein, 2016; Conger & Conger, 2002; Olson & Lavee, 2013; Wadsworth et al., 2016), family issues are addressed. Most of the studies show that, for example, positive parenting, high family cohesion, and perceived family support were linked to mental health, whereas negative parenting and family difficulties were related to negative outcomes such as pregnancy, internalizing, and externalizing problems.

According to the WHO (2019), suicide is one of the most prevalent causes of death in adolescents between 15 and 19 years globally. Around 90% of suicides are committed by adolescents living in LMICs (WHO, 2021). Therefore, the relevance of individual-environment interaction in the emergence of such complex and multifactorial mental health problems as adolescent suicidal behavior is demonstrated by the inquiry of Quijada from an ecological-systemic approach (see Chap. 8). A psychosocial model of suicide is presented in her chapter, which was tested using structural equation modeling with a Chilean population. The data indicate that risk trajectories originate from the interplay of several contextual variables, with psychosocial and clinical mediating factors, that lead to suicidal behavior. Findings show that school-based prevention programs are needed in Chile, as well as in other Latin American countries, where this problem has increased and to which few evidence-based mental health actions are applied.

In Chap. 9, González-Arratia and colleagues show findings with children and adolescents under different circumstances of psychosocial risk (e.g., children under street conditions, children and adolescents during confinement by COVID-19, neglected children). They observed different profiles comparing features related to resilience. From a positive psychology and resilience approach, they observed psychological resources such as optimism, a sense of humor, active coping, and social support when comparing resilient and nonresilient children and adolescents, which are consistent with previous data (e.g., Wadsworth et al., 2013; Zimmer-Gembeck & Skinner, 2016).

According to the developmental-organizational perspective (Cicchetti & Ng, 2014; Flynn et al., 2014), childhood maltreatment carries an accumulation of vulnerabilities in multiple domains during development. There is evidence that poverty promotes an environment of violence and maltreatment associated with antisocial and juvenile delinquency (e.g., Moffitt, 2018), one of the most increasing and highly prevalent problems in many Latin American countries such as Colombia, Brazil, and México. From an ecological perspective of adolescent development, Rezende-Bazon and Komatsu take up the Personal and Social Control Theory (PSCT) proposed by Le Blanc (2017) to carry out research with Brazilian adolescent offenders (see Chap. 10). The inquiry has been conducted from a multisystemic and multifactorial methodological approach using multivariate statistical procedures to understand the persistent trajectories of criminal conduct. Using cluster analyses, they identified patterns of criminal conduct that were significantly different from each other, linked to diverse family, school, and social problems. Their findings support assumptions of the PSCT (e.g., Le Blanc, 2017) and contribute to the understanding of antisocial and criminal behavior in a broad framework that goes beyond psychopathology, with implications for both clinical and social intervention. Likewise, their research highlights the need to reinforce preventive actions aimed at detecting features such as callous-unemotional traits in the early stages of childhood that are accentuated in adolescence, which has been linked to antisocial behavior and delinquency, but few studies have been conducted in Latin America, despite a high prevalence in school samples in marginalized neighborhoods, for example, in Mexico City (e.g., Barcelata & Rivera, 2018).

Finally, institutionalized children and adolescent mental health is an issue addressed in this book. For decades, the mental health of children in residential and foster care has been an issue addressed in investigation into the developmental perspective (e.g., Barber et al., 2004). In Mexico, as well as in other Latin American and Caribbean L-MICs, institutional care is a social problem associated with poverty (Kirk et al., 2017), as well as a risk for children and adolescent mental health and well-being, as, in turn, it is linked to neglected and abusive families, family economic hardships, parental mental illness, etc. Based on their own experiences and a review of the literature, Manzo presents an analysis of the consequences of residential care on multiple developmental domains in Mexican institutionalized children and early adolescents (see Chap. 11). She highlights the effects in the short, middle, and long term of residential care in the developmental trajectories and mental health of children and early adolescents. For instance, behavioral and emotional problems in children and adolescents may be worse; however, mental health care practitioners and therapists can help to improve the well-being of children and adolescents in foster care, providing close relationships with peers, receiving social support, and establishing good relationships with a significant person.

Final Considerations and Future Challenges

Research in Latin America represents many methodological challenges for investigators, addressing child, adolescent, and family developmental issues in poverty and disadvantaged backgrounds. As we noted, research from developmental science has grown, mostly based on the ecological-systemic perspective. Although there are significant methodological advances and new procedures and measures are presented with practical implications, research with stronger designs and statistical tools is needed. These advances undoubtedly contribute to the guiding of research in Latin America; however, considering the contextual differences of each country, one of the most important challenges is to generate more models ad hoc that explain the wide variability of developmental adolescent trajectories and outcomes according to the micro-contexts in which children and adolescents live. Given the cultural differences across Latin American countries, the meaning of adaptation, good functioning, and resilience could be diverse. Research into resilience should be addressed; beliefs of the family system, the meaning of rituals, the sense of belonging are a few examples. Therefore, the recommendation of considering resilience from a multicultural perspective (e.g., Masten, 2021; Ungar, 2021) seems to be useful for carrying out investigations in Latin America. Also, proposals that adaptation and resilience are processes changeable over time and places, given the interplay of individual and environment, should be followed by researchers (Cicchetti, 2013; Lerner, 2018; Masten, 2014), as they seem to be suitable for the understanding of children and adolescents' development in the Latin American context.

Moreover, given the multiple contexts of risk, multiple forms of successful adaptation, in diverse domains, as well as levels of resilience, will also be expected. Although many contexts cannot be changed as they are determined by complex macro-structural processes (e.g., economic, policy, etc.), the future for children and adolescents looks promising, even in adverse contexts. Research shows that childhood and adolescence are stages of human development characterized by neural plasticity at multiple levels, which allows structures to be reorganized, reorienting developmental trajectories that may lead to successful adaptation to different contexts.

In order to support the positive development of children and adolescents, as well as enhance adaptive and resilient outcomes, researchers' tasks should be:

1. To focus on diversity, even in a context of poverty.
2. To consider that a multidisciplinary perspective is needed.
3. To search for a more comprehensive approach addressing, risk, promotive, and protective factors when researching development in adverse contexts.
4. To address a multilevel and multi-informant approach.
5. To focus more on the resources of children, adolescents, and families.
6. To design intervention from a preventive perspective, given the low resources for supporting community programs.
7. To design universal and suitable selective intervention according to the particular context where children, adolescents, and families lives.
8. To use mixed methods, integrating qualitative and quantitative research for a comprehensive understanding of the adaptation of children, adolescents, and families, and resilience in multiple adverse contexts.

To summarize, poverty is a multidimensional risk to the development of children and adolescents. The ecological-systemic approach or relational development systems theory represent suitable frameworks for leading multisystemic research with vulnerable and disadvantaged populations. Researchers in Latin America should make synergy from a multidisciplinary work, gathering methodological and financial resources, to conduct multisystemic and multilevel research involving biological issues throughout childhood and adolescence, that the literature has shown to have an important influence on the development of children and adolescents. Perhaps most important is to let the "data speak," which means, listen to children, adolescents, and families, as they are plentiful resources, but most of the time they have trouble identifying them, and/or using them in a productive way. Research should display bridges between health and educational institutions, and lead mental health multilevel actions considering the variability of adversities, the multiple issues, and diverse cultural contexts across Latin America.

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