

Towards Complementarity:  
Specificity and Commonality in Social-Emotional Development

Introduction to the Special Section

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### Abstract

What are the roles of specificity and commonality in social-emotional development? We begin by highlighting the conceptual context for this timely and timeless question and explain how responses to it can inform novel lines of theoretical and empirical inquiry, as well as sociocultural generalizability. Next, we describe how the selection of papers included in this special section contribute to our understanding of specificity and commonality in social-emotional development. We then explain how applying the *complementarity principle* to social-emotional development can inform a future research agenda in this domain. Lastly, we discuss how specificity and commonality fundamentally impact the way we conceptualize and implement interventions aimed at nurturing social-emotional development in every child.

*Keywords:* Social-emotional development, specificity, commonality, complementarity, tailored interventions.

## Towards Complementarity: Specificity and Commonality in Social-Emotional Development

## Introduction to the Special Section

*There is as much difference between us and ourselves as between us and others.*

*Michel de Montaigne, 1580 (book II)*

The capacity for growth is an integral part of being human. Social-emotional development—how we understand our own and others’ emotions, express our internal states, needs, and desires, and navigate emotional and social upheaval—is an essential component of the human journey and a core feature of our personality across the life span. Social-emotional experiences are complex and heterogeneous, allowing humans from vastly different backgrounds to reach their fullest psychological potentials. Thus, any attempt to understand and enhance social-emotional development begins with an acknowledgement and appreciation of the uniquely lived experiences, richness, and healthy potentials for growth within each human being (Maslow, 1962; Rogers, 1961). We still often rely on averages across groups to understand how social-emotional processes unfold across the lifespan. In this introduction to the special section, we work towards a more complete understanding of every child’s social-emotional development by offering a thorough analysis of their uniqueness and context embeddedness. While this approach moves beyond the illusion of sameness in the empirical realm, it also recognizes that nearness in human emotional experiences is always possible to some extent, and thus emphasizes the inherent value in searching for common themes, shared experiences, and similarities in social-emotional development.

The main goal of this article is to adopt a fresh approach to this timely and timeless topic with three novel questions: What is specific in children’s social-emotional development? What is

common? And how do we move beyond sameness and apply the principle of complementarity to inform sociocultural generalizability and intervention practices aimed at nurturing social-emotional growth?

Questioning our development as social-emotional creatures in specific places, as specific individuals, and at specific points in time can help us appreciate our differences and guide us through issues of diversity, sociocultural generalizability, and inclusion. Questioning what is common in social-emotional development across these contexts and junctures can elucidate shared challenges and strengths, bringing scholars together in understanding the broader issues that make us human. Thus, investigating both specificities and commonalities in social-emotional processes and pathways may bring the field closer to magnifying the uniqueness and growth potential of each human's social-emotional experiences through the interrelatedness and collaborative potential of shared human experiences.

Exploring what is common in children's social-emotional development has a rich and longstanding tradition in developmental psychology. For instance, Charlotte Buehler's child-study laboratory in Vienna, founded in 1922, introduced comprehensive observations of children with the goal of identifying a unified scheme of psychological development (Buehler, 1927; see also Ainsworth, 1985; Erikson, 1950; Piaget, 1932). This heritage built the foundation for contemporary theorizing and empirical research, which continues to provide invaluable information on children's common social-emotional development, including implications for their health, the interrelated wellbeing of others, and their productivity and contributions to the greater good across the life span. These early theories and beginnings also come with major limitations, including (but not limited to), the predominant reliance on White, European-heritage samples and experiences, associated invisibility of minority populations, as well as a dramatic

underrepresentation of the rich diversity of social, economic, cultural, and historical realities that impact child social-emotional development. Even with the use of sophisticated sampling techniques to generate representative samples for specific contexts, significant questions remain as to if, and to what extent, these findings can be generalized across individuals, populations, places, and historical time (Syed, Santos, Yoo, & Juang, 2018).

The case for every child's uniqueness has been made since centuries, particularly in the early beginnings of the fields of clinical child psychology, child psychoanalysis, and childhood education. For example, Anna Freud acknowledged that every child has a unique personality and that their specific corresponding needs must be considered in the therapeutic alliance and treatment planning steps (Freud, 1965). While this reflects an appreciation of specificity in the realm of treatment, clinician scientists and like-minded people have also made numerous attempts to understand the unique developmental features of children. This is reflected in the application of case study designs to help illuminate unique clinical manifestations of the same diagnosis (Moustakas, 1992).

Questions of specificity and commonality in social-emotional development are also of current and increasing focus, with an urgent need to understand if and how much the findings from leading longitudinal studies on children's social-emotional development can be generalized across populations and settings. Clearly, a much more complete appreciation of the full range of diversity across populations, contexts, and time is warranted in the study of social-emotional development (Hill, 2021). This is becoming particularly important as children around the world are confronted with a growing and vast array of adversities, including poverty, and exposure to violence and institutionalization, widening divisions along local, national, and international lines (Hillis et al., 2021).

### **Social-emotional development**

Social-emotional processes encompass humans' affective and social experiences, including the ways we express and deal with emotions, both within us and in relation to others, and how we relate to ourselves and others in everyday life (Saarni, 1999). Social-emotional development pertains to how these processes change over the lifespan. It is complex, as it involves understanding one's own and others' internal affective states, desires, and needs, as well as abilities to coordinate diverse perspectives (Malti, 2020; Malti & Song, 2018). These processes change dynamically across childhood and adolescence as capacities and contexts change, requiring the continuous adaptation and re-balancing of self- and other-oriented needs. In developmental psychology, different conceptual frameworks have been proposed to describe and understand social-emotional development. While these frameworks emphasize different subcomponents of social-emotional development, they typically share the overt components of emotional understanding, emotional expression, emotion regulation, social interactions, and relationships. There is also a joint emphasis on how the development of these components impacts our personal well-being, how we relate to others, and the contributions we make to the greater good (Izard, Youngstrom, Fine, Mostow, & Trantacosta, 2006; Malti & Krettenauer, 2013; Schultz, Izard, & Bear, 2004).

Taxonomies of social-emotional development propose that its components can be organized and understood along two core dimensions: self- versus other-orientation and over- versus under-regulation. Self- versus other-orientation refers to whether the social-emotional component is predominantly focused on the self (e.g., self-conscious emotions, such as feelings of guilt following one's own wrongdoing), others (e.g., other-oriented emotions, such as empathy/sympathy for those in need), or both the self and others (e.g., social understanding

requiring the integration of one's own and others' perspectives) in a way that is adequate for one's age or developmental level (Malti, 2016, 2020; see Eisenberg, 2000; Hoffman, 2000). Considering over- versus under-regulation helps one understand how a social-emotional component is likely expressed given the individual's ability to regulate and balance their emotional arousal (Thompson, 1994; see Eisenberg, Spinrad, & Eggum, 2010). For example, while moderate feelings of sympathy have been associated with prosocial behaviors, the over-regulation of sympathy can present as callousness and the under-regulation of sympathy can present as personal distress and self-focused avoidance (Eisenberg, Spinrad, & Morris, 2014; see Eisenberg et al., 1996). Similarly, healthy levels of guilt after a wrongdoing are thought to deter future mishaps, whereas the over- and under-regulation of guilt are thought to manifest as ethical disengagement and neurotic self-blame (Malti, 2016; see Colasante, Jambon, Gao, & Malti, 2021).

The six manuscripts in this special section focus on a range of social-emotional capacities in the first two decades of life, including dimensions of emotional self-regulation, other-oriented emotional and behavioral tendencies, as well as self-oriented processes of emotional development. They explore social-emotional development as it is embedded in specific contexts, including distinct cultural frameworks across and within societies, parenting values and practices, religious beliefs, and experiences of migration, minority status, and discrimination. We explore the extent to which these rich findings provide evidence for commonality and specificity in 1) the respective subcomponents of social-emotional development and 2) links between social-emotional processes and contextual features.

In the following section, we discuss the role of commonality in social-emotional development and briefly highlight how the manuscripts in this section contribute to answering this question.

### **Commonality in social-emotional development**

The issue of common features in social-emotional processes, both across and within individuals, remains a core pillar of theoretical inquiry and empirical research in developmental psychology. Importantly, notions of commonality do not need to equate to perfect sameness or universality in developmental processes. Rather, the commonality principle refers to the general assumption that shared characteristics within the human species make it possible to identify similar features or trends across children, contexts, individuals, and historical time (e.g., processes of change, growth, and homeostasis in social-emotional capacities as they naturally unfold across the lifespan; Maturana & Varela, 1972). It can also refer to the concept of nearness, which includes psychological proximity, contextual similarity, or a complex combination of both. Thus, identifying commonalities in social-emotional processes is possible in principle because human beings have evolved as a species and, as a result, share many characteristics at a general level (Einstein, 1934; Sullivan, 1953).

Applied to the empirical realm, the commonality principle refers to attempts that identify similarities in dimensions of social-emotional development, such as empathy, and their expressions across individual, contextual, and temporal levels. Commonality does not deny diversity; rather, it presupposes that an accurate, shared description arising from an analysis of the rich variation in social-emotional processes in the human species can help identify properties within the self-organizing system of social-emotional development, ultimately moving research in this domain forward.



On a meta level, the search for commonality reflects our natural human need for relatedness, and indicates perceived mutuality in emotional experiences and interdependence stemming from caring relationships (Fromm, 1955; Kagıtçıbası, 1996; Malti, 2021). Humans have the complex ability to assume an imaginary viewpoint and observe others in relation to the self, a capacity that can make them increasingly aware of shared features in dimensions of social-emotional growth. For instance, accurate empathy can help us identify similarities in emotional experiences, both between us and others, and within ourselves across diverse contexts, thus enabling an understanding of, and changes in, perceptions of ourselves, others, and the world around us (Rogers, 1961).

The manuscripts in this section provide some evidence for commonality in social-emotional development. Specifically, Jukes et al. (this section) explored how communities in Mtwara, Tanzania conceptualize children's social-emotional capacities across two studies. The findings documented that an other-oriented, prosocial component and an emotional self-regulation component were part of parents' perceptions of children's social-emotional development. These perceptions reflect two of the main components of existing approaches to social-emotional development. The next two papers in this special section investigated commonality in social-emotional development within a specific cultural setting. The second manuscript by Lin et al. (this section) showed that patterns of infant temperament, including emotional self-regulation, described in predominantly White North American samples replicated in a sample of Mexican American infants. This finding supports the notion of some generalizability across diverse subpopulations, providing a frame for how common patterns of temperament may relate to environmental adversity and predict developmental outcomes.

In the third paper, Chen et al. (this section) investigated the generalizability of intergenerational transmission models of self-regulatory processes in a sample of Chinese American immigrant children and parents. Their findings underscored the common factors of parental self-regulation and parenting behaviors in children's self-regulatory development. The next two papers examined common features in social-emotional development, including relationships, across cultural settings. The fourth paper by Rothenberg et al. (this section) assessed commonality in social-emotional development and parenting behaviors using longitudinal data from nine countries and spanning the middle childhood to middle adolescence period. Single-generation parenting demonstrated commonality across cultures. Specifically, parental warmth promoted, and parental hostility, neglect, and rejection impeded the development of child flourishing—these patterns largely held regardless of parenting norms.

Using a person-oriented approach, the fifth paper by Oh et al. (this section) explored how dimensions of adolescents' relationship quality (i.e., support and negativity) with mothers, fathers, and best friends were influenced by three cultural contexts (i.e., South Korea, the United States, and Portugal), as well as how culturally common and culturally specific relationship profiles were associated with adolescents' social behaviors across these contexts. The majority of youth in all three countries reported considerably *congruent* or high-quality relationships with their mothers, fathers, and best friends, and a *high-quality* profile was associated with the most optimal social-behavioral development in all three countries. These findings are consistent with attachment theory and previous studies showing that high quality parent-child relationships and parental support contribute positively to the development of social behaviors across cultures. In the sixth and last paper, Davidov et al. (this section) investigated the role of maternal psychological control in children's prosociality in middle childhood, as well as the role of

religiosity as a moderator across three studies using samples of Israeli Jewish and Arab Muslim Israeli families. Across studies and religious contexts, religiosity moderated the link between maternal psychological control and children's prosociality.

Together, these papers speak to commonality in the conceptualization and expression of basic dimensions of social-emotional development across specific samples and contexts. Interestingly, there was even some evidence for commonality in moderating effects across different contexts.

### **Specificity in social-emotional development**

In contemporary psychology, the specificity principle has been introduced as a framework to understand developmental processes and related outcomes arising from or within specific individual characteristics, relationships, contexts, and/or time points (Bornstein, 2017, 2019; Lerner & Bornstein, 2021). Its application to social-emotional developmental processes implies an acknowledgement of the vast variability of social-emotional processes in any given population/context, a move away from average scores, and the needs to more fully describe and study the rich diversity of developmental processes (Cheah, 2016; Rose, 2017). This requires a shift to a focus on the uniqueness of each child's social-emotional development and what individual experiences mean for a child embedded in a particular context (Hill, 2021). Thus, specificity implies that social-emotional processes cannot be adequately captured by a focus on regularity, average scores, and comparative perspectives of normativity. Rather, less expected, unique, and specific notions of singularity and self-organizing features of living systems at the level of analysis are required to move beyond past knowledge about normative and typical social-emotional processes as they unfold across the first two decades of life (Jung, 1957; Malti, 2021; Maturana & Varela, 1972). A search for specificity also calls for the study of child social-

emotional development in specific populations that have been traditionally marginalized in developmental and clinical sciences, such as ethnic minority or refugee and migrant populations (Cabrera & Leyendecker, 2017; García Coll et al., 1996; Suárez-Orozco et al., 2017), as well as a thorough analysis of the unique features of the multi-level system in which the child is embedded, including family, peer, school, neighborhood, and community contexts, both contemporaneously and across time (Roisman, 2021; Witherspoon et al., 2016).

The manuscripts in this special section tackled these issues by analyzing specificity in social-emotional processes in specific populations and contexts across the first two decades of life. Jukes et al. (this section) found that, contrary to commonly used indicators of social-emotional development in predominantly White populations from North America and Europe, dimensions of social responsibility in children, including obedience, are considered a highly valued component of social-emotional development by parents and teachers in Mtwara, Tanzania. These findings support within-culture specificity in some domains of social-emotional development, which speaks for the need to investigate within-culture conceptualizations and the measurement of social-emotional development (Kaertner, 2015; Keller, 2018). The next two papers address a central theme of acculturative specificity—the heterogeneity of immigrant experiences and multifaceted links to social-emotional development. Lin and colleagues (this section) speak to specificity in the overrepresentation of high positive affect, well-regulated infant temperamental profile, and the absence of a reactive, well-regulated profile of infant temperament in this sample of Mexican American families. Moreover, the negative reactive, low regulated profile was associated with poorer socioemotional adjustment only for the subset of infants whose mothers endorsed low Anglo orientation or high Mexican orientation. These findings align with the emphasis that traditional Mexican culture places on the importance of

values of respect and familism, and Mexican-origin parents' emphasis on social-emotional capacities that foster obedience, respect, and moral obligations (see Davis et al., 2021).

Chen et al. (this section) showed specific intergenerational self-regulatory processes within an acculturative and socioeconomically diverse sample of Chinese American parents and children. Common association between parents and children's aspects of self-regulation in this ethnic minority immigrant family context was linked through specific indicators of family socioeconomic status (SES), (i.e., caregiver education). In addition, children's bilingual proficiency and dimensions of self-regulation were uniquely associated, suggesting that key contextual differences *within* distinct ethnic groups may account for variability in their social-emotional development. The next two papers examined specificity in social-emotional development across cultural settings. Rothenberg et al. (this section) found that intergenerational parenting influenced children's flourishing in samples of families from nine different countries over time. Intergenerational parenting showed specificity as children from cultures with above-average parental warmth experienced the most benefits through the intergenerational transmission of parental warmth on child flourishing. In addition, children from cultures with below average parental hostility, neglect, and rejection were best protected from the deleterious effects of negative parenting behaviors on flourishing. Oh et al. (this section) documented cultural specificity in the relationship profiles of adolescents, as well as in the complex buffering effects of certain relationship profiles on adolescents' social and behavioral outcomes across South Korea, USA, and Portugal. For example, South Korean youth showed relatively congruent relationship profiles characterized by greater support from and negativity with their mothers and fathers, relative to with their friends. Finally, Davidov et al. (this section) found that maternal psychological control was not always negatively associated with children's prosocial behavior;

rather, this link varied based on sociocultural contexts as measured by religiosity, as well as somewhat by cultural groups (Jewish versus Arab families).

In summary, the empirical findings document commonality in social-emotional processes across specific samples, as well as their links with contextual variables. The results also show a remarkable amount of uniqueness in social-emotional development in specific samples, relationships within cultural contexts, related values, and socioeconomic contexts. They speak to the need to acknowledge the diversity in social-emotional processes as they unfold in unique sociocultural and socioeconomic contexts across the first two decades of life (Chen & Rubin, 2011). The results also show that it is useful to explore questions of specificity and commonality with a diverse range of research designs and approaches, including within-group analyses of social-emotional development and the meaning systems attached to them, across-group comparisons, and complex cultural and contextual moderation-mediation effects (see Davidov, in press) to study sociocultural mechanisms and assumptions of heterogeneity in children's social-emotional development. Carefully investigating psychological, acculturative, sociodemographic, and contextual variations in purposeful ways may help disentangle what is unique and what is potentially common in child social-emotional development and when and why these variations and shared experiences matter. Together, these examinations provide social scientific analyses with unique and extraordinary power to unravel meaning and the association of meaning with action and help to elucidate forces that shape development.

### **Towards complementarity: Specificity, commonality, and sociocultural generalizability**

*The most universal quality is diversity*

Michel de Montaigne, 1580 book II

Throughout this article, we have highlighted the need to move beyond a science of average score comparison and toward a nuanced, specific perspective of child social-emotional development. However, the empirical findings presented in the manuscripts of this special section show that there is value in searching for *both* the common and the specific in children's social-emotional development within and across sociocultural contexts. Theoretically, the question remains: Is it possible to move away from sameness while acknowledging that, despite the vast richness of social-emotional processes across development, regularity and similarity remain, at least in part? The collective findings of this section touch on this idea and speak to both specific and common features in social-emotional development and, to some extent, illustrate that specificity and commonality may work in concert in multifaceted ways.

Again stepping back to a meta-level stance, a shared sense of humanity may serve as a framework or reference point from which to understand the unique deviations of each child's social-emotional pathway, all the while acknowledging that there are also shared features in those inner experiences. The latter may reflect what is potentially common or less dependent on contextual variations in the human species, for example, common qualities in the domain of social-emotional development, such as a fundamental capacity to express caring concern for the self and others. Shared challenges in parenting in urban, middle-class contexts can also lead mothers across seemingly diverse immigrant and non-immigrant cultures to similarly express maternal warmth to nurture their children, and maternal control over their children to set behavioral norms/standards, maintain child safety, support social relations and respect for others, provide structure, and guide moral development (Cheah et al., 2015; Cho et al., 2021). At the same time, however, mothers' emphasis on specific reasons and strategies varied across cultural groups, reflecting culturally prioritized values and modes of adaptation within their specific

contexts (Cheah et al., 2015; Cho et al., 2021). How such philosophical questions and discourse translate into the study of child social-emotional development is certainly an exciting task to tackle for future multidisciplinary endeavours. This task requires genuine open-mindedness towards diversity in its rich entirety, respect for differences and unique pathways, and a search for what is specific and common in becoming humane without equating common features with “sameness” or due only to shared biology. Respect, a core prosocial virtue and component of the social-emotional developmental domain, involves an appreciation of the differences between us, and also an awareness of our inherent interrelatedness, which can transcend perceived differences and create holistic experiences of two beings that create meaning (i.e., the “I-Thou relationship”; Buber, 1923/1997; Malti, Peplak, & Zhang, 2020). As such, we confer that a respectful, complementary view of what is potentially different and similar between us and others can inform attempts to capture both diversity and commonality in social-emotional development. In sum, the findings from this special section speak to the usefulness of transcending dualism and adopting a complementary perspective—one that acknowledges both the uniqueness in every child’s social-emotional development within context, yet still integrates past knowledge on common processes in social-emotional development, ultimately finding creative ways to combine new information on specific and common structures and patterns to reach a more comprehensive understanding of every child’s social-emotional development.

Lessons learned from the *complementarity principle* may also shed light on how we can move toward a research agenda that acknowledges both the vast richness and diversity of social-emotional processes without losing the potential that the identification of similarities within and across children, places, and time inherently has for understanding psychological adaptation. The *complementarity principle* was introduced in the discipline of physics as part of quantum



mechanics and asserts that particles can sometimes have different properties that cannot be seen or studied at the same time. With the properties of position and momentum as an example, the more precisely a particle's position is determined, the less information is available to determine its momentum. Conversely, with measurable momentum, it becomes more difficult to determine a particle's position (picture a still frame of a blurred baseball travelling at 100 mph). Thus, the confines we introduce in measurement limit our understanding of phenomena and a complete understanding of phenomena can only come from a consideration of *all* available experiments and properties (Bohr, 1928).

Moving forward, there may be value in adopting these lessons from the *complementarity principle* to research on children's social-emotional development. For example, it may be helpful to consider how one's conceptual or empirical approach precludes an understanding of specificities at the expense of understanding commonalities (and vice versa). It may also be prudent to consider the possibility of fully accounting for commonality and specificity in the same approach, or if it is necessary or better to adopt separate approaches best suited to understanding commonality and specificity and then consider the totality of their respective results. The *complementarity principle* may thus serve as a useful frame to open more comprehensive venues for the exploration of social-emotional processes as they naturally unfold in their entire richness, including approaches that draw out similarities and differences across historical and generational time, multiple disciplines, and communication and transfer (see Hill, 2021). A meta-level view of complementarity may also help respond to questions regarding the sociocultural generalizability of substantive conclusions within the social-emotional developmental domain by contributing to conceptual replication (Lykken, 1968) and clarifying which findings are robust within specific populations and settings (Roisman, 2021).

**Complementarity and interventions aimed at nurturing social-emotional development**

The knowledge gained from the current articles and their synthesis may also have implications for intervention practices aimed at nurturing social-emotional growth in every child. Taking the uniqueness of every child's social-emotional development seriously means to design and implement assessments and developmentally sensitive interventions that respond as caringly and sensitively as possible to every child's needs in a highly individualized manner. While extant social-emotional programs mostly account for age-related differences, the heterogeneity in social-emotional development within age groups and within and between specific populations, both at any point in development and across time, still need to be addressed much more carefully and comprehensively (Gonzales et al., 2016; Malti et al., 2016; Malti, 2020).

Accounting for the full range of variability within and across development and sociocultural contexts is an urgent and necessary step towards better interventions for every child. Artificial intelligence approaches may help adapt social-emotional and mental health intervention approaches to children's unique developmental needs (Bickman, 2020), and there is great promise to the digital development and implementation of developmentally tailored, individualized strategies to nurture every child's full social-emotional potential. However, due to the complexity and subtlety of factors that influence what works in interventions in this area, as well as the dynamic nature of the relationship between child and practitioner, there are also many challenges for the effective application of artificial intelligence or machine learning in psychosocial interventions aimed at nurturing social-emotional development and mental health (Horn & Weisz, 2020).

In line with the lessons learned from the principle of complementarity, it may also be useful to leverage established, common principles of nurturing care alongside highly

individualized and developmentally tailored strategies to capture and promote both common and specific aspects of social-emotional development in the same intervention approach. A gardening metaphor can illustrate how specific and common features of social-emotional development can be nurtured complementarily. While different flowers in a garden require highly individualized approaches and methods (e.g., different watering and pruning schedules), all of their roots are embedded in the same soil, which itself requires nurturing care (e.g., balanced nutrients) to provide a strong foundation for *everything* living in the garden to grow and reach its fullest potential. Similarly, as the findings in this special issue attest, children have both specific (flowers) and common (soil) social-emotional needs and characteristics. As such, they may benefit from interventions that integrate targeted (flower) and common (soil) approaches. This requires careful listening to, and understanding of, a child's needs, along with the existence of a warm, positive relationship that can make a response to the caring possible (Noddings, 1984; Rosa, 2016). Considerable work remains in finding answers to the questions of when and how developmentally tailored, contextually unique interventions are needed, if and when combined tailored and promotional approaches for all are suitable, and when and how the use of common strategies to nurture social-emotional growth in or even across communities can be considered (VanderWeele, 2021).

The manuscripts in this special section and research on the transferability of interventions across contexts also speak to the specific ways in which interventions should be adapted to account for specific needs (as per above, to account for different flowers above the soil). First, there is a need to identify and account for the meaning that individuals attach to social-emotional development in a specific community and why (see Jukes et al. and Lin et al., this section). Next, a more nuanced understanding regarding how specific contexts contribute to specificities in

social-emotional growth is warranted, acknowledging the heterogeneity both within specific groups (Chen et al. and Lin et al., this section) and across cultural frameworks (Rothenberg et al. and Oh et al., this section), as well as considering moderators of cultural effects on social-emotional development (Davidov et al., this section). Indeed, the transferability of parenting interventions aimed at nurturing child development across contexts depends on how well such interventions (including their curriculums and assessment tools) are adapted to the local context (Jeong, Pitchik, & Yousafzai, 2018; Zhang et al. 2021), as well as the extent to which bottom-up, community-based approaches (involving all stakeholders) are used to identify and prioritize the needs of a specific group (Abubakar et al., 2019; Speidel et al., 2021).

In terms of complementarity, it also seems warranted to think carefully about anchoring multi-sectoral interventions into a system of nurturing care and protection to make individualized interventions sustainable (see Britto et al., 2017). While child-level interventions will continue to improve when considering both unique and common features of social-emotional development in a given sociocultural context, it is also essential to provide support for nurturing care and protection to caregivers, practitioners, and policymakers so that they can address the social-emotional needs of children and themselves in times of social change, high prevalence rates of mental health needs, and exposure to adversities that compromise social-emotional development (Bethell et al., 2017; Carlos et al., in press; Killen, 2019). This relates to questions regarding the improvement of existing health care and education systems, how common systemic factors that work can be nurtured and dismantled from those that do not, along with community capacity building and stakeholder empowerment (Aboud & Yousafzai, 2015).

Lastly, beyond an acknowledgement of the need to move from developmentally and contextually sensitive approaches to systems of nurturing care, an evolution of a collective

ethical mindset is needed to sustain research-informed attempts to comprehensively nurture every child's social-emotional development. According to polymath Albert Schweitzer, a reverence for life reflects an appreciation of diversity in its fullest sense, in being aware that we live and want to live a feature we share with every other human being (and living entity). Thus, we owe appreciation to everyone, both similar and different from us, in their quest and right to reach their fullest potential (Schweitzer, 1966).

### **Conclusion**

In this article, we highlighted some of the current conceptual issues involved in the study of specificity and commonality in children's social-emotional development. We also discussed and synthesized the empirical findings of the manuscripts in this section that speak to specificities and commonalities in dimensions of social-emotional development, as well as in how different sociocultural contexts affect those dimensions. While the search for common in the past all too often meant sameness and coarse averaging, a new, rich understanding of social-emotional processes requires both an analysis of specific *and* common properties across individuals and individual time, contexts, and historical time. At the meta-level, lessons learned from the *complementarity principle* may be useful in reaching a more complete understanding of social-emotional processes embedded in sociocultural frameworks and meaning systems across the first two decades of life. A dual focus on the specific and common features of social-emotional development can respond to questions regarding sociocultural generalizability and inform sustainable, developmentally and contextually tailored interventions that nurture unique pathways of social-emotional development through individualized strategies while acknowledging common human needs across children.

### References

- About, F.E., & Yousafzai, A.K. (2015). Global health and development in early childhood. *Annual Review of Psychology, 3*, 433-457. <https://doi.org/10.1146/annurev-psych-010814-015128>
- Abubakar, A., Angwenyi, V., Kabue, M., Zhang, L., Lye, S., Malti, T., Maranga, J., Marfo, K., Martin, M.-C., Moran, G., Muedno, R., & Proul, K. (2019). Parenting programme in an informal settlement in Nairobi, Kenya: Priority needs and identification of delivery platforms. *International Journal of Birth and Parent Education, 6*(3), 11-14.
- Ainsworth, M.D. (1985). Patterns of attachment. *Clinical Psychologist, 38*(2), 27–29.
- Bethell, C.D., Solloway, M.R., Guinossa, S., Hassink, S., Srivastav, A., Ford, D., & Simpson, L.A. (2017). Prioritizing possibilities for child and family health: An agenda to address adverse childhood experiences and foster the social and emotional roots of well-being in pediatrics. *Academic Pediatrics, 17* (7), S36-S50.  
<https://doi.org/10.1016/j.acap.2017.06.002>
- Bickman, L. (2020). Improving mental health services: A 5-year journey from randomized experiments to artificial intelligence and precision mental health. *Administration and Policy in Mental Health and Mental Health Services Research, 26*, 1-49.  
<https://doi.org/10.1007/s10488-020-01065-8>
- Bohr, N. (1928). The quantum postulate and the recent development of atomic theory. *Nature, 121*, 580-590.
- Bornstein, M. H. (2017). The specificity principle in acculturation science. *Perspectives on Psychological Science, 12*(1), 3-45. <https://doi.org/10.1177/1745691616665597>

Bornstein, M. H. (2019). Fostering optimal development and averting detrimental development:

Prescriptions, proscriptions and specificity. *Applied Developmental Science, 23*(4), 340–345. <https://doi.org/10.1080/10888691.2017.1421424>

Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., Perez-

Escamilla, R., Rao, N., Ip, P., Fernald, L. C. H., MacMillan, H., Hanson, M., Wachs, T. D.,

Yao, H., Yoshikawa, H., Cerezo, A., Leckman, J. F., & Bhutta, Z. A. (2017). Nurturing care: promoting early childhood development. *Lancet, 389*, 91–102.

[https://doi.org/10.1016/S0140-6736\(16\)31390-3](https://doi.org/10.1016/S0140-6736(16)31390-3)

Buber, M. (1923/1997). *Ich und Du* (I and Thou). Leipzig, Germany: Insel Verlag.

Buhler, C. (1927). Die ersten sozialen Verhaltensweisen des Kindes (The first social behaviors

of the child). *Quellen und Studien zur Jugendkunde, 5*. Jena, Germany: Fischer Verlag.

Cabrera, N.J., & Leyendecker, B. (Eds.). (2017). *Handbook on positive development of minority*

*children and youth*. Basel, Switzerland: Springer. [https://doi.org/10.1007/978-3-319-43645-6\\_18](https://doi.org/10.1007/978-3-319-43645-6_18)

Carlos, G., Cheah, C. S. L., Conejo Bolaños, L. D., & Cho, H.S. (in press). The social

development of immigrant children: A focus on Asian and Latinx children in the U.S. In

P. K. Smith & C. H. Hart (Eds.), *Wiley-Blackwell handbook of childhood social*

*development, 3<sup>rd</sup> Ed.* Wiley-Blackwell Publishers.

Cheah, C. S. L. (2016). Charting future directions for research on Asian American child

development. [Special issue on Research on Asian American Child Development]. *Child*

*Development, 87*(4), 1055-1060. <https://doi.org/10.1111/cdev.12580>

- Cheah, C. S. L., Li, J., Zhou, N., Yamamoto, Y., & Leung, C. Y. Y. (2015). Understanding Chinese immigrant and European American mothers' expressions of warmth. *Developmental Psychology, 51*(12), 1802–1811. <https://doi.org/10.1037/a0039855>
- Chen, S., Fang Deng, S., Zhang, E., Liu, C., & Wang, L. (2021). Self-regulatory development in children from Chinese immigrant families: Evidence for commonality and specificity. *Child Development*. <https://doi.org/10.1111/cdev.13593>
- Chen, X., & Rubin, K. H. (Eds.). (2011). *Socioemotional development in cultural context*. The Guilford Press.
- Cho, H. S., Cheah, C. S. L., Vu, K. T. T., Selçuk, B., Yavuz, H. M., Şen, H. H., & Park, S.-Y. (2021). Culturally shared and unique meanings and expressions of maternal control across four cultures. *Developmental Psychology, 57*(2), 284–301. <https://doi.org/10.1037/dev0001136>
- Colasante, T., Jambon, M., Gao, X., & Malti, T. (2021). A process model linking physiological arousal and fear recognition to aggression via guilt in middle childhood. *Development and Psychopathology, 33*(1), 109-121. <https://doi.org/10.1017/S0954579419001627>
- Davis, A. N., McGinley, M., Carlo, G., Schwartz, S. J., Unger, J. B., Rosiers, S. E. D., Baezconde-Garbanati, L., Lorenzo-Blanco, E. I., & Soto, D. (2021). Examining discrimination and familism values as longitudinal predictors of prosocial behaviors among recent immigrant adolescents. *International Journal of Behavioral Development, 45*(4), 317–326. <https://doi.org/10.1177/01650254211005561>
- Davidov, M. (in press). Cultural moderation of the effects of parenting: Answered and unanswered questions. *Child Development Perspectives*.



- Davidov, M., Oren, M., & Abu-Asaad, I. (2021). Religiosity as a moderator of the links between parental psychological control and children's prosociality. *Child Development*.
- De Montaigne, M. (1991). On schoolmasters' learning. In M. A. Screech (Ed.), *Michel de Montaigne: The complete essays* (pp. 150–162). London: Penguin (Original work published in 1580).
- Einstein, A. (1934). *Mein Weltbild* (the world as I see it). Amsterdam, The Netherlands: Querido Verlag.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51, 665–697. <https://doi.org/10.1146/annurev.psych.51.1.665>
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Smith, M., & Maszk, P. (1996). The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Developmental Psychology*, 32, 195–209. <https://doi.org/10.1037/0012-1649.32.2.195>
- Eisenberg, N., Spinrad, T.L., & Eggum, N.D. (2010). Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology*, 6, 495-525. <https://doi.org/10.1146/annurev.clinpsy.121208.131208>
- Eisenberg, N., Spinrad, T., & Morris, A. (2014). Empathy-related responding in children. In M. Killen, & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 184–207). New York, NY: Psychology Press.
- Erikson, E. (1950). *Childhood and society*. New York: Norton & Co.
- Freud, A. (1965). *Normality and pathology in childhood*. London: Routledge.
- Fromm, E. (1955). *The sane society*. New York: Holt, Rinehart, and Winston.

García Coll, C., Maberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B., & Garcia, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891–1914.

Gonzales, N. A., Lau, A. S., Murry, V. M., Pina, A. A., & Barrera, M., Jr. (2016). Culturally adapted preventive interventions for children and adolescents. In D. Cicchetti (Ed.), *Developmental psychopathology: Risk, resilience, and intervention* (pp. 874–933). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781119125556.devpsy417>

Hill, N.E. (2021). In search of the individual embedded in context: Applications of the Specificity Principle. *Journal of Applied Developmental Psychology, 75*.  
<https://doi.org/10.1016/j.appdev.2021.101289>

Hillis, S.D., Unwin, J.H.T., Chen, Y., Cluver, L., Sherr, L., Goldman, P., et al., (2021). Global minimum estimates of children affected by COVID-9-associated orphanhood and deaths of caregivers: A modelling study. *Lancet, 398* (10298), 391-402.  
[https://doi.org/10.1016/S0140-6736\(21\)01253-8](https://doi.org/10.1016/S0140-6736(21)01253-8)

Hoffman, M. L. (2000). *Empathy and moral development. Implications for caring and justice*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511805851>

Horn, R.L., & Weisz, J.R. (2020). Can artificial intelligence improve psychotherapy research and practice? *Administration and Policy in Mental Health and Mental Health Services Research, 47*, 852-855. <https://doi.org/10.1007/s10488-020-01056-9>

Izard, C.E., Youngstrom, E.A., Fine, S.E., Mostow, A.J., & Trentacosta, C.J. (2006). Emotions and developmental psychopathology. In D. Cicchetti & D.J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (pp. 244-292). New York: Wiley.

- Jeong J, Pitchik, H.O., & Yousafzai, A.K. (2018). Stimulation interventions and parenting in low-and middle-income countries: a meta-analysis. *Pediatrics*, *141*(4), e20173510.  
<https://doi.org/10.1542/peds.2017-3510>
- Jukes, M., Mgonda, N.L., Tibenda, J., Gabriele, P., Jeremiah, G., Betts, K., & Bub, K. (2021). Identifying, validating, and measuring community-defined social-emotional competencies in Tanzania. *Child Development*.
- Jung, C. G. (1957). *Gegenwart und Zukunft* (The undiscovered self). Zurich, Switzerland: Rascher-Verlag.
- Kärtner, J. (2015). The autonomous developmental pathway: The primacy of subjective mental states for human behavior and experience. *Child Development*, *86*(4), 1298–1309.  
<https://doi.org/10.1111/cdev.12377>
- Kagitçibasi, C. (1996). The autonomous-relational self: A new synthesis. *European Psychologist*, *1*(3), 180–186. <https://doi.org/10.1027/1016-9040.1.3.180>
- Keller, H. (2018). Parenting and socioemotional development in infancy and early childhood. *Developmental Review*, *50*, 31-41. <https://doi.org/10.1016/j.dr.2018.03.001>
- Killen, M. (2019). Developing inclusive youth: How to reduce social exclusion and foster equality and equity in childhood. *The American Educator*, 8 - 40.
- Lerner, R.M., & Bornstein, M. (2021). Contributions of the specificity principle to theory, research, and application in the study of human development: A view of the issues. *Journal of Applied Developmental Psychology* *75*. <https://doi.org/10.1016/j.appdev.2021.101294>
- Lin, B., Lemrey-Chalfant, K., Beekman, C., Crnic, K., Gonzalez, N., & Luecken, K. (2021). Infant temperamental profiles, cultural orientation, and toddler behavioral and

physiological regulation in Mexican American families. *Child Development*.

<https://doi.org/10.1111/cdev.13637>

Lykken, D.T. (1968). Statistical significance in psychological research. *Psychological Bulletin*, 70(3), 151-159. <https://doi.org/10.1037/h0026141>

Malti, T. (2021). Kindness: A perspective from developmental psychology. *European Journal of Developmental Psychology*, 18(5), 629-657.

<https://doi.org/10.1080/17405629.2020.1837617>

Malti, T. (2020). Children and violence: Nurturing social-emotional development to promote mental health. *Social Policy Report (SPR)*, Society for Research in Child Development (SRCD), 33(2), 1-27. <https://doi.org/10.1002/sop2.8>

Malti, T. (2016). Toward an integrated clinical-developmental model of guilt. *Developmental Review*, 39, 16–36. <https://doi.org/10.1016/j.dr.2015.11.001>

Malti, T., Chaparro, M. P., Zuffianò, A., & Colasante, T. (2016). School-based interventions to promote empathy-related responding in children and adolescents: A developmental analysis. *Journal of Clinical Child and Adolescent Psychology*, 45(6), 718–731.

<https://doi.org/10.1080/15374416.2015.1121822>

Malti, T., & Krettenauer, T. (2013). The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis. *Child Development*, 84(2), 397–412.

<https://doi.org/10.1111/j.1467-8624.2012.01851.x>

Malti, T., Peplak, J., & Zhang, L. (2020). The development of respect in children and adolescents. *Monographs of the Society for Research in Child Development*, 85(3), 1-93.

<https://doi.org/10.1111/mono.12417>

- Malti, T., & Song, J. -H. (2018). Social-emotional development and aggression. In T. Malti & K. H. Rubin (Eds.), *Handbook of child and adolescent aggression* (pp. 127-144). New York, NY: Guilford Press.
- Maslow, A. (1962). *Toward a psychology of being*. Princeton, NJ: Van Nostrand.
- <https://doi.org/10.1037/10793-000>
- Maturana, H.R., & Varela, F.J. (1972). *Autopoiesis and cognition*. Dordrecht, The Netherlands: D. Reidel Publishing Company.
- Moustakas, C. (1992). Firebrand - the experience of being different. *The Humanistic Psychologist*, 20, 2-3, 175-188. <https://doi.org/10.1080/08873267.1992.9986789>
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkeley: University of California Press.
- Oh, W., Bowker, J., Santos, A., Ribeiro, O., Guedes, M., Freitag, M., Kim, H.K., Song, S., & Rubin, K.H. (2021). Distinct profiles of relationships with mothers, fathers, and best friends and social-behavioral functioning in early adolescence: A cross-cultural study. *Child Development*. <https://doi.org/10.1111/cdev.13610>
- Piaget, J. (1932). *The moral judgment of the child*. New York: Free Press.
- Rogers, C. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston, Houghton Mifflin.
- Roisman, G.I. (2021). Editorial: A vision of a fair and efficient, diverse and inclusive, cumulative science of child development in the best and worst of times. *Child Development*, 92(2), 451-465. <https://doi.org/10.1111/cdev.13538>
- Rosa, H. (2016). *Resonanz: Eine Soziologie der Weltbeziehung* (resonance: A sociology of our relationship to the world). Berlin, Germany: Suhrkamp Verlag.

- Rose, T. (2017). *The end of average. Unlocking our potential by embracing what makes us different*. New York: HarperCollins.
- Rothenberg, W. A., Lansford, J. E., Bornstein, M. H., Uribe Tirado, L. M., Yotanyamaneewong, S., Alampay, L. P., Al-Hassan, S. M., Bacchini, D., Chang, L., Deater-Deckard, K., Di Giunta, L., Dodge, K. A., Gurdal, S., Liu, Q., Long, Q., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., ... Steinberg, L. (2021). Cross-cultural associations of four parenting behaviors with child flourishing and self-regulation: Examining specificity and commonality in cultural normativeness and intergenerational transmission processes. *Child Development*. <https://doi.org/10.1111/cdev.13634>
- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.
- Schultz, D., Izard, C. E., & Bear, G. (2004). Children's emotion processing: Relations to emotionality and aggression. *Development and Psychopathology*, *16*, 371–387. <https://doi.org/10.1017/S0954579404044566>
- Schweitzer, A. (1966). *Die Ehrfurcht for dem Leben* (reverence for life). Muenchen, Germany: Verlag C.H. Beck.
- Speidel, R., Galarneau, E., Elsayed, D., Mahhouk, S., Filippelli, J., Colasante, T., & Malti, T. (2021). *Refugee children's social-emotional capacities: Links to adjustment upon resettlement and buffering effects on pre-migratory adversity*. Manuscript submitted for publication.
- Suárez-Orozco C, Motti-Stefanidi F, Marks A, Katsiaficas D. (2017). An integrative risk and resilience model for understanding the adaptation of immigrant-origin children and youth. *American Psychologist*, *73*(6), 781-796. <https://doi.org/10.1037/amp0000265>
- Sullivan, H. S. (1953). *The interpersonal theory of psychiatry*. New York: W.W. Norton &

Company.

- Syed, M., Santos, C., Yoo, H.C., & Juang, L. P. (2018). Invisibility of racial/ethnic minorities in developmental science: Implications for research and institutional practices. *American Psychologist*, 73(6), 812-826. <https://doi.org/10.1037/amp0000294>
- Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. In N. A. Fox (Ed.), *The development of emotion regulation and dysregulation: Biological and behavioral aspects. Monographs of the Society for Research in Child Development*, 59, 25–52 (Serial no. 240).
- VanderWeele, T. (2021). Measures of community well-being: A template. In M.T. Lee, L.D. Kubzansky, & WanderWeele, T. (Eds.), *Measuring well-being* (pp. 408-434). New York: Oxford University Press.
- Witherspoon, D. P., Daniels, L., Smith, E. P., & Mason, A. (2016). Racial attitudes in context: Examining mediation of neighborhood factors on children's adjustment. *American Journal of Community Psychology*, 57 (1-2), 87-101. <https://doi.org/10.1002/ajcp.12019>