Published in final edited form as:

Monogr Soc Res Child Dev. 2016 March ; 81(1): 7–23. doi:10.1111/mono.12223.

GENDER IN LOW- AND MIDDLE-INCOME COUNTRIES: INTRODUCTION

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... everyone is entitled to all the rights and freedoms set forth [in the Convention on the Rights of the Child], without distinction of ... sex

-- Preamble, Convention on the Rights of the Child
General Assembly resolution 44/25, 20 November 1989.

In 2013, the United Nations estimated that 1.1 billion people lived in countries characterized as very high on the Human Development Index (HDI; a measure of the social and economic status of a country), and another 1.0 billion lived in countries characterized as high HDI (United Nations Development Programme, 2013). This situation contrasts with over 3.5 billion in countries listed as medium HDI and 1.3 billion in countries listed as low HDI. As it happens, the vast majority of research on gender and child development has taken place in countries in the top tier (i.e., High Income Countries; HIC), whereas almost none has taken place in the bottom tier (i.e., Low to Middle Income Countries; LMIC). There are, of course, notable exceptions, such as the Six Cultures Study (Whiting, 1963) and Young Lives Study (Harpham, Huttly, De Silva, & Abramsky, 2005); however, the vast majority of what is known about how gender is implicated in children's experiences is derived from studies conducted in HIC (that is, the "minority world"). In HIC, parents tend to create gender-contrasting home environments for girls and boys, a process that may begin even prior to birth. Girls generally have more dolls and fictional characters, and boys more sports equipment, tools, and vehicles (Pomerleau, Bolduc, Malcuit, & Cossette, 1990). In the United States, for example, parents possess different ideas about their girls' and boys' emotions (Diener & Lucas, 2004; Putnam, Sanson, & Rothbart, 2002), and European

American mothers and fathers talk about emotions differently with daughters than with sons (Adams, Kuebli, Boyle, & Fivush, 1995; Chodorow, 1978; Fivush, Berlin, Sales, Mennuti-Washburn, & Cassidy, 2003; Fivush, Brotman, Buckner, & Goodman, 2000). From the little that is documented about parenting in LMIC (the “majority world”), the same approach to gender differentiation appears to be operative. For example, in a study of Zinacanteco babies in Mexico, a father reported giving his son three green chilies to hold so that the boy would know to buy chili when he grew up (Greenfield, Brazelton, & Childs, 1989). In an African village, girls are given dolls to play with whereas boys are given construction vehicles and weapons (Bloch & Adler, 1994). By age 4 to 5, Sri Lankan village children display gender differences in play, similar to those found with British children (Prosser, Hutt, Hutt, Mahindadasa, & Goonetilleke, 1986). These important contributions to the LMIC literature on gender differences in child and parent behavior notwithstanding, there is a general dearth of multinational information on gendered child development and gender-based parenting practices for most LMICs.

Around the world, from conception onward gender is commonly believed to pervasively direct how children are reared and what roles they learn. Everywhere, it seems, adult caregivers appear primed to treat girls and boys differently so that each will follow cultural paths deemed to be gender appropriate. It is routine to attribute different beliefs and behaviors to girls and boys and to hold different expectations for them. It may be that some of these beliefs and behaviors are universal or near universal around the world. Alternatively, some may have roots only in local cultural or religious traditions or reflect situational social and economic conditions. Whatever their origins, gender differences in experiences at any point in the life course are important, but may be especially so in childhood because even small differences in patterns of development or treatment can cumulate over time, and so gender typing likely has power to fashion variations in the trajectories of children’s gender development. For their part, children are exquisitely tuned to detect nuances in how they are treated by others (Williams & Best, 1982/1990). Indeed, young children seem to learn gender-appropriateness even before they can translate their ideas into words or behaviors. Children quickly come to see themselves and others in terms of gender (e.g., girls versus boys, females versus males, femininity versus masculinity), as distal influences (from national treatment of the genders to gendered occupations of adults around them) combine with more proximal ones (those beliefs and behaviors referred to earlier) to promote lifelong gendered roles.

Research interest in the intergenerational transmission of gender is longstanding (McHale, Crouter, & Whiteman, 2003). Lytton and Romney (1991) examined differential parental socialization of girls and boys through meta-analysis of the psychological and developmental literatures. They included 172 studies conducted in North America and non-North American Western societies. A clear effect to emerge from their survey was systematic encouragement of children’s gender-typed activities by both mothers and fathers. Psychological socialization by family members appears to be fairly consistently gender informed, and, even in realms of development where parental socialization does not differentiate between daughters and sons, the same parental treatment may still affect girls and boys differently as girls and boys may experience their environments differently or interpret their experiences differently. According to Gurin and Markus (1989), processes of

gender-based treatment that occur within the family very often are aligned with gender-based treatment and ideas emanating from numerous other sources (social exchanges with peers, interactions with other adults in the community, political climate), thus solidifying sets of perceptions and patterns of behavior observed in females and males within a society. In effect, gender is consensually acknowledged to be an important moderator in understanding many aspects of childhood and parenthood. Attributes associated with being either female or male appear early, are stable across time, and shape attitudes and actions throughout the balance of the life course (Anker, 1997).

All that said, new theory and careful examination of extant results are beginning to cast doubt on such facile conclusions. The findings from a worldwide survey of children's experiences in multiple domains of development reported in this *Monograph of the SRCD* add fresh data to this cresting iconoclastic revision.

GENDER THEORY AND GENDER SIMILARITIES AND DIFFERENCES

Gender plays a role in how children are treated (Ruble, Martin, & Berenbaum, 2006; Wilcox & Kline, 2013), and it is widely believed that girls and boys are reared differently in most parts of the world. Prevailing theory buttresses past empirical observations and cultural stereotypes. Evolutionary theory, cognitive social learning theory, and sociocultural theory all devote considerable attention to gender differences. The ensuing brief overview closely follows Hyde's (2014) insightful disquisition and deconstruction. Evolutionary theory focuses on how natural selection produces a psychology of gender based on an assumption that different behaviors may be adaptive for females and males (Buss & Schmitt, 1993). A key to the evolutionary argument is parental investment, behaviors of adults that increase the offspring's chances of survival but that also cost the parent (Trivers, 1972). Given that organisms have finite amounts of time, effort, and energy to maximize fitness (the ability to both survive and reproduce), evolution optimizes females toward parenting and its associated psychological concomitants (in nurturance and safety) and males toward mating and its associated psychological concomitants (in aggression). Evolutionary psychologists emphasize cross-cultural universals in patterns of gender differences, and, broadly, daughters and sons appear to be trained in ways that relate to the evolutionary history of reproductive successes of the two genders (Low, 1989). Maternal investment concentrates on assuring survival of offspring, whereas paternal parental investment focuses on mating to produce offspring (Draper & Harpending, 1982; Mascaro, Hackett, & Rilling, 2013). Cognitive social learning theory, as applied to understanding the psychology of gender, asserts that child (and adult) behavior is shaped by incentives and disincentives. Thus, people imitate or model others in their environment, particularly if those others are powerful or admirable (Bussey & Bandura, 1999). Sociocultural theory, which focuses on variations across cultures in patterns of gender, contends that the psychology of gender results from accommodations or adaptations of the individual to restrictions on or opportunities for their gender in their society (Eagly & Wood, 1999; Wood & Eagly, 2012). Gender operates in social structures that define power relations in a society (Fiske & Stevens, 1993; Goodwin & Fiske, 2001; Stewart, 1998), and the more a culture or nation values gender similarities and differences, the more likely are gender similarities and differences to appear there (Oyserman & Markus, 1993).

All three theories developed at least in part to explain gender differences. The theories converge in support of the idea that gender sorts individuals into categories of female and male characteristics and circumstances that support those characteristics. The primary difference among the theories resides in the causal mechanisms responsible (i.e., biology, socialization, or context). There is also convergence in the ideas that gender relates to individual differences in women and men and gender structures social institutions within which women and men develop. In a nutshell, theory and research tend to paint gender differences as universal, inadvertently reinforcing credence in trait-like assumptions of female-male differences. To date, not surprisingly, most thinking has favored gender differences (Shields, 2007).

Although *vive la différence!* is (in some respects) supportable based on evidence produced in a wide variety of social science studies, just how large la différence is has come under serious question as biological, psychological, and sociological evidence using new methodologies and paradigms has mounted. The strong and continuing presumption of gender differences as fully penetrating the thoughts and behaviors of females and males tends to mitigate or even overlook entirely gender similarities and the large variances of many characteristics within the genders. In some sense, the gender differences perspective exaggerates, reinforces, or even creates gender differences. Females and males may differ biologically, but at the most basic level human beings are diploid organisms whose cells contain 23 matched pairs of chromosomes, one inherited from mother and one from father. Only one pair, the sex chromosomes, strictly distinguish females and males. The remaining 22 pairs of autosomes are found in females and males alike, and the approximately 25,000 genes in the human genome are passed from mothers and fathers to daughters and sons across generations and expressed equally when inherited from either parent. Moreover, biology is neither a necessary nor a sufficient cause of gender-related distinctions or differential development because biology is not determinative (Best, 2010). Gender variation in experience and expression is socially constructed (Brody, 1999; Shields, 2007)—and so may be socially constructed to be different or similar (Mead, 2001). Even domains of development under genetic, anatomical, or hormonal influence are modifiable. That is, gendered phenomena may develop from genetically, anatomically, or hormonally influenced predispositions, but their ultimate phenotypic expression is shaped by experiences with the social environment and affordances of the physical environment (Best, 2010; Wallen, 1996). Context also defines what possibilities and situations individual children can access in determining their own development. Contemporary theoretical perspectives concur that sociocultural norms help to account for gender (e.g., Brody, 1999; Durik et al., 2006; Hewlett, 2004; Shields, 2007), and that biology and experience co-influence expressions of gender and their development. Biological factors may impose restrictions and predispositions on gender in girls and boys, but contextual factors are influential determinants. Context can render gender categories salient or not, increasing or decreasing gender identification, and may or may not lead to one or another set of gendered beliefs and behaviors (Abrams, Sparkes, & Hogg, 1985; Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990). Indeed, the magnitudes of a range of gender differences appear to vary impressively across cultures and nations (Lucas & Gohm, 2000; Williams & Best, 1990). Analysis of data from a small number of LMICs reveals that structural differences at the community or

country level, and access to various forms of material and human capital at the household level, tend to have stronger impacts on most areas of child health and behavior than gender per se (Pells, 2010; Rendall, 2012).

Reorganization of internal structures and functional connections between components of psychobiological systems is especially likely in phylogenetically advanced organisms living in complex ecologies (Lerner, Hershberg, Hilliard, & Johnson, 2015). Human beings qualify. In some ways, it behooves such organisms to harbor somewhat offsetting tendencies so as to allow maximum flexibility in addressing the full panoply of conditions they might face over time. In effect, even as one acknowledges certain pre-dominant biological, social, or contextual mechanisms for particular (gendered) tendencies, it is worth considering circumstances that might induce competing or compensatory tendencies. Consider, by way of illustration, some “facts of life” that might partially diminish the likelihood females and males exclusively manifest the nurturing versus mating tendencies discussed above. One fact of life is parental death. Throughout history mothers have died (in childbirth, via accident, on account of disease) leaving offspring of various ages without their primary nurturer. To some extent, the likelihood such offspring would survive and live to reproduce (humans take an exceptionally long time to fully mature) might be enhanced if fathers had some tendency to nurture – at least until another female could step in to enact the role. Likewise, in the case of paternal death (or even prolonged absence), it may fall to mothers to act in an aggressive manner to protect offspring – there is substantial evidence of this in some mammalian species – and in other ways (e.g., by employment) to support development. So, there might be predominant tendencies in females and males that have broad survival value and that would likely be fostered; but there are commonly experienced circumstances that might also increase the likelihood of developing offsetting tendencies and capacities (which also might be fostered). The gradual movement of humans over millennia into larger communities and constantly interacting and evolving social enterprises may further increase the likelihood that some counterpoising tendencies would be fostered – more so perhaps in some societies than others – as these new circumstances offer quite different affordances from the circumstances that typically faced humans millennia ago.

In contrast with the long-standing tradition of focusing on gender differences, the “gender similarities” hypothesis states that females and males are actually similar on many psychological measures (Hyde 2005, 2014). Some early evidence for this hypothesis can be found in Maccoby and Jacklin’s (1974) narrative review of parents’ gender-differentiated socialization practices. Outside parents’ rein-forcing gender-typed play activities and toy choices, Maccoby and Jacklin (1974, p. 342) concluded that “the reinforcement contingencies for the two sexes appear to be remarkably similar.” Even though Lytton and Romney (1991) later determined that parents systematically encourage their children’s gender-typed activities based on a meta-analysis of 172 studies, most studies comparing socialization practices aimed at girls and boys tend to identify relatively small differences (with many non-significant findings emerging). In the last 2 decades more gender studies and more meta-analyses of putative gender differences in more domains of development have appeared. For example, Bornstein, Putnick, Bradley, Lansford, and Deater-Deckard (2015) found that maternal education (instructional capital) led to improved infant growth through availability of household resources (physical capital) in 117,881 families across a

wide swath of 39 LMIC but did so equivalently for girls and boys. Likewise, attachment research shows a conspicuous absence of gender differences (Benenson, 1996). Generally, Strange Situation attachment classifications as well as maternal sensitivity ratings do not reveal gender differences and, consistent with this pattern, in van IJzendoorn et al. (2000), gender of child was not associated with maternal sensitivity or attachment classification per se. The strongest evidence for a hypothesis of gender similarities emerged from a review of 46 meta-analyses of the psychological and developmental research literatures. All told, those meta-analyses yielded 124 effect sizes for gender comparisons across a range of psychological domains, including cognitive, communication, social and personality, well-being, motor, and a heterogeneous variety of other categories. Effect size (Cohen's, 1988, d) was used as a metric, where a d of .20 is small, .50 medium, and .80 large. Altogether, 30% of the effect sizes fell between 0.0 and 0.10 and were interpreted as negligible, and an additional 48% fell in the range between 0.11 and 0.35 of a small difference. In sum, 78% of *reported* gender differences were small or close to 0. Domains in which gender differences proved to be small included mathematics performance, verbal skills, gregariousness and conscientiousness in personality, reward sensitivity, negative affectivity in temperament, relational aggression, tentative speech, aspects of sexuality, leadership effectiveness, self-esteem, and academic self-concept. Exceptions to gender similarities, where differences were moderate or large, included 3D mental rotation, agreeable/tender-minded personality, sensation seeking, interests in things versus people, physical aggression, and some sexual attitudes and behaviors. Therefore, considerable empirical evidence appears to support similarities between the genders. Furthermore, as Hyde (2014) pointed out, all "grand theories" of gender differences (evolutionary theory, cognitive social learning theory, sociocultural theory) can be re-construed to sustain and explain gender similarities.

It is not the purpose of this *Monograph* to meticulously adjudicate between these two opposing views pertaining to gender. However, for the kinds of environmental conditions we examine and the components of child well-being we consider, the newer view of gender similarity seems more fitting. The studies we report in this *Monograph of the SRCD* analyze gender similarities and differences in an array of psychological domains across a large number of LMIC. Although we expect to find that the kinds of household conditions and parenting practices we examine will generally bear similar relations to children's development, it will be important to better define how conditions present in some LMIC contribute to gender similarities and differences, as both have implications for policy and practice.

The social contexts of many LMIC are widely believed to favor men over women (Morrison & Jütting, 2005; UNDP, 1995, 2011), as it is that gender differences and differential treatment of children by gender survive in most parts of the world, from Albania to Zimbabwe. However, the lives of girls and boys, women and men may vary substantially across LMIC; therefore, it may be inappropriate to assume that girls and boys in LMIC are treated differently. There is simply too little research on whether and how, at the family level, young girls and boys are reared in systematically similar or different ways, and what situations obtain across countries or only in select countries. This *Monograph of the SRCD* addresses a gap in the research literature of how girls and boys are reared across LMIC. The scope of this *Monograph of the SRCD*, in terms of the diversity of countries, peoples, and

issues covered, serves to increase our understanding of how context interacts with biological predispositions to shape gender-related characteristics in children. By exploring gender in a broad range of LMIC, we can empirically assess how early similarities and differences in the treatment and experiences of girls and boys might become apparent, and whether particular country contexts moderate gender similarities and differences. Furthermore, covering a broad range of developmental topics allows us to determine whether gender similarities and differences are of comparable magnitude across different domains of development; whether, for example, girls and boys are read to similarly but disciplined differently. Such an approach depends on data from the same participants on multiple dimensions of development across multiple contexts. It also specifies direct and indirect connections between societal-level and individual-level phenomena (Stewart & McDermott, 2004).

In this *Monograph of the SRCD*, we re-visit a variety of topics central to gender development in childhood and bring multinational data from the majority world of LMIC to bear on the question of gender similarities and differences.

THE BIOECOLOGICAL PERSPECTIVE ON CHILD GENDER

Children are embedded in a complex web of diverse social and physical contexts, and the relational bioecological developmental systems perspective is today the prevailing theoretical framework in developmental science (Bronfenbrenner & Morris, 2006; Lerner et al., 2015; Overton & Molenaar, 2015). The studies in this *Monograph of the SRCD* are guided by that relational developmental systems paradigm.

Bioecological theory characterizes development as a joint function of process, person, context, and time (Bronfenbrenner & Morris, 2006). Processes refer to dynamic interactions that the developing person experiences. Characteristics and qualities of the developing person, including gender, interact with characteristics of the environment to influence the nature and structure of development. The contexts that envelop the child and shape development are conceived in terms of a hierarchically organized, inter-linked set of systems, with lower-level more proximal contexts nested within higher-level more distal contexts. Each system has the potential to influence other systems. The microsystem encompasses patterns of activities, roles, and interpersonal relationships which the child experiences in face-to-face settings that are defined by specific physical and material parameters. This innermost system comprises patterns of interaction (proximal processes) between children and their immediate social milieu and physical environments. The microsystem is heterogeneous, and various dimensions of the microsystem are functionally linked. Thus, the child's home environment has both social and physical components (Wachs, 2015) and the nature of proximal parent-child interactions can vary depending on characteristics of the physical microsystem, such as resources (Bradley, 2015). Distinct microsystems afford children opportunities to experience different activities that alone and in combination foster their development. Bioecological theory forces close attention on proximal processes, which Bronfenbrenner and Morris posited to be most important to development. These are the person's interactions within microsystems, including social interactions with others and engagement in particular activities with material resources in their settings. A mesosystem harbors processes and links between two or more

microsystems, and the exosystem encompasses linkages between aspects of the environment the child does not directly encounter, but which influence development through lower-level micro- and mesosystems. At the outermost circle of developmental influences are overarching macrosystem patterns of beliefs, values, customs, and living conditions -- culture, religion, the socioeconomic organization of society, and (most germane here) national indicators of gender equality. The macrosystem is not separate from children's more immediate environments; rather, it permeates and colors exo-, meso-, and microsystems. Understanding the meaning and effect of proximal influences on the child often requires setting them within the broader macrosystem in which they occur (Bornstein, 1995). The overarching macrosystem context can exert profound effects on how development is gendered, prescribing how girls and boys are socialized, what is considered adaptive for each gender, which tasks girls and boys are prescribed and proscribed, and what roles they likely adopt as mature women and men. Contextual expectations promote conformity to gender roles and influence how people think about themselves as gendered beings, including their general perceptions of femininity and masculinity.

In studies done in LMIC it is especially important to bear in mind that environmental conditions often interact with biological factors (some of which are connected to gender) to determine developmental course (Miller & Chen, 2013; Rendall, 2013). Many children residing in LMIC live in sparse and dangerous conditions, without the kinds of supports requisite to maintain good health or normal growth in most domains of development (Howe, Huttly, & Abramsky, 2006). Accordingly, the "impact" of particular household conditions or parenting practices may be diminished or augmented depending on key (sometimes gender based) biological conditions. Moreover, the likelihood that a particular biological factor will moderate the influence of some environmental conditions tends to be greater in the prenatal and early postnatal periods (Chen, Matthews, & Boyce, 2002).

The meaning of gender in a society is often communicated through the macrosystem (e.g., existing power and economic differentials between women and men) that in turn influence the microsystems children directly experience at home, in school, and around their neighborhood (Leaper, 2002). Thus, parents typically adopt dominant and prevailing contextual prescriptions for their girls and boys. Generally, social structure and culture — especially opportunities for women's power in the social world and male mobility—are linked to the amplification or suppression of gender differences in parenthood in different societies (Low, 1989). Countries vary greatly in whether and how they promote gender equality, and a national "culture" *re* gender may have repercussions for gender similarities or differences at the individual, family, and national levels. Childrearing strategies reflect adaptations by parents (and other caregivers) meant to help prepare children for success in their specific developmental context. They also reflect current demands pertaining to daily living and level of access to social and material resources. Therefore, the types of socialization practices directed toward girls and boys, and the use of girls and boys for various daily tasks, often mirror existing opportunity structures for women and men in their community. Roughly speaking, how children are treated in a society tends to correlate with divisions of labor according to gender (Best & Williams, 1997; Hewlett, 1991; Low, 1989; Rendall, 2013; Whiting, 1986). In Chile, for example, contextual standards of women as caregivers and men as providers operate early in the primary socialization contexts of

families and schools (Schkolnik, 2004). The rights of adult women and men often differ in LMIC, and therefore young girls in these countries may be treated poorly compared to boys. That said, as indicated earlier, there is still little systematic research on how, at the family level, young girls and boys are actually treated across the developing world. In this *Monograph of the SRCD* we assess whether girls and boys experience similar and differential treatment in a large sample of underresearched countries and a broad range of developmental domains. The studies in this *Monograph of the SRCD* bridge near proximal contexts in which children find themselves with distal context indicators that are thought to influence children in equally compelling, if less immediately manifest, ways.

TOPICS OF GENDER RESEARCH

The chapters in this *Monograph of the SRCD* explore how certain microsystem experiences reflect certain macrosystem variations across a large number of LMIC. These chapters attempt to provide a snapshot of how experiences and outcomes are similar and different for girls and boys in the context of key country-level sociodemographic factors. In attempting to shed new light on the statuses of girls and boys in a large variety of contemporary underresearched LMIC, we adopt a Human Rights based approach, in particular Child Rights. The Convention on the Rights of the Child (CRC; Limber & Flekkoy, 1995) is a comprehensive and legally binding articulation upholding children's rights to survival, development, protection, and participation (United Nations General Assembly, 1989). Children have inherent rights to life, survival, and development (Article 6). Both health and psychosocial well-being of the child constitute prerequisites to realizing human potential (Engle et al., 2007). In other words, all children have rights to high-standard health care and nutrition, to nurturing and stimulating caregiving, to protection from abuse and neglect (including psychological and physical violence), and to environments that support their thriving. Rooted in the Rights framework, chapters in this *Monograph of the SRCD* examine all-important experiences and tasks in girlhood and boyhood, including physical growth and survival, experiences of caregiving, exposure to abuse, and labor participation in large numbers of families in a significant number of LMIC.

GENDER RESEARCH AND INTERNATIONAL DEVELOPMENTAL SCIENCE: PAST, PRESENT, AND FUTURE

As children develop in widely varying contexts internationally, those contexts can be expected to dramatically influence children's development (Bornstein, 2010; Packer & Cole, 2015). In consequence, studies of development in context are requisite to encompass the full scope of child development.

The main aim of this *Monograph of the SRCD* is to examine proximal microsystem contexts and influences on growth and mortality, caregiving, discipline and violence, and labor in young girls and boys in a large number of macrosystem LMIC. To achieve this aim, we drew on the Multiple Indicator Cluster Survey (MICS), a nationally representative and internationally comparable household survey (Bornstein et al., 2012; UNICEF, 2006). The MICS is implemented periodically in approximately 50 LMIC and provides a unique source

of information with which to examine protective and risk factors for child health, education, development, and well-being in different regions of the developing world.

Three kinds of empirical psychological and developmental research about gender have been identified (Stewart & McDermott, 2004). The most prevalent kind of study embraces a comparative gender similarities/differences approach and represents the one we are concerned with in this *Monograph of the SRCD*. Most of this kind of gender studies investigate ways in which girls and boys or women and men resemble or differ from one another. This orientation considers average differences in characteristics between the genders and when, how, and why they might arise. Hypotheses proposed to account for similarities/differences range from biology to socialization to social roles to social situations. A second kind of research concerns within-gender variability, and a third kind examines gender-linked power relations that structure social institutions and interactions (people are located within social structures that capture power relations implied by those structures). The studies in this *Monograph of the SRCD* are more about gendered parenting, experiences, and environments in childhood and less about gender development or identity. In selecting topics to study, we attempted to identify a broad set of issues that would provide insights into processes associated with child gender while also being representative of contemporary interests and future directions in the field.

Research on gender similarities and differences is important for several reasons. First, stereotypes about psychological gender differences abound, influencing people's beliefs and behaviors, and so it is important to evaluate their validity. Second, descriptions of treatment across gender lines are important because they inform theoretical approaches to understanding gender. Third, psychological gender differences are often invoked in relation to important policy questions, and so it is crucial to have accurate scientific information available to evaluate policy needs, recommendations, and justifications.

Despite consensus about the significance of early childhood and gender, and what each portends for development in the balance of the life span, the developmental literature is hampered by several context-related limitations that constrain our more complete understanding of child gender development. A narrow participant database in research is one. There is a surprising dearth of population-based multinational data from LMIC on the conditions of girls and boys and diverse (possibly gender-related) experiences. Most of what is currently known about children and gender still comes from studies of children in the minority developed world (Best, 2010; Bornstein, 2010; Tomlinson et al., 2015), of primarily middle-class, European or North American samples without considering how sociocultural factors provide the lenses through which implications about gender at large are seen. It has been estimated that, roughly speaking, 90% of the literature in developmental science emanates from regions of the world that account for less than 10% of the world's population (Kielsing & Rohde, 2012; Population Reference Bureau, 2013; Tomlinson et al., 2015). In some fields, the gap may be even greater (e.g., Mari et al., 2010). Much of what is known about children and gender in the majority world of LMIC still comes from studies of small samples in single locales (such as those we cited earlier). Thus, critics wisely reject broad generalizations about girls and boys derived from contextually restricted findings (Arnett, 2008; Bornstein, 1980, 1991, 2010; Henrich, Heine, & Norenzayan, 2010; Klasen &

Crombag, 2013). This general concern may be particularly relevant when applied to LMIC, as many are undergoing rapid political and economic change (Rendall, 2013; United Nations Development Programme, 2013). As a corollary, the societies typically included in developmental research are usually similar in many ways: In them, families normally adhere to the same basic nuclear organization, and parents play the same fundamental roles and share many of the same primary goals for their children. Therefore, much less is appreciated scientifically than is commonly acknowledged about girls and boys more generally or the influences of broader ecological contexts on girls and boys specifically. This restriction of range is equally limiting in terms of understanding idiosyncrasies of gender in girls and boys as it is humbling to generalizations and identifying putative universals about them. A more encompassing and valid approach to sampling would yield a more comprehensive perspective on psychological and developmental processes and is critical for testing the limits of generalization of psychological phenomena. Studies that employ a wider contextual lens also promise more penetrating insights into similarities and differences in how girls and boys think, feel, and behave as they do. Such lessons illuminate how expansive or circumscribed are the presumed universals of gender as well as how girls' and boys' experiences in specific different settings shape specific expressions of their behavior.

Therefore, population-based multinational data from LMIC are indispensable to identify the statuses, treatment, and condition of girls and boys in the majority world of LMIC as well as how gender more generally intersects with different domains of development. Furthermore, having aggregate information would improve our comparative understanding of children and gender and help to ensure equality of opportunity for girls and boys globally. Multinational data promise to leverage better-informed national and global policies for early child development with respect to gender. In brief, population-based multi-national data are crucial for monitoring the situations of girls and boys worldwide and to flesh out the database in human development. Because we use data collected under the auspices of the United Nations, our detailed analyses of LMIC data may also help inform decisions directly relevant to achieving some UN Millennium Development Goals.

Gender is a perennially popular subject, and innumerable studies of child gender populate the contemporary biological, behavioral, and social science literatures. Surprisingly, however, only a few (now older) large-scale, cross-national comparative studies have previously focused on gender. Barry, Bacon, and Child (1957) assessed socialization practices in more than 100 societies and found, generally, girls were reared to be nurturant, responsible, and obedient, whereas boys were reared to achieve and to be independent and self-reliant. However, Hendrix and Johnson (1985) later reanalyzed the Barry et al. data and deduced no evidence of a general gender differentiation in socialization; for both female and male socialization factors, self-reliance and independence had strong positive loadings, and nurturance loaded negatively. The Six Cultures study (Edwards & Whiting, 1974; Minturn & Lambert, 1964; Whiting, 1963; Whiting & Edwards, 1973) and its sequel, *Children of Different Worlds* (Whiting & Edwards, 1988), presented another, if smaller scale, cross-national data gathering effort that reported on child gender. Gender differences in aggression, nurturance, responsibility, and help- and attention-seeking were examined. Few gender differences were found in some locales (Kenya, the Philippines, or the United States) where girls and boys alike cared for younger siblings and performed household chores. In

contrast, child gender differences were found in others (India, Mexico, and Japan) where girls and boys were treated dissimilarly, girls assuming more responsibility for siblings and household tasks. Williams and Best (1982/1990) still later focused on gender stereotypes in children in 25 countries. They unearthed a general developmental pattern of stereotype acquisition beginning prior to age 5, accelerating during the early school years, and achieving completion during adolescence. Stereotype scores were high or relatively high in some countries (Pakistan, New Zealand and England) and low in others (Brazil, Taiwan, Germany, and France). Finally, Lytton and Romney (1991) examined differential parental socialization of girls and boys and considered especially the interaction between parent gender and child gender by investigating whether and how mothers and fathers distinguish between daughters and sons in mostly North American but also some Western non-North American societies. The only clear effect to emerge from their survey of over 150 studies was for parents' disparate encouragement of children's gender-typed activities. What is clearly lacking across this brief history of studies, and the gap we attempt to fill in this *Monograph of the SRCD*, is a more contemporary broader multidomain assessment of similarities and differences in the lives of young girls and boys in nationally representative samples of a large number of low- and middle income countries across the developing world. These gaps are especially important to fill in light of the major structural and labor market adjustments that are occurring in many developing countries (Rendall, 2013).

This *Monograph of the SRCD* therefore focuses on documenting international variation in physical, mental, emotional, and social experiences of young girls and boys in a substantial number of families across many LMIC in the majority world (Figure 1.1) using 21st-century data. The LMIC reported about in this *Monograph of the SRCD* vary widely in terms of history and ideology, beliefs and values, social and economic situations, as well as other sociodemographic factors thought to influence gender in girls and boys. However, these countries all constitute LMI nations (UNICEF, 2006) defined with reference to the World Bank's (2014) system of classification of economies based on gross national incomes per capita, quality of life (life expectancy, literacy rates), and economic diversification (labor force, consumption). More than 650 million children under 5 years of age are estimated to live in LMIC (UNICEF, 2014).

LMIC generally have low standards of living, but conditions within and across them still vary. For example, on an index (0–5) of household material resources (electricity, radio, telephone, television, and transportation), some LMIC average over 4 resources, whereas others average fewer than 1 (Bradley & Putnick, 2012). Children living in poor households may be directly affected by inadequate resources (e.g., they do not have safe drinking water or get enough to eat) or indirectly through family interactions (e.g., poverty undermines how parents interact with their children; Engle & Black, 2008; McLoyd, Aikens, & Burton, 2006). Given limited resources, parents decide how to allocate those resources to children and what roles to assign children within the family. In some countries, parents may favor girls or boys because one or the other is perceived to have a greater need. For example, if boys are more likely to attend school than girls, parents may be more likely to read to sons than daughters or to spend time naming and counting with them. Similarly, boys may be allocated more food if they require the stamina to work the family farm, but they may be disciplined more harshly if their misbehavior is seen as a threat to future family success

(Quinn, 2005). Limited financial, material, and social resources may drive parents to engage in more gender-based differential treatment, with allocations of resources and assignments to tasks reflecting gender (Edmonds, 2006).

In brief, multinational developmental inquiry, conducted within a sensitive contextual relational systems framework, provides the medium to explore and distinguish uniformity and diversity vis-à-vis child gender. Most established relations between country-level factors and gender in children have been based on European and North American samples from the minority developed world. Our understanding of child gender is therefore circumscribed by the existing body of research, and it is unclear if and whether gender effects that obtain in the minority world apply to the majority world.

THIS MONOGRAPH OF THE SRCD

This introductory chapter has described the conceptual framework of the *Monograph* in terms of gender theory and gender differences and similarities, the bioecological perspective on child gender, and past and present gender research and international developmental science. The next chapter describes the nature of the MICS microsystems survey, country-level gender equity and economic well-being macrosystem indicators used in association with the MICS, and the general analytic plan of substantive chapters in this *Monograph*. The chapters that follow then describe situations of girls and boys with successive foci on child growth and mortality in Chapter III (Bradley & Putnick, 2016), caregiving by mothers and fathers in Chapter IV (Bornstein & Putnick, 2016), discipline and violence in Chapter V (Deater-Deckard & Lansford, 2016), and child labor in Chapter VI (Putnick & Bornstein, 2016). These reports employ a dataset of approximately 2,000,000 respondents in 412,000 families in 41 LMIC (Figure 1.1). The common questions addressed in these chapters are How do girls and boys in underresearched LMIC in the majority world vary with respect to central indicators of child growth and mortality, parental caregiving, discipline and violence, and child labor? and How do key indicators of national gender equity and economic development relate to child gender in each of these substantive areas of child development? The *Monograph* concludes, revisiting gender theory, with a summary discussion of the main findings, interpretations of those findings, thoughts on their main methodological and substantive strengths and limitations, and finally policy implications.

According to bioecological theory (Bronfenbrenner & Morris, 2006), human lives carry the imprint of their social worlds. Girls and boys are biologically similar as well as different, and children around the world can expect to live qualitatively similar and different lives, based in part on their gender. Biological similarities and differences between the genders are exaggerated or attenuated by the forces of contextual socialization. Gender equity is a universal development goal in its own right (that is recognized in the Convention on the Elimination of All Forms of Discrimination against Women, which has been ratified by a majority of LMIC; Abu-Ghaida & Klasen, 2004). Understanding gender empirically across LMIC is prerequisite to establishing gender equality which, in turn, is prerequisite to achieving many vital Millennium Development Goals, including eliminating poverty, reducing infant mortality, achieving universal education, and promoting socioeconomic growth (Abu-Ghaida & Klasen, 2004; United Nations, 2005).

Acknowledgments

This research was supported by the Intramural Research Program of the NIH, NICHD. We thank UNICEF and participating countries for collecting the data.

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Figure 1.1.
MISC3 countries included in this *Monograph of the SRCD*.