



## "Poor brain development" in the global South? Challenging the science of early childhood interventions

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#### Abstract

Global Early Childhood Development (ECD)-an applied field with the aim to improve the "brain structure and function" of future generations in the global South-has moved to the center of international development. Global ECD rests heavily on evidence claims about widespread cognitive, social, and emotional deficits in the global South and the benefits of changing parenting practices in order to optimize early childhood development. We challenge these claims on the grounds that the leading ECD literature excludes research from anthropology, cultural psychology, and related fields that could provide crucial insights about childrearing and children's development in the targeted communities. We encourage anthropologists and other scholars with ethnographic expertise on childhood to critically engage with global ECD. To facilitate such an endeavor, this article sketches the history, scientific claims, and interventions of global ECD, points out the critical potential of ethnographic research, and suggests strategies to make ethnography more relevant.

#### **KEYWORDS**

early childhood development, parenting interventions, international development, applied research

#### French translation of the abstract

Le développement cérébral est-il déficient dans les pays du Sud ? Contester la scientificité des interventions précoses chez l'enfant

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**Résumé:** Le développement de la petite enfance (DPE) global -- un domaine d'intervention dont l'objectif est d'améliorer "la structure et le fonctionnement cérébraux" des générations futures des pays du Sud - est aujourd'hui au coeur du développement international. Le DPE global affirme l'existence de déficits cognitifs, sociaux et émotionnels dans les pays du Sud, et promeut un changement des pratiques parentales afin d'optimiser le développement des enfants. Nous contestons ces affirmations: la littérature scientifique sur laquelle le DPE s'appuie ignore les recherche d'anthropologie, de psychologie culturelle et d'autres disciplines proches, concernant l'éducation des enfants et leur développement dans les communautés concernées. Nous encourageons les anthropologues et autres chercheurs ethnographes de l'enfance à entrer en débat avec le DPE global. Pour le permettre, cet article décrit l'histoire, les revendications scientifiques et les modes d'intervention de cette discipline. Il souligne le potentiel de la recherche ethnographique, et suggère des stratégies pour la rendre plus pertinente.

#### Spanish translation of the abstract

¿Desarrollo cerebral "deficiente" en el Sur Global? Criticando a la ciencia de las intervenciones en la primera infancia

Resumen: El Desarrollo Global de la Primera Infancia (Early Childhood Development o ECD), eje central en los programas de desarrollo internacional, es un campo aplicado que busca mejorar la "estructura y función del cerebro" de las generaciones futuras en el Sur Global. En gran medida, el ECD postula que hay déficits cognitivos, sociales y emocionales entre los niños del Sur Global y sugiere optimizar el desarrollo de la primera infancia en los niños a través de ciertas prácticas de crianza. Argumentamos que, este paradigma excluye aportes académicos de antropología, psicología cultural y otros campos relacionados, sobre la crianza y el desarrollo de los niños en comunidades del Sur Global. En este artículo esbozamos el paradigma ECD según su historia, afirmaciones científicas e intervenciones, señalando, además, el potencial crítico de la investigación etnográfica. Por lo tanto, académicos con experiencia etnográfica en la niñez deben dialogar críticamente con este nuevo campo de intervención.

## **INTRODUCTION**

In recent years, we have witnessed the emergence of early childhood development (ECD) interventions in the global South as a large-scale sector of international development.<sup>1</sup> This movement, which we call global ECD,<sup>2</sup> aims to bring about economic and societal development by improving young children's

development, including their "brain structure and function" (Britto et al., 2017, 97). Global ECD reached an important milestone in 2018 when the World Health Assembly—the decision-making body of the World Health Organization (WHO)—and its 194 member states launched the Nurturing Care Framework, a roadmap for the worldwide implementation of ECD interventions. Therefore, global ECD is positioned to intervene in virtually every family in the global South. The WHO, United Nations Children's Fund (UNICEF), and the World Bank Group (WBG) jointly proposed the framework (2018a, 2018b) based on scientific claims presented in three consecutive series of eight review articles in the *Lancet.*<sup>3</sup> We encourage anthropologists, cultural psychologists, and scholars from other fields with relevant expertise to critically engage with global ECD's scientific claims, which contradict the ethnographic record.

According to the scientific claims of global ECD, presented in the *Lancet* articles mentioned earlier, many young children in so called low- and middle-income countries "fail to reach their developmental potential" (Grantham-McGregor et al., 2007, 62). "Poor early childhood development" is largely ascribed to poverty and poor parenting practices and is believed to reproduce poverty and poor parenting in the next generation, leading to the "intergenerational transmission of poverty" (Engle et al., 2007, 229). Global ECD claims that early childhood interventions boost children's brain development and, if applied nation-wide, sustainable economic and societal development (Black et al., 2017). In the *Early Moments Matter* report, UNICEF (2017, 1) puts this promise in a nutshell: "Building Brains, Building Futures."

While global ECD claims to rely on robust, state-of-the-art evidence, we contend that its knowledge base is highly selective and strongly biased. It is derived from research in behavioral sciences like pediatrics, developmental psychology, neurosciences, and behavioral economics and excludes findings from anthropology, cultural psychology, and other relevant fields. This research is used, for example, to define concepts of "healthy child development" and standards of "optimal child care," which the ECD movement applies globally to assess and change early childhood development. However, scholars have shown that the behavioral sciences in general rely overwhelmingly on Western, educated, industrialized, rich, and democratic (WEIRD) researchers and research participants (Henrich, Heine, and Norenzayan, 2010, 65; see also Arnett, 2008). To be sure, the global ECD knowledge base also includes some studies about populations in the global South. These studies, which focus on the assessment of supposed deficits and intervention effects, depend entirely on concepts and standards that they derive from research in WEIRD contexts, as we have outlined elsewhere (Scheidecker et al., 2022; Scheidecker, Oppong, et al., 2021). Taken together, these critiques demonstrate that global ECD relies on basic research that has been conducted in the global North and on some biased assessment studies in the global South while excluding any basic research about childrearing and child development in the targeted communities.

These biases and yawning gaps in the knowledge base of global ECD cannot be ascribed to a lack of research. Long before this applied field emerged, anthropologists, cultural psychologists, and others had begun to study childhood in many communities and social contexts in the global South. An impressive body of research that demonstrates the diversity of childrearing models and practices, socialization strategies, and developmental pathways as functions of variable social, cultural, and ecological contexts is available (for reviews see Keller, 2007; Lancy, 2022; Rogoff, 2003). Furthermore, anthropology, cultural psychology, and other context-sensitive disciplines offer abundant conceptual and methodological expertise that is specifically adapted to capture children's learning environments outside of the Western and educated middle class (Greenfield et al., 2003; Super and Harkness, 1986; Weisner, 2002, 2005). The importance of such ethnographic expertise for a globally operating applied field cannot be overstated. So far, however, ethnographic research has been completely ignored in the scientific literature on which global ECD in its current form is based.

The unfortunate situation that highly relevant ethnographic research is de facto irrelevant for global ECD must be ascribed to the disciplinary divides between the fields that produce ethnographic research and the sciences that actually inform child-focused interventions, as others have pointed out (e.g., Hart, 2006; Ochs and Kremer-Sadlik, 2020). Scholars on either side of that divide may be unaware of or reluctant to engage with a body of literature that, although referring to the same subject matter, abides by different scientific procedures, assumptions, and standards. However, if we want ethnographic research to be

relevant to the families we study, we need to actively engage with the sciences that guide interventions into childcare. Such a cross-disciplinary engagement does not necessarily join the endeavor of "improving" child development in the global South; it could also help prevent misguided and potentially harmful interventions and challenge widely publicized claims about "poor" brain development in "poor" countries.

Psychological anthropology has historically engaged with psychology and other behavioral sciences (LeVine, 2007). This engagement has contributed greatly to the subfield of cultural psychology, which largely continues the task of challenging unfounded universalistic claims based on WEIRD samples (e.g., Keller, 2022). However, this task is never complete, as new scientific claims and fields continue to emerge. Although drawing heavily on findings from developmental psychology, neurosciences, and behavioral economics, global ECD is dominated by the field of medicine—especially pediatrics—, which may be even farther away from context-sensitive approaches than psychology. Thus, it is necessary to expand our cross-disciplinary engagements from challenging universalist claims in developmental sciences to scrutinizing the universal application of such claims in global ECD and related applied fields.

With this contribution, we aim to initiate a broader critical engagement with global ECD from anthropology and other fields with relevant ethnographic expertise. We invite our colleagues to join in exploring global ECD and its premises and actual implementations, scrutinizing its scientific claims in light of ethnographic evidence, and developing strategies to bring relevant ethnographic expertise to this field. To facilitate this endeavor, we first outline the main assumptions and objectives of global ECD and then demonstrate the critical potential of ethnographic research.

## THE APPLIED FIELD OF GLOBAL ECD

Child-focused interventions in the global South are not new. In colonial times, a central concern of colonizers was to "civilize" Indigenous populations through the introduction of European-type schooling (Chaudhary, Kapoor, and Negi, 2018) and even, in some cases, pre-schooling (Prochner and Kabiru, 2008). Another long-standing goal of international intervention is to enhance the survival and health of children, especially in the early years. A comparably new approach within child-focused interventions aims at optimizing children's brain development in the global South by changing views and practices of parents and caregivers.

Global ECD in this sense began to take shape in the 1990s when international organizations started to set ECD agendas, formulate corresponding policies, and conduct intervention trials (Grantham-McGregor et al., 1991). By the year 2000, "in less than 10 years ECD had moved from the periphery of concern . . . to become a major topic" (Pence and Nsamenang, 2008, 4). Between 2000 and 2014, the number of countries with ECD or related early childhood policies increased from six to 68 (Vargas-Barón, 2015). The implementation of large ECD programs such as Saving Brains (Grant Challenges Canada) or Care for Child Development (UNICEF and WHO) began around 2010 (Black et al., 2017). Finally, with the launch of the Nurturing Care Framework in 2018, WHO, UNICEF, and the World Bank established a roadmap to "scale up" global ECD interventions and "to enable everyone to reach their full human potential" (Richter et al., 2017, 103). Furthermore, in the founding document of the Nurturing Care Framework, WHO, UNICEF, and the World Bank position global ECD in the center of international development and argue that improved early childhood development is the foundation for all Sustainable Developmental Goals (2018a; see Figure 1).

A central strategy of these United Nations' agencies is to initiate, guide, and monitor the incorporation of Nurturing Care policies and programs in each country of the global South. In this process, economic arguments are central: "Investing in early childhood development is one of the best investments a country can make to boost economic growth, promote peaceful and sustainable societies, and eliminate extreme poverty and inequality" (WHO, UNICEF, and WBG, 2018a); "for every \$1 spent on early childhood development interventions, the return on investment can be as high as \$13" (WHO, UNICEF, and WBG, 2018b).



**FIGURE 1** The five components of the Nurturing Care Framework and their position at the center of the Sustainable Developmental Goals. Source: WHO, UNICEF, and WBG. 2018b. Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential. Geneva: World Health Organization. [This figure appears in color in the online issue]

In addition to these efforts to integrate ECD programs in the policies of national governments, childfocused NGOs such as Save the Children and private corporations like LEGO are shifting their attention to ECD. In 2019, for instance, the LEGO Foundation granted USD 100 million "to bring learning through play to children impacted by crises in Ethiopia and Uganda" (International Rescue Committee, 2019). Thus, we agree with Martin Woodhead that in international development, "early childhood development (ECD) will be a priority focus for the twenty-first century" (Woodhead, 2016, 1).

Global ECD emerges from existing approaches to child-focused intervention through several extensions and shifts in focus. First, global ECD builds on programs in the global North that gained momentum in the 1960s, such as the Head Start programs in the United States (Baratz and Baratz, 1970) and exports their recipes to the global South. Second, ECD brings along a shift in focus from survival and health to "thriving" (Richter et al., 2017) or, as UNICEF puts it, from body to brain: "Too many children are still missing out on the 'eat, play, and love' their brains need to develop. Put simply, we don't care for children's brains the way we care for their bodies" (UNICEF, n.d.). Third, global ECD implies an extension of the educational sector from school-aged children to toddlers, infants, and fetuses as it aims to standardize development and learning from conception onward to increase "school-readiness." Fourth, ECD entails shifts in the mode of intervention, from providing resources to changing caregiver behaviors as well as "brain structure and function" of children. Targeting maximally intimate domains of human life, ECD interventions are clearly among the most intrusive approaches of international development. Finally, ECD moves from a primarily rights-based legitimation, characteristic of most other forms of child-focused intervention, to a predominantly scientific mode of justification and promotion.

This last shift may not be immediately evident since ECD policies sometimes refer to the Convention on the Rights of the Child, which includes the obligation to ensure children's development "to their fullest potential" (United Nations General Assembly, 1989). However, this formulation is too vague to enforce any action. Whether children are considered "on track" or "failing to reach their fullest potential" depends fundamentally on definitions of human nature, developmental goals, and the standards used in assessments. While such definitions vary cross-culturally, the ECD movement determines them quietly by resorting to the authority of WEIRD sciences and their tacit premises.

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The essential role of scientific claims is evident in the founding document of the Nurturing Care Framework. Its introduction begins by stating that this framework "builds on state-of-the-art evidence about how early childhood development unfolds and how it can be improved by policies and interventions" (WHO, UNICEF, and WBG, 2018a, 2). The subsequent chapter, "A Case for Nurturing Care," presents this evidence under section headings that all begin with two words: "We know." As noted earlier, the UN agencies adopted this evidence from the three *Lancet* series, which were sponsored by UNICEF. Next, we will outline some of the major scientific claims of global ECD.

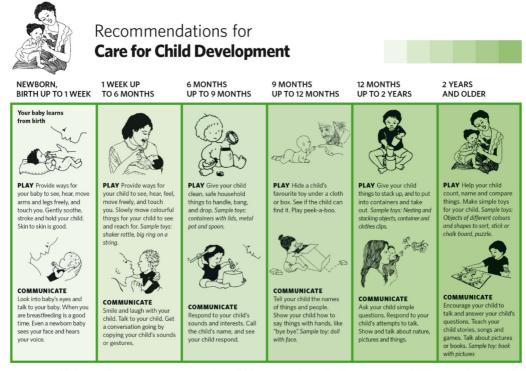
### Scientific claims of global ECD

The three *Lancet* series compile scientific evidence about alleged deficits of early child development in the global South and about the effectiveness of ECD intervention trials. On this basis, WHO, UNICEF, and the World Bank created the Nurturing Care Framework. One of their most fundamental claims is "that 250 million children (43%) younger than 5 years in low-income and middle-income countries are at risk of not reaching their developmental potential" (Black et al., 2017, 77). This claim is simply derived from the estimated number of children who are stunted or living on less than USD 1.90 per day. To justify the use of poverty as an indicator of poor child development, the authors refer to a handful of studies indicating that "poor children consistently had considerable developmental deficits compared with more affluent children" (Grantham-McGregor et al., 2007, 64). Furthermore, the newest series presents some preliminary results of caregiver-reported assessments of early childhood development:

Initial analyses using UNICEF's caregiver-reported Early Childhood Development Index found that 36.8% of 3-year-olds and 4-year-olds in 35 LMICs [low- and middle-income countries] *do not attain basic cognitive and socio-emotional skills, such as following directions and inhibit-ing aggression.* Efforts are underway to validate population-level measures that can be applied globally. (Black et al., 2017, 78, our emphasis)

The *Lancet* articles amplify this core claim of poor child development in poor countries through a model of intergenerational transmission of poverty. Accordingly, poverty engenders biological risk factors like poor nutrition as well as psychosocial risk factors of "poor care and home stimulation" due to "stress/depression, low responsivity [and] low education" of children's "primary caretakers." The *Lancet* articles explain that these factors together lead to "poor cognitive, motor [and] socio-emotional development" in early childhood and consequentially to "poor school achievement" in childhood and low productivity and high criminality in adulthood (Grantham-McGregor et al., 2007, 62, Figure 2). Economists even quantify what is frequently called the "burden" of poor child development: "For the 43% of children estimated to be at risk of poor development . . . their average percentage loss of adult income per year is likely to be 26%" (Richter et al., 2017, 110). In addition, "when these children grow up, they tend to be less equipped to take on a parenting role and are more likely to perpetuate a cycle of adverse caregiving across generations" (Britto et al., 2017, 96).

As the *Lancet* articles explain, while poor parenting and poor early childhood development are at the root of poverty, they also contain the solution to overcome it. The articles predict that interventions to improve caregiving practices will boost brain growth and optimize cognitive as well as socioemotional development in early childhood, which then should translate into higher school achievement in childhood and higher productivity as well as less violence in adulthood (Engle et al., 2011). If such interventions are implemented at scale, they are promised to boost overall economic growth and political stability in the targeted countries by creating the first socially, emotionally, and cognitively fully developed generation or, as some organizations call it, the "breakthrough generation" (Tostan, n.d.).



• Give your child affection and show your love • Be aware of your child's interests and respond to them • Praise your child for trying to learn new skills

FIGURE 2 Counseling card from Care for Child Development. Source: WHO and UNICEF. 2012. Care for Child Development: Improving the Care of Young Children. Geneva: World Health Organization. [This figure appears in color in the online issue]

## **Global ECD interventions**

The Nurturing Care Framework (Black et al., 2017; Britto et al., 2017; Richter et al., 2017) includes recommendations for ECD interventions. To outline them, we briefly present the primary addressees of interventions, the standards of care to be conveyed to them, and intervention techniques.

Nurturing Care interventions may be targeted at institutional day care settings as well as family care and parenting. Although the framework endorses both options, parenting programs are clearly prioritized, along with a focus on children under the age of three. The framework defines parenting programs as "interventions or services aimed at improving parenting interactions, behaviors, knowledge, beliefs, attitudes, and practices" (Britto et al., 2017, 94). In principle, any caregiver can be addressed, but mothers are de facto in the spotlight, usually without any scientific justification. For example, among seven early learning interventions reviewed by Walker and colleagues in the first *Lancet* series (2007, 151), six are exclusively directed at mothers while one also includes preschool teachers.

Nurturing Care encompasses the five domains of health, nutrition, security and safety, responsive caregiving, and early learning (Black et al., 2017). Here we focus on the last two domains as they are specifically designed to foster early childhood development and consequently prioritized in ECD programs. The *Lancet* articles claim that "responsive caregiving," a particular parenting style derived from attachment theory, "positively affect[s] the child's cognitive and socioemotional development, their brain structure and function, and their physical health" (Britto et al., 2017, 99). In the domain of "early learning," the *Lancet* articles endorse interventions that train caregivers on how to properly play and talk with their children (see Walker et al., 2007, 151). They claim that such parenting interventions improve children's cognitive development, even on the level of "neurocognitive processing and brain functioning" (Engle et al., 2007, 230). The counseling card of Care for Child Development (WHO and UNICEF, 2012), the most widely implemented ECD program that is based on the first *Lancet* series and integrated into the Nurturing Care Framework, offers concrete examples on how caregivers should communicate and play with their children from birth onward (see Figure 2). The upcoming *Practice Guide for Nurturing Care* will even include instructions on how to foster antenatal early learning, for example by talking to the unborn child (Nurturing Care, 2021b).

Programs usually realize ECD interventions through various techniques aimed at parental behavior change:

The most effective parenting programmes used several behaviour-change techniques, including media such as posters and cards that illustrate enrichment practices, opportunities for parental practice of play and responsive talk with their child, guidance and support for changing practices, and problem-solving strategies. (Britto et al., 2017, 94)

Practice sessions in the context of home visits are among the most common techniques. Reach Up and Learn, another widely implemented ECD program, provides some insights into the procedure of such visits:

Home visitors model desired actions and demonstrate activities to encourage mothers to respond to their children's vocalizations and actions. They demonstrate ways the mother can talk about and show her child objects and activities in their environment, and how to introduce new activities and concepts. Visitors promote giving praise, celebrating the child's achievements and efforts, and showing love throughout the visit. (Walker et al., 2018, 38)

According to a program leader, the program prefers home visits to group sessions outside the home: "When you show up at their door, it is harder for them to resist" (Start Early, 2018). Another frequently discussed technique to ensure parents' compliance consists of "combining the promotion of early child development with conditional cash transfer programmes" (Engle et al., 2011, 1339), that is, parents receive financial support on the condition that they "invest" in their children's development. The elements of coercion are hard to miss.

## The production and selection of evidence in the Lancet articles

While the Lancet articles and global ECD as a whole claim that their assessments and recommended interventions are evidence-based, we argue that they cherry-pick evidence and ignore a wide range of relevant research. Concerning the global South, they refer to a limited number of assessment and intervention studies. The assessment of ECD rests mainly on psychometric tests and surveys about childcare such as UNICEF's Multiple Indicator Cluster Survey (see McCoy et al., 2022 as an example; Scheidecker et al., 2022 for a commentary). The researchers compare resulting data across continents, countries, and within-country wealth quintiles to support the basic claim that poverty is caused by inadequate childcare and suboptimal development. To support the premise that ECD interventions will improve child development and economic growth, the Lancet articles mainly refer to randomized controlled trials that measure the intended developmental outcomes in an intervention group and compare it to a control group (see Weber, Fernald, and Diop, 2017 for an example, Morelli, Bard, et al., 2018 for a commentary). Importantly, this applied research in the global South hinges entirely on standards, theories, and test procedures that emerged through basic research of developmental sciences in the global North. References to findings from anthropology or cultural psychology are completely absent from the Lancet articles, even though these fields could provide basic research about childhood in the global South and other non-WEIRD populations. Furthermore, research providing other explanations for global economic inequalities than "poor" ECD is ignored. In view of our goal to critically engage with global ECD and, ultimately, to contribute to a more balanced knowledge base, it is important to consider the selection

mechanisms of the *Lancet* review articles and other ECD literature. We see several selection mechanisms at work.

First, the selection process appears to be strongly driven by advocacy, that is, by the goal to scientifically justify preexisting convictions about the importance of ECD interventions and proper ways of raising children. This is indicated by the fact that the Lancet series appeared after ECD agendas and policies had been formulated. Additionally, the series was sponsored by UNICEF and initiated by a steering group whose members were partly active as ECD advocates beforehand (see Grantham-McGregor et al., 2007, acknowledgments). Even the authors of the Lancet articles mention that evidence is needed to promote an existing ECD agenda rather than to figure out what families really want. Richter and colleagues, for example, state in an article from the third series: "Although the scientific evidence for investing in early childhood development is strong, more is needed to generate political will" (2017, 115). Another indicator of advocacy-driven research is the fact that most intervention studies are designed to only detect the intended effects, as Shaw and da Silva point out (2020). Hence, potential negative side effects of interventions are left unexamined—a problem Morelli, Bard, and colleagues identified (2018). This is astonishing given that the *Lancet* articles otherwise strongly rely on methodological approaches from the medical field, wherein the examination of side effects is prescriptive for the approval of new cures. Obviously, an advocacy-driven review fosters a confirmation bias, that is, a bias toward selecting research that confirms the need and efficacy of ECD intervention and toward ignoring contradicting or complicating research.

Second, the fact that the *Lancet* articles are anchored in the medical field leads to additional selection biases. The reviews and most of the reviewed literature come from medical journals, often with a focus on global health. Journals from cultural and cross-cultural psychology or anthropology are not included in the reference lists of the *Lancet* articles. Even in ECD publications with a more qualitative approach, anthropological research is rarely referenced. As an example, the authors of "a qualitative study reporting maternal perceptions on the importance of play" in the journal *BMC Pediatrics* state that "evidence is limited in Africa regarding play behaviours and caregiver perceptions" (Prioreschi et al., 2020, 2). Hence, they do not refer to any of the numerous anthropological or cultural-psychological publications on play in African contexts (e.g., Boyette, 2016; Lancy, 1996).

Third, the authors of the *Lancet* articles applied several explicit selection criteria for their reviews that made ethnographic research unlikely to be included. As stated in the first of the eight articles, researchers used the keywords "developing countries," "developing nations," or "third world" to identify publications referring to the global South (Grantham-McGregor et al., 2007, 60). These normative notions are frequently used in studies within the field of international development but avoided in ethnographic research, which aims to understand or explain instead of hierarchizing cross-cultural variation. Consequently, these articles do not consider basic research on child development in the global South. Other selection criteria refer to methodological standards that are made explicit in one of the articles:

Our present systematic review . . . included 42 effectiveness trials and programme assessments. . . . The effectiveness trials met the public health standards of experimental design . . . and content criteria. Programme assessments were measured with reference to programme evaluation standards. (Engle et al., 2011, 1340)

This advocacy-driven selection based on specific standards of quantitative methodology, partly derived from the field of medicine, excludes all ethnographic research. We strongly believe that unless critically minded scholars of childhood challenge the status quo, it is unlikely that proponents of global ECD will initiate any serious consideration of ethnographic and other context-sensitive research on childhood.

## TOWARD A CRITICAL ENGAGEMENT WITH GLOBAL ECD

To provide some preliminary orientation and ideas for the project of a critical engagement with global ECD, we first review literature on which such an engagement can build. Subsequently, we offer examples

on how ethnographic research could be leveraged against four central claims of global ECD—that poor child development causes poverty, that child development depends mainly on the mother, that responsive caregiving is the only appropriate way to interact with children, and that early learning depends on parentchild play. Finally, we make some suggestion on how to ensure that global ECD recognizes such criticism.

#### Precursors and sources to build on

The critical engagement with global ECD we are promoting can build on several research strands and initiatives. They include, among others, critical engagements with ECD in the global North, research in the anthropology of development about child-focused interventions, ethnographic research on childhood in the global South, and, finally, pioneering critiques of global ECD.

In the global North, ECD programs have already received considerable critical attention from a range of disciplines, including sociology (e.g., Gillies, Edwards, and Horsley, 2017), philosophy (e.g., Ramaekers and Suissa, 2011), critical pedagogy (e.g., Soto and Swadener, 2002), social work (e.g., Geinger, Vandenbroeck, and Roets, 2014) and anthropology (e.g., Faircloth and Murray, 2015; Scheidecker et al., 2020). Common lines of critique in this body of research are that the "turn to parenting" (Daly, 2013) in national policies is based on questionable, ideologically infused evidence and implies blaming parents, especially mothers, for their children's disadvantages instead of tackling structural causes that produce social inequalities in the first place. In addition, scholars have begun a detailed scrutiny of the specific evidence base of language-focused parenting programs in the United States, particularly the alleged word gap of children from "welfare families" as compared to "professional families" (Hart and Risley, 1995). They point out that the underlying research is compromised by a WEIRD sampling bias, leading to a failure to account for social and cultural diversity in languages, language use, and language socialization (Blum, 2017; De León and García-Sánchez, 2020; Ochs and Kremer-Sadlik, 2020; Paugh and Riley, 2019; Sperry, Sperry, and Miller, 2019). The assessment and training of non-WEIRD families based on WEIRD standards might contribute to a perpetuation rather than alleviation of educational inequality (McCarty, 2015); in the United States-one of the first countries to set up large-scale ECD programs like Head Start in the 1960s—educational disparities have actually increased in recent decades (Kuchirko and Nayfeld, 2020).

Many of these problematic aspects are likely to pertain to ECD interventions in the global South as well since they are largely derived from ECD programs in the global North, especially the United States. The problems can even be expected to multiply as local realities might diverge not only more profoundly on the levels of families, neighborhoods, or communities from the WEIRD model, on which global ECD is implicitly based, but even on the macro level of political and economic systems in which the new generation of "optimally developed" individuals is supposed to thrive.

Another source to draw upon is research from the anthropology of development. It provides ample insights into the power relations, local incompatibilities, and unintended dynamics of international aid (for a review see Mosse, 2013) and includes research about child-focused programs and interventions (e.g., Boyden, 1990; Cheney and Sinervo, 2019), particularly on topics such as child labor (Nieuwenhuys, 1996), child soldiers (Rosen, 2007), street children (Stodulka, 2016), children's rights (Reynolds, Nieuwenhuys, and Hanson, 2006), child protection (Fay, 2021), children's health (Gupta, 2012), schooling (Balagopalan, 2014), and early childhood education (Wilinski, 2012). To extend these critical perspectives to global ECD appears to be logical as it is now positioned in the center of international development. While research on child-focused intervention provides important insights, it tends to "focus on childhoods in difficult circumstances or at the margins" (Twum-Danso Imoh, 2016, 455). To effectively challenge the deficit view of global ECD, that is, a classification of families as deficient based on their divergence from WEIRD socio-demographics, we see the need to additionally draw on research that focuses on "normal" childhoods within specific contexts of the global South.

The anthropology of childhood, cultural developmental psychology, and social science scholarship in countries of the global South offer such ethnographic research on childhood, socialization, and development and include abundant insights into children's first years of life (Gottlieb, 2015; Hewlett, 1993;

Keller, 2007; LeVine et al., 1996; Takada, 2020) as well as into the specific domains of ECD interventions like cognitive development (Rogoff, 1990), learning through play (Lancy, 1996) or talk (Ochs, 1988), social development (Chapin, 2014; Otto and Keller, 2014), and socialization of emotions (Röttger-Rössler, et al. 2015; Scheidecker, 2020). Furthermore, ethnographic research on childhood is available for every region of the global South. Childhood in India, for example, has been explored by anthropologists from the global North (e.g., Seymour, 1999) as well as by India-based scholars from social work (e.g., Anandalakshmy, 1991), psychoanalysis (e.g., Kakar, 1978), developmental psychology (e.g., Chaudhary, 2004), and many other disciplines (e.g., Saraswathi, Menon, and Madan, 2018). Such research on childhood in specific contexts of India and other world regions often contradicts basic premises of global ECD and thus is particularly crucial for challenging its basic assumptions. Unfortunately, so far, ethnographic childhood research is largely isolated from the academic field that informs global ECD and vice versa.

In the last decade, several scholars from various disciplinary backgrounds have begun to directly engage with global ECD. Among the first to criticize global ECD were Africa-based psychologists like A. Bame Nsamenang (2010), Kofi Marfo (along with sociologist Alan Pence; Pence and Marfo, 2008), and Robert Serpell (Serpell, 2019; Serpell and Nsamenang, 2014), each of whom points to insufficient consideration of local contexts and knowledge in global ECD. A new generation of scholars from the global South is continuing this work (e.g., Ejuu, 2015; Ng'asike and Swadener, 2019; Oppong, 2015; Rai, 2019). Other researchers apply sociological approaches to global ECD, focusing mainly on the social construction and circulation of a particular, Western-derived concept of childhood through this movement (Nilsen and Steen-Johnsen, 2020; Penn, 2011; Siagian et al., 2019). Some critical responses to global ECD are also emerging from various medical fields: a group of psychiatrists and medical anthropologists in South Africa recently pointed out the need to consider local knowledge in infant mental health, an applied field that largely overlaps with ECD (Lachman et al., 2021). Moreover, medical anthropologists have begun to critically examine maternal nutrition interventions, which are an integral part of global ECD (Pentecost and Ross, 2019; Yates-Doerr, 2020). Not least, pediatrician Olusanya Bolajoko has criticized the exclusion of researchers from the global South from the core group of scientists that designed the Nurturing Care Framework (Olusanya, 2021a, 2021b; Olusanya et al., 2021).

While these critical engagements with global ECD point to many important shortcomings, the critical *and* constructive potential of the large body of ethnographic childhood research discussed in this article remains largely untapped. Only a small number of cultural psychologists and anthropologists of childhood have begun to make use of this potential. Sara Harkness and colleagues addressed the need to consider children's specific developmental niche in ECD interventions (Harkness et al., 2013; Harkness and Super, 2020). Moreover, a group of anthropologists and psychologists outline the problems resulting from the global application of attachment theory to parenting interventions (Rosabal-Coto et al., 2017) and raise ethical questions related to such interventions (Morelli, Quinn, et al., 2018). Their critical commentary about an ECD intervention study in Senegal resulted in a sequence of mutually responding publications about the science and ethics of global ECD (Weber et al., 2017; Morelli, Bard, et al., 2018; Weber et al., 2021; Scheidecker, Oppong, et al., 2021). A recent commentary demonstrates severe methodological biases in ECD assessment research (Scheidecker et al., 2022). While these publications represent the first critical engagements with global ECD, many more are needed to bring the critical potential of available ethnographic expertise to the fore. Next, we exemplarily highlight this potential of ethnographic research regarding four major ECD claims.

## Poverty and poor child development: A questionable equation

As we outline earlier in this article, one of the most fundamental claims of the ECD movement is that poverty is reproduced by poor child development (Black et al., 2017; Grantham-McGregor et al., 2007). Before examining this claim, it is important to notice its far-reaching judgments about the mental capacities and brain function of whole populations. While the *Lancet* articles focus on children under five when

diagnosing developmental deficits, their model of intergenerational poverty transmission implies that the parents and preceding generations are affected by the same problem. Thus, these publications suggest that large segments of the "developing world's" population have underdeveloped brains and have not reached their "full human potential." When applying their criteria to Madagascar or Malawi, they would need to consider more than 80 percent of those countries' populations cognitively and socioemotionally deficient (Nurturing Care, 2021a). Furthermore, their model applies not only to the poorest, who are "at *elevated* risk of not achieving their human potential" (Richter et al., 2017, 104, our emphasis), but, in principle, to all people who are not as wealthy as members of the educated, Western middle classes. These judgments are actively circulated through the websites of UN agencies, NGOs, and news media to raise awareness and funds. By this model, the image of a malnourished child as an emblem of the "Third World" will likely be suplemented by the image of a psychologically underdeveloped child.

If there is any justification for employing a model with such grave judgments, it should at least be based on conclusive evidence. However, this is not at all the case. Large bodies of research provide counter evidence, which is neither considered nor refuted in the *Lancet* articles. Here we point to some counter evidence regarding two basic assumptions of the "poverty equals poor brain development" claim: first, that unequal socioeconomic status reflects unequal brain functioning; second, that there is only one optimal childrearing method while all others are deficient.

The first assumption-that across the world income below a certain threshold indicates poor development—presupposes a global meritocracy in which people everywhere have principally the same opportunities and goals, and they could become equally wealthy if only their brains were developed to the same degree. However, structural and contextual factors, like resource availability, educational opportunity, and job availability, as well as mechanisms of inclusion and exclusion, have been shown over and over again to influence inequality (e.g., Banerjee et al., 2007; Gorski, 2012; Shizha, 2013). The Lancet articles do not account for such structural factors when they base their claims on studies showing correlations between socioeconomic status and educational achievement (Black et al., 2017; Grantham-McGregor et al., 2007). Even the psychological tests that some of the referenced studies use cannot be expected to measure brain function since they are obviously infused with the concepts, norms, social routines, and prioritizations of the hegemonic group that created them (Harkness et al., 2009; Misra, Prakash, and Verma, 1999; Serpell and Simatende, 2016). Similar criticisms have also been leveled at the increased reliance on neurosciences to measure cognitive development (Dougherty and Robey, 2018). If scientific support for the povertypoor development link within a national context such as the United States is already questionable (see Kuchirko and Nayfeld, 2020), its generalization across all countries based on one poverty line is entirely hazardous.

The second, more specific claim that there is exactly one best way to foster children's development— "Nurturing Care" as defined in the most recent *Lancet* articles (e.g., Britto et al., 2017)—and that other ways of upbringing are automatically deficient is derived from developmental sciences. The *Lancet* articles do not at all consider the systematic reviews demonstrating that developmental sciences largely reflect the current lifestyles and values of WEIRD people and cannot readily be generalized to the global population (Arnett, 2008; Henrich, Heine, and Norenzayan, 2010). Neither do they consider the vast literature on the social and cultural diversity of childrearing and development beyond the WEIRD world. At best, cultural diversity is considered on a folkloristic level, for instance, regarding the songs or doll clothes used in interventions (see Walker et al., 2018), or on an instrumental level, as something that can help to get messages across or improve parents' compliance (Chaudhary, 2018).

The *Lancet* articles even interpret WEIRD research in a highly selective manner. For example, the finding that, in the first few years of life, the brain develops particularly rapidly and is highly susceptible to the environment is taken as scientific evidence for the urgency of implementing WEIRD parenting standards (Black et al., 2017). The established proposition that brain plasticity allows children to adapt to highly variable social, cultural, and ecological environments is not even considered (Chiao, 2009; Han et al., 2013). Furthermore, to believe that human brains can only develop properly under conditions that emerged in just the last few decades in some parts of the world appears teleological and contradicts every possible understanding of human evolution (Sherwood and Gómez-Robles, 2017).

15481322, 2023. 1, Downloaded from https://antnosource.onlinebibury.wiley.com/doi/10.1111/etho.12379 by Freie Universiate Berlin, Wiley Online Library on [11/04/2023], See the Terms and Conditions (https://onlinelibary.wiley.com/terms-and-conditions) an Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

The evidence for alleged childrearing deficits in the global South is no less selective. One example shall suffice. The claim that poor mothers tend to be stressed and depressed, which is offered as an explanation for poor parenting (Grantham-McGregor et al., 2007, 62), is based on exactly two empirical studies, a report for UNICEF about mothers in rural Bangladesh (Hamadani and Grantham-McGregor, 2004) and a study about "mothers of undernourished Jamaican children" (Baker-Henningham et al., 2003). It is hard to see any scientific standard that would grant such a generalization from two small studies in very specific settings to the "developing world" as a whole. But it is in line with a thorough deficit view wherein differences from WEIRD norms are classified by default as deficits (Akhtar and Jaswal, 2013; Scheidecker et al., 2022). If deficits are the only recognized characteristics of families in the global South, they appear necessary to examine and discuss in detail the ECD claims about poor development, the invoked evidence,

all the same. The use of "poverty" as an overarching approach to difference reinforces such a deficit view, according to which people come to be seen only through what they appear to lack (Singh, 2015). To counter this deficit view, ethnographic research that accounts for the positive side of childrearing around the world-both in terms of what is actually there and what is valued-needs to be included in the knowledge base of global ECD. We hold that the recognition of caregivers' beliefs, goals, and reasons behind their childrearing practices is a crucial precondition to avoid misjudgments and to develop truly meaningful projects for children and their families (see also Harkness et al., 2013; Morelli, Quinn, et al., 2018; Pence and Nsamenang, 2008; Scheidecker, Spallek, et al., 2021). Thus, context-sensitive research on early childhood has important contributions to make regarding the fundamental premises of global ECD and specific programs. To unlock this potential, to which we can only point in this article, we believe it is

#### Why just the mother? Maternal versus distributed care

and the ignored counterevidence.

Global ECD is fundamentally based on a nuclear family model. One of its most salient features is the focus on an adult primary caregiver, essentially the mother, and her dyadic relationship with the child. This focus is taken for granted but has far-reaching consequences. Here we provide just a few examples.

The Lancet articles base their claim of "inadequate cognitive stimulation" simply on what parents (don't) do: In "developing countries . . . only 10-41% of parents provide cognitively stimulating materials to their child" and "only 11-33% of parents actively involve their children in cognitively stimulating activities" (Walker et al., 2007, 153). Similarly, they establish the claim of poor socioemotional development in reference to mothers: "Women in developing countries have high rates of stress and depressive symptoms.... Children of depressed mothers are at risk for poor development, in part mediated through inconsistent and unresponsive parenting" (Engle et al., 2007, 237). The argument to intervene even before the birth of a child is equally focused on mothers: "Maternal programming for nurturing care begins during pregnancy" (Britto et al., 2017, 97). Finally, WHO and UNICEF promote their Care for Child Development program in reference to parents: "Every time a parent speaks to a young child, it sparks something in the child; it's stimulation to the child. It forms brain connections" (UNICEF, n.d.). The articles fail to question whether only parental talk or play can spark something in the child or whether the allegedly deprived child may receive such inputs from social partners other than the parents.

The model of the nuclear family with the mother as the primary caregiver-who is supposed to care sensitively and responsively for virtually all of her young child's needs-is arguably derived from attachment theory. According to this theory, attachment is understood as an emotional bond between a child and a significant adult caregiver that emerges during the first year of life. Children may develop secure or various insecure patterns of attachment, depending on the sensitivity and responsiveness of the primary caregiver. While in principle any significant caregiver can become an attachment figure, this role is de facto ascribed to the mother: "The vast majority of [attachment] studies have focused on mothers" (Forslund et al., 2022, 6). These core assumptions have remained largely unchanged since the late 1960s. Attachment theory not only provides the global ECD field with normative views on proper families and appropriate

parent-child interaction, but it is also the base for specific "attachment-based" parenting programs (e.g., Rosabal-Coto et al., 2017; Steele and Steele, 2019).

Yet right from its inception, anthropologists and cultural psychologists criticized attachment theory on the grounds that it does not account for the diversity of kinship and family configurations, caregiving arrangements, and valued childrearing practices around the world (e.g., LeVine and Miller, 1990; Mead, 1954; Morelli and Tronick, 1991; Otto and Keller, 2014; Quinn and Mageo, 2013). Instead, attachment theory has been shown to largely reflect the Western middle-class philosophy of the psychologically autonomous human being who is self-contained, self-conscious, and emotionally expressive (Keller, 2018, 2022), as well as a particular socioeconomic arrangement in which one parent dedicates her whole time to the baby at home while the other is at work (Faircloth, 2014; Hays, 1998). Thus, the universal validity of attachment theory is highly questionable. However, the ECD literature does not account for these critical findings, even though they are of particular pertinence for their highly diverse areas of operation in the global South.

Ethnographic research can also be used to directly challenge ECD programs' focus on the mother or another alleged primary caregiver. It provides ample evidence about the diversity of maternal roles (Barlow and Chapin, 2010) as well as on various forms of multiple caregiving (Morelli and Tronick, 1991; Weisner and Gallimore, 1977), multiparty interaction (De León, 2011), and complementary role division (Scheidecker, forthcoming). These forms of socially distributed care are highly relevant for the adequate assessment of developmental risks. What if the 67–89 percent of parents in the global South who, according to the *Lancet* articles (Walker et al., 2007, 153), do not "actively involve their children in cognitively stimulating activities" simply don't do it because others are doing it already? In many parts of the globe, the social world of children is characterized by a particular pattern of complementary role division, according to which parents care mainly for the physical wellbeing of children while similar-aged siblings and cousins provide ample opportunity for highly stimulating and responsive social interaction (Scheidecker, forthcoming). This insight is simple but crucial as it directly challenges the core claim of ECD that a large proportion of children in the global South are not properly stimulated.

Ethnographic insights about children's varying social support networks are not only relevant for challenging some of the most fundamental assumptions of global ECD, they are also useful for designing more meaningful programs. For example, they could help to develop support that builds on existing social structures and strengths rather than simply trying to press parents everywhere into the same form. Based on such insights, child-to-child approaches have been developed and successfully implemented in Zambian schools and other contexts (Serpell, Mumba, and Chansa-Kabali, 2011).

#### Responsive caregiving: Widely applied but rarely studied

"Responsive caregiving" is one of the five core components of the Nurturing Care Framework designed for global ECD implementation. Derived from attachment theory and its concept of sensitive responsiveness, it is considered a necessary condition for the development of secure attachment. In turn, secure attachment is deemed crucial for favorable developmental outcomes in emotional, social, and cognitive domains across cultures (Mesman, van IJzendoorn, and Sagi-Schwartz, 2016)—although the empirical evidence is poor (Meins, 2017). Responsive caregiving implies that the primary caregiver should always be attentive to the child's cues and respond to them consistently, promptly, and appropriately (Ainsworth, Bell, and Stayton, 1974). In ECD policies, this abstract definition is translated into various concrete recommendations for primary caregivers. UNICEF's Care for Child Development program suggests, for example: "Give your child affection and show your love; look into baby's eyes; smile and laugh with your child; get a conversation going by copying your child's sounds and gestures; call the child's name, and see your child respond; praise your child for trying to learn new skills" (see Figure 2).

Despite the central place occupied by responsive caregiving in ECD, the benefits of such interventions in the global South have rarely been studied. The *Lancet* articles list only two studies that are specifically dedicated to responsive caregiving (see Engle et al., 2011, 1344; Walker et al., 2011, 151): one conducted

in South Africa (Cooper et al., 2009) and another in Ethiopia (Klein and Rye, 2004). We doubt that this is enough evidence to justify the conversion of mothers around the globe to the type of responsive caregiving exemplified above. We assume that the incorporation of responsive caregiving into global ECD programs was driven by the direct application of parenting styles that are valued in Western middle classes rather than by scientific findings about its benefits in the global South. Scrutinizing in detail the incorporation of responsive caregiving into global ECD would be an important task within the general critical endeavor we are proposing.

Furthermore, ethnographic research could help global ECD proponents improve their understanding of why parents in the global South may deviate from the principles of responsive caregiving defined above. As mentioned earlier, according to the *Lancet* articles, it is prevailing stress and depression that prevents parents in the global South from providing responsive care (Engle et al., 2007, 237). While this explanation implies that parents everywhere would naturally conform to the standards of Nurturing Care, if only they could, the ethnographic record is replete with reasons why parents act *purposefully* in other ways. By way of example, we outline just two among many ethnographic findings that could be leveraged against the claim of responsive caregiving as the only appropriate way to interact with children: specific developmental goals and hierarchical parent–child relationships (for more examples, see Keller et al., 2018; Keller, 2022).

In many societies, not responding promptly and consistently to a child's requests fosters culturally specific developmental goals. In her ethnographic research in Samoa, Jeannette Mageo shows how early distancing practices create an interpersonal insecurity that helps children to focus on group bonding rather than one-to-one bonding. She questions the common view that "interpersonal insecurity tends to create maladjusted adults" (Mageo, 2013, 193). Equally, among the Runa, an Indigenous population of the Ecuadorian Amazon, caretakers routinely deploy distancing practices with children until they show that they can contribute to the household economy (Mezzenzana, 2020). Caretakers' unwillingness to respond to children's requests has two consequences: first, it encourages children to become autonomous and self-reliant from an early age; second, it fosters children's social awareness and responsibility. To become socially recognized, even very young children promptly learn to care for and be useful to others. Also, in some contexts of the global North, distancing practices are considered beneficial for a child's development. In an ethnographic study of German infants and parents, Robert LeVine and Karin Norman (2001) observed how German parents undertook many practices that could be classified as decidedly "unresponsive." German parents in the study let their children cry without consoling them immediately, left babies alone in their room for some time after they had woken up, and sleep trained them. Norman and LeVine showed that German parents adopted such practices with the explicit intention of fostering children's emotional resilience and autonomy.

Parents in many "gerontocratic" societies deeply value hierarchically structured relationships with their children, instantiated by asymmetrical interaction (Keller, 2013; Ochs, 1982; Scheidecker, 2017). These values contrast with the "bi-directional interactions" (Black et al., 2017, 79) of responsive caregiving and the concomitant ideal of an egalitarian caregiver—child relationship. Rather than caretakers adapting to children's requests and emotions, it may be children who are expected to accommodate their needs in relation to the activities of the adults surrounding them. Often children are considered equal only when they take part in the economic and social life of the household and larger community (Lancy, 2022). Ethnographic research clearly shows that this hierarchical model of childrearing fosters respect, responsibility, social awareness, and other qualities that are highly valued in many communities of the global South (Kärtner, Keller, and Chaudhary, 2010; Whiting and Edwards, 1992).

Ironically, hierarchical, nonresponsive relationships are not alien to ECD interventions in that they tend to provide *unsolicited* training to parents in the global South on how to properly interact with their children. In a way, these interventions treat parents like children while telling them to treat their own children like equals. We suggest turning this relationship around and fostering sensitive responsiveness first and foremost in the relation of ECD interventions to families and communities. Anthropology and cultural psychology could play an important role in such an endeavor by sensitizing ECD proponents to the understandings, developmental goals, and interests of the communities they wish to serve.

# Early learning through parent-child play: Unverified assumptions and harmful misperceptions

"To bring learning through play to children" is not only the stated aim of the LEGO Foundation, as indicated in the introduction, but is among the most common approaches of ECD interventions. The focus on play is understandable since play certainly can be beneficial for learning and cognitive development. If we now reconsider that only 11–33 percent of parents in the global South may involve their children in play or other cognitively stimulating activities (Walker et al., 2007, 153), it may appear urgent to inform these parents about the importance of play and to show them how they could engage their children in such a joyful activity. However, when considering the ethnographic record, this rationale of play-focused ECD interventions turns out to be based on a number of unverified assumptions and even misperceptions.

The alleged lack of play opportunities for children—with its far-reaching insinuations about cognitively underdeveloped populations in the global South-rests again on the nuclear family model we challenge above. In this case, ECD researchers assume that mothers or parents are children's only noteworthy partners in play and their only providers of play materials and spaces (Lancy, 2007). This assumption appears to be unverified. Ethnographic research has shown that in many communities of the global South, children mostly play with other children (e.g., Scheidecker, forthcoming). Furthermore, assumptions about "unstimulating home environments" (Grantham-McGregor et al., 2007, 60) and needs for "educational toys" (Walker et al., 2007, 151) ignore what those supposedly understimulated children may have available instead. Children in rural contexts often can participate to a much larger degree in the complex real-world surrounding them than children in urban contexts, who may spend most of their time in circumscribed spaces like a child's room or playground, occupied with simplified replicas from the real world. In rural contexts, children may freely explore their environment and play with whatever is at hand, such as cast-off tools and utensils, old fishing nets, bones, and corn cobs-even tools with sharp edges (for a cross-cultural survey, see Power, 2000). Parents, when queried, typically argue that such play eventually leads to mastery of the tool and thus justifies the obvious risks (Lancy, 2016). In fact, so successful are children in learning to become productive family members that they constitute a reserve labor force, "stepping up" in a crisis or filling in for an ill or absent adult worker (Lancy, 2015).

ECD advocates may assume that parent-and-child play utilizing "educational toys" is superior to childto-child play with found objects. However, such an evaluation can only be based on a taken-for-granted norm since these advocates present no supporting evidence. Equally invalid would be the claim that children in WEIRD contexts are deprived of play opportunities just because they lack a group of constantly available cousins and siblings. Of course, it is possible that due to disruptive social change or migration, previous play partners become unavailable and are not readily replaced by others. However, this cannot be determined based on single indicators such as parents' involvement but only through contextsensitive research in each community. Even if such research points to a real need for play opportunities in a particular setting, it may turn out that others are better positioned than mothers to provide such opportunities.

Another misconception refers to parents' knowledge about play. The central purpose of play interventions in the global South—to enlighten parents about the importance of play and to teach them how to play—is obviously based on the assumption that the targeted parents do not know about the benefits of play. However, play, in general, is highly valued in nearly every society that has been studied, at times to keep children away from adult work areas or as a medium of education that requires only occasional adult involvement (Lancy, 2022). Thus, while valuing children's play for various reasons, the targeted parents may not agree with the underlying assumption of ECD interventions that parent-guided play is the only valuable form of play.

Ethnographic studies have found various reasons why parent-child play is considered unimportant or even inappropriate. In many societies, parents hold the view that children learn best through play with other children while adult intervention is simply needless (e.g., Scheidecker, forthcoming). In some

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societies, adults avoid stimulation such as making eye contact with or addressing speech to an infant to keep the baby as calm and quiet as possible (e.g., Bird-David, 2008). Cradles, cradleboards, swaddling, and nursing at the first sign of wakefulness aid this effort. Such an approach is also found in some societies of the global North. For instance, "the Dutch maintain a model of infancy in which plenty of sleep and restful, quiet waking periods is ideal. By contrast, US mothers are committed to keeping infants stimulated via physical contact, speech, and toys" (Harkness and Super, 2006, 69).

In some societies, the mother is absorbed in subsistence work or the care of a newborn and sees children's play with peers as a way to distance herself from the child and reduce demands on her attention (e.g., Whittemore, 1989, 92). Finally, norms and values may impede parent-child play. For example, "Sisala parents regard an interest in children's play as beneath their dignity" (Grindal, 1972, 25). As discussed earlier, in hierarchically organized societies, the child occupies a lower rank. Parents engaging children in joint, reciprocal play would compromise their status and even risk infringing on the moral order of their society.

We consider it a basic condition for respectful interaction in the context of ECD interventions to take parents' views and reasons into account. To urge parents to play with their children while these parents see it as inappropriate violates the ECD principle of responsiveness, as previously discussed. Here again, ethnographic expertise on how to explore the perspectives of the targeted people would be highly valuable.

## OUTLOOK

In this article, we presented global ECD as an emerging and highly dynamic movement of international development that aims to boost economic and societal development in the global South through optimizing early childhood development, especially brain function and structure. This movement is driven by UNICEF, WHO, the World Bank, and some partner organizations in tandem with an interdisciplinary academic field composed mainly of pediatrics, developmental psychology, neurosciences, and behavioral economics. Three exceedingly influential series in The Lancet, which were sponsored by UNICEF and authored by scientists who, in many cases, hold positions in these UN agencies, present the evidence and recommendations for Nurturing Care as the leading framework for global ECD. Starting from the observation that this evidence base excludes most context-sensitive research about childhood in the targeted societies of the global South, we encouraged our fellow ethnographers to join in a critical engagement with global ECD and eventually bring relevant ethnographic research to this applied field. To illustrate the critical potential of ethnographic expertise, we outlined three areas in the ECD knowledge base in need of ethnographic intervention or expertise: the equation of poverty and "poor" ECD; the attribution of responsibility to mothers; and the claims that all parents need to engage in a particular form of "responsive caregiving" and certain play activities to foster "healthy" child development.

To conclude, we ask: What would a critical engagement with global ECD look like, and how could it make a difference for the targeted communities? This is an open question to which we contribute our specific experiences and perspectives. First, we think that such an engagement should not be confined to critical debates *about* global ECD but include direct exchanges *with* global ECD. While anthropology and associated disciplines have a strong critical tradition, the influence of these critiques is often limited to scholars from the same fields and rarely reaches out to the external scientific community. Such a miscommunication may simply result from differences in method, style, and vocabulary across involved fields. As outlined in the introduction, the gap between ethnography and ECD science is particularly deep and needs to be bridged strategically if our critiques might make a difference in the applied field and eventually for the targeted communities.

Communication across this gap entails a detailed examination of the ECD literature. While this article seeks to introduce the science of global ECD to scholars with relevant ethnographic expertise, it cannot replace the detailed analysis of specific assumptions, assertions, and evidence claims in the ECD

literature that is necessary for any pertinent critical engagement. While many ethnographers might reject global ECD as a whole, general criticism may not be persuasive for proponents of ECD interventions, especially if it emerges from a different ethical or epistemological point of view. A second task would be to tailor relevant ethnographic findings, which are often widely distributed and sometimes hidden in voluminous monographs, such that they can effectively challenge or improve the ECD knowledge base. Finally, to ensure that such critical work reaches the intended audience, it needs to be published or prominently referenced in the medical outlets of the ECD field. As trials for such a strategy, we expressed some of our ethnography-derived critique through commentaries about specific ECD articles in the *British Medical Journal Global Health* (Scheidecker, Oppong, et al., 2021) and *The Lancet Child & Adolescent Health* (Scheidecker et al., 2022). A group of medical anthropologists and psychiatrists articulated their concerns in the perspectives section of *The Lancet* (Lachman et al., 2021). With formats like commentaries, perspectives, viewpoints, or essays, these medical journals offer specifically designed forums for academic debates. In our experience, they are open to ethnographic interventions.

In addition to the urgent need for critical engagement with ECD science, in the longer run, ethnography could also make important contributions by studying ECD interventions on the ground to enhance conventional intervention research that is usually based on specific, highly standardized methodologies. Ethnographic approaches would bring the perspectives and practices of the targeted families as well as unintended effects of interventions into the picture, all of which is crucial to aligning family support with the needs and strengths of communities. In this case it would be crucial again to make sure that the practically relevant findings from ethnographic intervention research are actually introduced to ECD practitioners and scientists.

A critical engagement *with* global ECD should not, of course, replace a debate within anthropology and neighboring fields *about* early interventions and the potential role of ethnographic evidence and expertise. By contrast, a critical engagement with global ECD that is powerful enough to make a difference can only benefit from broader debates within the fields that offer ethnographic expertise on children. With this contribution we hope to encourage such debates and exchanges so that a broader critical engagement with global ECD can emerge. This is, in our view, necessary to counteract the wide dissemination of prevailing and allegedly evidence-based claims of poor brain development in the global South and, in the longer run, to contribute to a more balanced knowledge base that might genuinely help families around the world.

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## ENDNOTES

<sup>1</sup>With the term *global South* we refer loosely to regions that are classified as "low- and middle-income" or "developing countries" in most of the ECD literature. We do not wish to imply any commonalities between the countries of the global South except for the crucial fact that they are jointly addressed and treated as being in need of external developmental aid.

<sup>2</sup> ECD partly overlaps with ECCE (early childhood care and education) and other similar descriptions of an applied field that focuses on early childhood. We use ECD because we believe that it has become the dominant notion in recent years, encompassing the others but focusing specifically on developmental outcomes. "Global ECD" is sometimes used in the literature but not yet entirely established. It refers to ECD in the context of international development agendas that are typically directed at "low- and middleincome countries." <sup>3</sup>The three series include *Early Child Development in Developing Countries 2007* (Engle et al., 2007; Grantham-McGregor et al., 2007; Walker et al., 2007), *Early Child Development in Developing Countries 2011* (Engle et al., 2011; Walker et al., 2011), and *Advancing Early Childbood Development: From Science to Scale* (Black et al., 2017; Britto et al., 2017; Richter et al., 2017).

#### REFERENCES

- Ainsworth, Mary D., Salter M. Bell, and Donelda F. Stayton. 1974. "Infant–Mother Attachment and Social Development." In The Introduction of the Child into a Social World, edited by Martin P. M. Richards, 99–135. London: Cambridge University Press.
- Akhtar, Nameera, and Vikram K. Jaswal. 2013. "Deficit or Difference? Interpreting Diverse Developmental Paths: An Introduction to the Special Section." *Developmental Psychology* 49 (1): 1–3.
- Anandalakshmy, S. 1991. "The Female Child in a Family Setting." The Indian Journal of Social Work 52 (1): 29-36.
- Arnett, Jeffrey J. 2008. "The Neglected 95%: Why American Psychology Needs to Become Less American." American Psychologist 63 (7): 602–14.
- Baker-Henningham, Helen, Christine A. Powell, Susan P. Walker, and Sally Grantham-McGregor. 2003. "Mothers of Undernourished Jamaican Children Have Poorer Psychosocial Functioning and This Is Associated with Stimulation Provided in the Home." *European Journal of Clinical Nutrition* 57 (6): 786–92.
- Balagopalan, Sarada. 2014. Inhabiting 'Childbood': Children, Labour and Schooling in Postcolonial India. Basingstoke, UK: Palgrave.
- Banerjee, Abhijit V., Shawn Cole, Esther Duflo, and Leigh Linden. 2007. "Remedying Education: Evidence from Two Randomized Experiments in India." *The Quarterly Journal of Economics* 122 (3): 1235–64.
- Baratz, Stephen, and Joan Baratz. 1970. "Early Childhood Intervention: The Social Science Base of Institutional Racism." Harvard Educational Review 40 (1): 29–50.
- Barlow, Kathleen M., and Bambi L. Chapin. 2010. "The Practice of Mothering: An Introduction." Ethos 38 (4): 324-38.
- Bird-David, Nurit. 2008. "Feeding Nayaka Children and English Readers." Anthropological Quarterly 81 (3): 523-622.
- Black, Maureen M., Susan P. Walker, Lia C. H. Fernald, Christopher T. Andersen, Ann M. DiGirolamo, Chunling Lu, Dana C. McCoy, et al. 2017. "Early Childhood Development Coming of Age: Science Through the Life Course." *The Lancet* 389 (10064): 77–90.
- Blum, Susan D. 2017. "Unseen WEIRD Assumptions: The So-Called Language Gap Discourse and Ideologies of Language, Childhood, and Learning," International Multilingual Research Journal 11 (1): 23–38.
- Boyden, Jo. 1990. "Childhood and the Policy Makers: A Comparative Perspective on the Globalization of Childhood." In Constructing and Reconstructing Childbood, edited by Allison James and Alan Prout, 184–216. Basingstoke, UK: Falmer Press.
- Boyette, Adam H. 2016. "Children's Play and Culture Learning in an Egalitarian Foraging Society." Child Development 87 (3): 759-69.
- Britto, Pia R., Stephen J. Lye, Kerrie Proulx, Aisha K. Yousafzai, Stephen G. Matthews, Tyler Vaivada, Rafael Perez-Escamilla, et al. 2017. "Nurturing Care: Promoting Early Childhood Development." The Lancet 389 (10064): 91–102.
- Chapin, Bambi L. 2014. Childhood in a Sri Lankan Village: Shaping Hierarchy and Desire. New Brunswick, NJ: Rutgers University Press. Chaudhary, Nandita. 2004. Listening to Culture: Constructing Reality from Everyday Talk. New Delhi: Sage.
- Chaudhary, Nandita. 2018. "Cross-cultural Psychology as a Solution to Global Inequality: Optimism, Overconfidence or Naiveté? An Invited Commentary on "The Positive Role of Culture: What Cross-Cultural Psychology Has to Offer to Developmental Aid Effectiveness Research', By Symen A. Brouwers." *Journal of Cross-Cultural Psychology* 49 (4): 535–44.
- Chaudhary, Nandita, Shraddha Kapoor, and Bhavna Negi. 2018. "Individual Achievement and Social Progress: Mending the Broken Alliance between School and Community in India." In *Alterity, Values, and Socialization: Human Development Within Educational Contexts*, edited by Angela U. Branco and Maria C. Lopes-de-Oliveira, 65–86. Cham: Springer.
- Cheney, Kristen, and Aviva Sinervo. 2019. Disadvantaged Childhoods and Humanitarian Intervention. Basingstoke, UK: Palgrave.

Chiao, Joan Y. 2009. "Cultural Neuroscience: A Once and Future Discipline." Progress in Brain Research 178: 287-304.

- Cooper, Peter J., Mark Tomlinson, Leslie Swartz, Mireille Landman, Chris Molteno, Alan Stein, Klim McPherson, and Lynne Murray. 2009. "Improving Quality of Mother-Infant Relationship and Infant Attachment in Socioeconomically Deprived Community in South Africa: Randomised Controlled Trial." *British Medical Journal* 338: b974.
- Daly, Mary. 2013. "Parenting Support Policies in Europe." Families, Relationships and Societies 2 (2): 159-74.
- De León, Lourdes. 2011. "Language Socialization and Multiparty Participation Frameworks." In *The Handbook of Language Socialization*, edited by Alessandro Duranti, Elinor Ochs, and Bambi B. Schieffelin, 81–111. Malden, MA: Wiley-Blackwell.
- De León, Lourdes, and Inmaculada M. García-Sánchez. 2020. "Language Socialization at the Intersection of the Local and the Global: The Contested Trajectories of Input and Communicative Competence." *Annual Review of Linguistics* 7: 421–48.
- Dougherty, Michael R., and Alison Robey. 2018. "Neuroscience and Education: A Bridge Astray?" Association for Psychological Science 27 (6): 401–6.
- Ejuu, Godfrey. 2015. "Is This Early Childhood Development Ours? Deciphering What African Parents Want Their Children to Learn in Early Childhood Development." *Teachers' Work* 12 (1): 30–44.
- Engle, Patrice L., Maureen M. Black, Jere R. Behrman, Meena Cabral de Mello, Paul J. Gertler, Lydia Kapiriri, Reynaldo Martorell, Mary Eming Young, and International Child Development Steering Group. 2007. "Strategies to Avoid the Loss of Developmental Potential in More than 200 Million Children in the Developing World." *The Lancet* 369 (9557): 229–42.
- Engle, Patrice L., Lia C. H. Fernald, Harold Alderman, Jere Behrman, Chloe O'Gara, Aisha Yousafzai, Meena Cabral de Mello, Melissa Hidrobo, Nurper Ulkuer, Ilgi Ertem, Selim Iltus, and The Global Child Development Steering Group. 2011. "Strategies for Reducing Inequalities and Improving Developmental Outcomes for Young Children in Low-Income and Middle-Income Countries." *The Lancet* 378 (9799): 1339–53.

Faircloth, Charlotte. 2014. "Intensive Parenting and the Expansion of Parenting." In Parenting Culture Studies, edited by Ellie Lee, Jennie Bristow, Charlotte Faircloth, and Jan Macvarish, 25–50. Basingstoke, UK: Palgrave.

Faircloth, Charlotte, and Marjorie Murray. 2015. "Parenting: Kinship, Expertise, and Anxiety." Journal of Family Issues 36 (9): 1115–29.

- Fay, Franziska. 2021. Disputing Discipline: Child Protection, Punishment, and Piety in Zanzibar Schools. New Brunswick, NJ: Rutgers University Press.
- Forslund, Tommie, Pehr Granqvist, Marinus H.van IJzendoorn, Avi Sagi-Schwartz, Danya Glaser, Miriam Steele, Mårten Hammarlund, et al. 2022. "Attachment Goes to Court: Child Protection and Custody Issues." *Attachment & Human Development* 24 (1): 1–52.
- Geinger, Feya, Michel Vandenbroeck, and Griet Roets. 2014. "Parenting as a Performance: Parents as Consumers and (De)Constructors of Mythic Parenting and Childhood Ideals." *Childbood* 21 (4): 488–501.
- Gillies, Val, Rosalind Edwards, and Nicola Horsley. 2017. Challenging the Politics of Early Intervention: Who's 'Saving' Children and Why. Bristol, UK: Policy Press.
- Gorski, Paul C. 2012. "Perceiving the Problem of Poverty and Schooling: Deconstructing the Class Stereotypes that Misshape Education Practice and Policy." *Equity & Excellence in Education* 45 (2): 302–19.
- Gottlieb, Alma. 2015. The Afterlife Is Where We Come From: The Culture of Infancy in West Africa. Chicago: University of Chicago Press.
- Grantham-McGregor, Sally M., Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and International Child Development Steering Group. 2007. "Developmental Potential in the First 5 Years for Children in Developing Countries." *The Lancet* 369 (9555): 60–70.
- Grantham-McGregor, Sally M., Christine A. Powell, Susan P. Walker, and John Himes. 1991. "Nutritional Supplementation, Psychosocial Stimulation, and Mental Development of Stunted Children: The Jamaican study." The Lancet 338 (8758): 1–5.
- Greenfield, Patricia M. 2009. "Linking Social Change and Developmental Change: Shifting Pathways of Human Development." *Developmental Psychology* 45 (2): 401–18.
- Greenfield, Patricia M., Heidi Keller, Andrew Fuligni, and Ashley Maynard. 2003. "Cultural Pathways through Universal Development." Annual Review of Psychology 54 (1): 461–90.
- Grindal, Bruce T. 1972. Growing Up in Two Worlds: Education and Transition among the Sisala of Northern Ghana. New York: Holt, Rinehart, and Winston.
- Gupta, Akhil. 2012. Red Tape: Bureaucracy, Structural Violence, and Poverty in India. Durham, NC: Duke University Press.
- Hamadani, Jena D., and Sally Grantham-McGregor. 2004. Report of the Family Care Indicators Project: Validating the Family Psychosocial Indicators in Rural Bangladesh. *Report to UNICEF Early Child Development Desk*. Dahka: UNICEF.
- Han, Shihui, Georg Northoff, Kai Vogeley, Bruce E. Wexler, Shinobu Kitayama, and Michael E. W. Varnum. 2013. "A Cultural Neuroscience Approach to the Biosocial Nature of the Human Brain." *Annual Review of Psychology* 64: 355–59.
- Harkness, Sara, and Charles M. Super. 2006. "Themes and Variations: Parental Ethnotheories in Western Cultures." In Parenting Beliefs, Behaviors, and Parent-Child Relations: A Cross-Cultural Perspective, edited by Kenneth H. Rubin and Ock Boon Chung, 61–79. New York: Psychology Press.
- Harkness, Sara, and Charles M. Super. 2020. "Why Understanding Culture Is Essential for Supporting Children and Families." Applied Developmental Science 25 (1): 14–25.
- Harkness, Sara, Charles M. Super, Oumar Barry, Marian Zeitlin, and Jennifer Long. 2009. "Assessing the Environment of Children's Learning: The Developmental Niche in Africa." In *Multicultural Psychoeducational Assessment*, edited by Elena L. Grigorenko, 133–55. New York: Springer.
- Harkness, Sara, Charles M. Super, Caroline Johnston Mavridis, Oumar Barry, and Marian Zeitlin. 2013. "Culture and Early Childhood Development." In *Handbook of Early Childhood Development Research and Its Impact on Global Policy*, edited by Pia R. Britto, Patrice L. Engle, and Charles M. Super, 142–60. Oxford, UK: Oxford University Press.
- Hart, Betty, and Todd R. Risley. 1995. Meaningful Differences in the Everyday Experience of Young American Children. Baltimore, MD: P.H. Brookes.
- Hart, Jason. 2006. "Saving Children: What Role for Anthropology?" Anthropology Today 22 (1): 5-8.
- Hays, Sharon. 1998. "The Fallacious Assumptions and Unrealistic Prescriptions of Attachment Theory: A Comment on 'Parents' Socioemotional Investment in Children'." Journal of Marriage and Family 60 (3): 782–90.
- Henrich, Joseph, Steven J. Heine, and Ara Norenzayan. 2010. "The Weirdest People in the World?" *Behavioral and Brain Sciences* 33 (2–3): 61–83.
- Hewlett, Barry S. 1993. Intimate Fathers: The Nature and Context of Aka Pygmy Paternal Infant Care. Ann Arbor: University of Michigan Press.
- International Rescue Committee. 2019. "Press Release: The LEGO Foundation Awards US\$100 Million Grant to the International Rescue Committee to Bring Learning through Play to Children Impacted by Crises in Ethiopia and Uganda." Accessed March 21, 2022. https://www.rescue.org/press-release/lego-foundation-awards-us100-million-grant-international-rescue-committeebring.
- Kakar, Sudhir. 1978. Inner World: A Psychoanalytic Study of Childhood and Society in India. New Delhi: Oxford India.
- Kärtner, Joscha, Heidi Keller, and Nandita Chaudhary. 2010. "Cognitive and Social Influences on Early Prosocial Behavior in Two Sociocultural Contexts." *Developmental Psychology* 46 (4): 905–14.
- Keller, Heidi. 2007. Cultures of Infancy. Mahwah, NJ: Erlbaum.
- Keller, Heidi. 2013. "Culture and Development: Developmental Pathways to Psychological Autonomy and Hierarchical Relatedness." Online Readings in Psychology and Culture 6 (1): n.p.

- Keller, Heidi. 2018. "Universality Claim of Attachment Theory: Children's Socioemotional Development Across Cultures." Proceedings of the National Academy of Sciences 115 (45): 11414–19.
- Keller, Heidi. 2022. The Myth of Attachment Theory: A Critical Understanding of Multicultural Societies. London: Routledge.
- Keller, Heidi, Kim Bard, Gilda A. Morelli, Nandita Chaudhary, Marga Vicedo, Mariano Rosabal-Coto, Gabriel Scheidecker, Marjorie Murray, and Alma Gottlieb. 2018. "The Myth of Universal Sensitive Responsiveness: Comment on Mesman et al. (2017)." *Child Development* 89 (5): 1921–28.
- Klein, Pnina S., and Henning Rye. 2004. "Interaction-Oriented Early Intervention in Ethiopia: The MISC Approach." Infants and Young Children 17 (4): 340–54.
- Kuchirko, Yana, and Irena Nayfeld. 2020. "Language Gap: Cultural Assumptions and Ideologies." In International Approaches to Bridging the Language Gap, edited by Cristina-Aránzazu Huertas-Abril and María Elena Gómez-Parra, 32–53. Hershey, PA: IGI Global.
- Lachman, Anusha, Astrid Berg, Fiona Ross, and Michelle Pentecost. 2021. "Infant Mental Health in Southern Africa: Nurturing a Field." The Lancet 398 (10303): 835–36.
- Lancy, David F. 1996. Playing on the Mother-Ground: Cultural Routines for Children's Development. New York: Guilford Press.
- Lancy, David F. 2007. "Accounting for Variability in Mother-Child Play." American Anthropologist 109 (2): 273-84.
- Lancy, David F. 2015. "Children as a Reserve Labor Force." Current Anthropology 56 (4): 545-68.
- Lancy, David F. 2016. "Playing with Knives: The Socialization of Self-Initiated Learners." Child Development 87 (3): 654-65.
- Lancy, David F. 2022. The Anthropology of Childbood: Cherubs, Chattel, Changelings. 3rd ed. Cambridge, UK: Cambridge University Press. LeVine, Robert A. 2007. "Ethnographic Studies of Childhood: A Historical Overview." American Anthropologist. 109 (2): 247–60.
- LeVine, Robert A., Suzanne Dixon, Sarah LeVine, Amy Richman, P. Herbert Leiderman, Constance H. Keefer, and T. Berry Brazelton. 1996. *Child Care and Culture: Lessons from Africa*. Cambridge, UK: Cambridge University Press.
- LeVine, Robert A., and Peggy J. Miller. 1990. "Commentary." Human Development 33: 73-80.
- LeVine, Robert A., and Karin Norman. 2001. "The Infant's Acquisition of Culture: Early Attachment Reexamined in Anthropological Perspective." In *The Psychology of Cultural Experience*, edited by Carmello C. Moore and Holly F. Mathews, 83–104. Cambridge, UK: Cambridge University Press.
- Mageo, Jeannette M. 2013. "Toward a Cultural Psychodynamics of Attachment: Samoa and US Comparisons." In Attachment Reconsidered. Cultural Perspectives on a Western Theory, edited by Naomi Quinn and Jeannette M. Mageo, 191–214. Basingstoke, UK: Palgrave.
- McCarty, Teresa L. 2015. "How the Logic of Gap Discourse Perpetuates Education Inequality: A View from the Ethnography of Language Policy." *Journal of Linguistic Anthropology* 25 (1): 70–72.
- McCoy, Dana C., Jonathan Seiden, Jorge Cuartas, Lauren Pisani, and Marcus Waldman. 2022. "Estimates of a Multidimensional Index of Nurturing Care in the Next 1000 Days of Life for Children in Low-Income and Middle-Income Countries: A Modelling Study." The Lancet Child & Adolescent Health 6 (5): 324–34.
- Mead, Margaret. 1954. "Some Theoretical Considerations on the Problem of Mother-Child Separation." American Journal of Orthopsychiatry 24 (3): 471–83.
- Meins, Elizabeth. 2017. "The Predictive Power of Attachment." Psychologist 30 (1): 21-24.
- Mesman, Judi, Marinus H.van IJzendoorn, and Abraham Sagi-Schwartz. 2016. "Cross-Cultural Patterns of Attachment." Handbook of Attachment: Theory, Research, and Clinical Applications, edited by Jude Cassidy and Phillip R. Shaver, 852–77. New York: Guilford Press.
- Mezzenzana, Francesca. 2020. "Between Intention and Thought: Individualism and Responsibility in Amazonian Child-Rearing." American Anthropologist 122 (3): 540-53.
- Misra, G., Anand Prakash, and Sunet Verma. 1999. "Psychology in India: Perceptions and Perspectives." *Psychology and Developing Societies* 11 (1): 25–53.
- Morelli, Gilda A., Kim Bard, Nandita Chaudhary, Alma Gottlieb, Heidi Keller, Marjorie Murray, Naomi Quinn, et al. 2018. "Bringing the Real World into Developmental Science: A Commentary on Weber, Fernald, and Diop (2017)." *Child Development* 89 (6): e594–e603.
- Morelli, Gilda A., Naomi Quinn, Nandita Chaudhary, Marga Vicedo, Mariano Rosabal-Coto, Heidi Keller, Marjorie Murray, Alma Gottlieb, Gabriel Scheidecker, and Akira Takada. 2018. "Ethical Challenges of Parenting Interventions in Low-to Middle-Income Countries." *Journal of Cross-Cultural Psychology* 49 (1): 5–24.
- Morelli, Gilda A., and Edward Z. Tronick. 1991. "Efe Multiple Caretaking and Attachment." In *Intersections with Attachment*, edited by Jacob L. Gewirtz and William M. Kurties, 41–51. Hillsdale, NJ: Erlbaum.
- Mosse, David. 2013. "The Anthropology of International Development." Annual Review of Anthropology 42: 227-46.
- Ng'asike, John T., and Beth Blue Swadener. 2019. "Promoting Indigenous Epistemologies in Early Childhood Development Policy and Practice in Pastoralist Communities in Kenya." In *Early Childhood and Development Work*, edited by Anne-Trine Kjørholt and Helen Penn, 113–32. Cham, Switzerland: Palgrave.
- Nieuwenhuys, Olga. 1996. "The Paradox of Child Labor and Anthropology." Annual Review of Anthropology 25: 237-51.
- Nilsen, Ann C. E., and Tale Steen-Johnsen. 2020. "The Early Childhood Care and Development Mission and the Institutional Circuit of Evidence." *Journal of Early Childhood Research* 18 (1): 84–98.
- Nsamenang, A. Bame. 2010. "Issues in and Challenges to Professionalism in Africa's Cultural Settings." Contemporary Issues in Early Childbood 11 (1): 20–28.
- Nurturing Care. 2021a. "Country Profiles (2020)." Accessed June 8, 2021. https://nurturing-care.org/resources/country-profiles-2020.

- Nurturing Care. 2021b. "Strategic Actions 2 and 3. Focus on Families and Communities & Strengthen Services." YouTube video, 0:15:39. May 5, 2021. https://www.youtube.com/watch?v=eOYsOxcJH7c.
- Ochs, Elinor. 1982. "Talking to Children in Western Samoa." Language in Society 11 (1): 77-104.
- Ochs, Elinor. 1988. Culture and Language Development: Language Acquisition and Language Socialization in a Samoan Village. Cambridge, UK: Cambridge University Press.
- Ochs, Elinor, and Tama Kremer-Sadlik. 2020. "Ethical Blind Spots in Ethnographic and Developmental Approaches to the Language Gap Debate." Language et Société 170 (2): 39–67.
- Olusanya, Bolajoko O. 2021a. "Dismantling Structural Discrimination in Global Health." JAMA Pediatrics 175 (10): 993-94.
- Olusanya, Bolajoko O. 2021b. "Systemic Racism in Global Health: A Personal Reflection." The Lancet Global Health 9 (8): e1051-52.
- Olusanya, Bolajoko O., Macpherson Mallewa, and Felix A. Ogbo. 2021. "Beyond Pledges: Academic Journals in High-Income Countries Can Do More to Decolonise Global Health." *BMJ Global Health* 6 (5): e006200.
- Oppong, Seth. 2015. "A Critique of Early Childhood Development Research and Practice in Africa." Africanus 45 (1): 23-41.
- Otto, Hiltrud, and Heidi Keller, eds. 2014. Different Faces of Attachment: Cultural Variations on a Universal Human Need. Cambridge, UK: Cambridge University Press.
- Paugh, Amy L., and Kathleen C. Riley. 2019. "Poverty and Children's Language in Anthropolitical Perspective." Annual Review of Anthropology 48: 297–315.
- Pence, Alan R., and Kofi Marfo. 2008. "Early Childhood Development in Africa: Interrogating Constraints of Prevailing Knowledge Bases." International Journal of Psychology 43 (2): 78–87.
- Pence, Alan R., and A. Bame Nsamenang. 2008. "A Case for Early Childhood Development in Sub-Saharan Africa." Working Papers in Early Childhood Development 51. The Hague: Bernard van Leer Foundation.
- Penn, Helen. 2011. "Travelling Policies and Global Buzzwords: How International Non-Governmental Organizations and Charities Spread the Word About Early Childhood in the Global South." *Childhood* 18 (1): 94–113.
- Pentecost, Michelle, and Fiona Ross. 2019. "The First Thousand Days: Motherhood, Scientific Knowledge, and Local Histories." *Medical Anthropology* 38 (8): 747–61.

Power, Thomas G. 2000. Play and Exploration in Children and Animals. Mahwah, NJ: Erlbaum.

- Prioreschi, Alessandra, Stephanie V. Wrottesley, Wiedaad Slemming, Emmanuel Cohen, and Shane A. Norris. 2020. "A Qualitative Study Reporting Maternal Perceptions of the Importance of Play for Healthy Growth and Development in the First Two Years of Life." *BMC Pediatriss* 20 (1): 1–11.
- Prochner, Larry, and Margaret Kabiru. 2008. "ECD in Africa: A Historical Perspective." In Africa's Future, Africa's Challenge, edited by Marito Garcia, Alan Pence, and Judith L. Evans, 117–33. Washington, DC: The World Bank.
- Quinn, Naomi, and Jeannette M. Mageo, eds. 2013. Attachment Reconsidered: Cultural Perspectives on a Western Theory. Basingstoke, UK: Palgrave.
- Rai, Prabhat. 2019. "Building and Using Common Knowledge as a Tool for Pedagogic Action: A Dialectical Interactive Approach for Researching Teaching." In *Cultural Historical Approaches to Studying Learning and Development: Societal, Institutional and Personal Perspective*, edited by Ann Edwards, Marylin Fleer, and Louise Botcher, pp. 151–68. Singapore: Springer.
- Ramaekers, Stefan, and Judith Suissa. 2011. The Claims of Parenting: Reasons, Responsibility and Society. London: Springer.
- Reynolds, Pamela, Olga Nieuwenhuys, and Karl Hanson. 2006. "Refractions of Children's Rights in Development Practice: A View from Anthropology—Introduction." *Childhood* 13 (3): 291–302.
- Richter, Linda M., Bernadette Daelmans, Joan Lombardi, Jody Heymann, Florencia Lopez Boo, Jere R. Behrman, Chunling Lu, et al. 2017. "Investing in the Foundation of Sustainable Development: Pathways to Scale Up for Early Childhood Development." The Lancet 389 (10064): 103–18.
- Rogoff, Barbara. 1990. Apprenticeship in Thinking: Cognitive Development in Social Context. Oxford, UK: Oxford University Press.

Rogoff, Barbara. 2003. The Cultural Nature of Human Development. Oxford, UK: Oxford University Press.

- Rosabal-Coto, Mariano, Naomi Quinn, Heidi Keller, Marga Vicedo, Nandita Chaudhary, Alma Gottlieb, Gilda A. Morelli, et al. 2017. "Real-World Applications of Attachment Theory." In *The Cultural Nature of Attachment: Contextualizing Relationships and Development*, edited by Heidi Keller and Kim Bard, 335–54. Cambridge, MA: MIT Press.
- Rosen, David M. 2007. "Child Soldiers, International Humanitarian Law, and the Globalization of Childhood." American Anthropologist 109 (2): 296–306.
- Röttger-Rössler, Birgitt, Gabriel Scheidecker, Leberecht Funk, and Manfred Holodynski. 2015. "Learning (by) Feeling: A Cross-Cultural Comparison of the Socialization and Development of Emotions." *Ethos* 43 (2): 187–220.
- Saraswathi, T. S., Shailaja Menon, and Ankur Madan. 2018. Childboods in India: Traditions, Trends and Transformations. Abingdon, UK: Routledge.
- Scheidecker, Gabriel. 2017. Kindheit, Kultur und moralische Emotionen: Zur Sozialisation von Furcht und Wut im ländlichen Madagaskar. Bielefeld, Germany: Transcript.
- Scheidecker, Gabriel. 2020. "Unfolding Emotions. The Language and Socialization of Anger in Madagascar." In *The Routledge Handbook of Languages and Emotion*, edited by Sonya E. Pritzker, Janina Fenigsen, and James H. Wilce, 49–70. Abingdon, UK: Routledge.
- Scheidecker, Gabriel. Forthcoming. "Caregivers, Parents, and Peers: Patterns of Complementarity in the Social World of Children in Rural Madagascar." Current Anthropology.
- Scheidecker, Gabriel, Nandita Chaudhary, Seth Oppong, Birgitt Röttger-Rössler, and Heidi Keller 2022. "Different Is Not Deficient: Respecting Diversity in Early Childhood Development." *The Lancet Child & Adolescent Health* 6 (12): E24–25.

- Scheidecker, Gabriel, Seth Oppong, Nandita Chaudhary, and Heidi Keller. 2021. "How Overstated Scientific Claims Undermine Ethical Principles in Parenting Interventions." BMJ Global Health, 6 (9): e007323.
- Scheidecker, Gabriel, Susan Spallek, Kieu Nga Tran, Diemut Geigenmüller, and Birgitt Röttger-Rössler. 2021. "Kultursensible sozialpädagogische Versorgung am Beispiel von Fütterstörungen." Kinderärztliche Praxis 92 (2): 98–102.
- Scheidecker, Gabriel, Giang Thierbach, Hoang Anh Nguyen, and Birgitt Röttger-Rössler. 2020. "Navigation durch schwieriges Gelände. Erziehung und Erziehungshilfe aus Sicht vietnamesischer Migrant\*innen in Berlin." In Ist Zubause da, wo die Sternfrüchte süß sind. Viet-deutsche Lebensrealitäten im Wandel, edited by VLab Berlin, 43–56. Berlin: Regiospectra.
- Serpell, Robert. 2019. "Perspectivist Challenges for ECD Intervention in Africa." In Early Childhood and Development Work, edited by Anne-Trine Kjørholt and Helen Penn, 39–68. Cham, Switzerland: Palgrave.
- Serpell, Robert, Paul Mumba, and Tamara Chansa-Kabali. 2011. "Early Educational Foundations for the Development of Civic Responsibility: An African Experience." New Directions for Child and Adolescent Development 2011 (134): 77–93.
- Serpell, Robert, and A. Bame Nsamenang. 2014. Locally Relevant and Quality ECCE Programmes: Implications of Research on Indigenous African Child Development and Socialization. Paris: UNESCO.
- Serpell, Robert, and Barnabas Simatende. 2016. "Contextual Responsiveness: An Enduring Challenge for Educational Assessment in Africa." Journal of Intelligence 4 (1): 1–19.
- Seymour, Susan C. 1999. Women, Family and Child Care in India: A World in Transition. Cambridge, UK: Cambridge University Press.
- Shaw, Kurt, and Rita de Cácia Oenning da Silva. 2020. "Look Upstream: Measurement for Innovation on the Upper Rio Negro of the Amazon Basin." Frontiers in Pediatrics 8: 1–8.
- Sherwood, Chet C., and Aida Gómez-Robles. 2017. "Brain Plasticity and Human Evolution." Annual Review of Anthropology 46: 399– 419.
- Shizha, Edward. 2013. "Reclaiming Our Indigenous Voices: The Problem with Postcolonial Sub-Saharan African School Curriculum." Journal of Indigenous Social Development 2 (1): 1–18.
- Siagian, Clara, Sandra Arifiani, Putri Amanda, and Santi Kusumaningrum. 2019. "Supporting Children, Blaming Parents: Frontline Providers' Perception of Childhood's Adversity and Parenthood in Indonesia." Social Sciences 8 (2): 64.
- Singh, Bhrigupati. 2015. Poverty and the Quest for Life: Spiritual and Material Striving in Rural India. New Delhi: Oxford University Press.
- Soto, Lourdes Diaz, and Beth Blue Swadener. 2002. "Toward Liberatory Early Childhood Theory, Research and Praxis: Decolonizing a Field." Contemporary Issues in Early Childhood 3 (1): 38–66.
- Sperry, Douglas E., Linda L. Sperry, and Peggy J. Miller. 2019. "Reexamining the Verbal Environments of Children from Different Socioeconomic Backgrounds." *Child Development* 90 (4): 1303–18.
- Start Early. 2018. "Home Visiting from Program to Scale: A Global Perspective." YouTube video, 1:16:00. February 11, 2018. https://www.youtube.com/watch?v=MDPCCZaPEdY.
- Steele, Howard, and Miriam Steele, eds. 2019. Handbook of Attachment-Based Interventions. New York: Guilford Press.
- Stodulka, Thomas. 2016. Coming of Age on the Streets of Java: Coping with Marginality, Stigma and Illness. Bielefeld, Germany: Transcript.
- Super, Charles M., and Sara Harkness. 1986. "The Developmental Niche: A Conceptualization at the Interface of Child and Culture." International Journal of Behavioral Development 9 (4): 545–69.
- Takada, Akida. 2020. The Ecology of Playful Childhood: The Diversity and Resilience of Caregiver-Child Interactions among the San of Southern Africa. Cham, Switzerland: Palgrave.
- Tostan. n.d. "New Leaders of the Breakthrough Generation." Accessed March 21, 2022. https://www.tostan.org/new-leadersbreakthrough-generation.
- Twum-Danso Imoh, Afua. 2016. "From the Singular to the Plural: Exploring Diversities in Contemporary Childhoods in Sub-Saharan Africa." Childhood 23 (3): 455–68.
- UNICEF. 2017. Early Moments Matter for Every Child. New York: UNICEF.
- UNICEF. n.d. "Early Childhood Development." Accessed March 21, 2022. https://www.unicef.org/early-childhood-development.
- United Nations General Assembly. 1989. Convention on the Rights of the Child. United Nations Treaty Series 1577: 3.
- Vargas-Barón, Emily. 2015. Policies on Early Childhood Care and Education: Their Evolution and Some Impacts. Paris: UNESCO.
- Walker, Susan P., Susan M. Chang, Joanne A. Smith, and Helen Baker-Henningham. 2018. "The Reach Up Early Childhood Parenting Program: Origins, Content, and Implementation." Zero to Three 38 (4): 37–43.
- Walker, Susan P., Theodore D. Wachs, Sally Grantham-McGregor, Maureen M. Black, Charles A. Nelson, Sandra L. Huffman, Helen Baker-Henningham, et al. 2011. "Inequality in Early Childhood: Risk and Protective Factors for Early Child Development." *The Lancet* 378 (9799): 1325–38.
- Walker, Susan P., Theodore D. Wachs, Julie Meerks Gardner, Betsy Lozoff, Gail A. Wasserman, Ernesto Pollitt, Julie A. Carter, et al. 2007. "Child Development: Risk Factors for Adverse Outcomes in Developing Countries." *The Lancet* 369 (9556): 145–57.
- Weber, Ann M., Anne Fernald, and Yatma Diop. 2017. "When Cultural Norms Discourage Talking to Babies: Effectiveness of a Parenting Program in Rural Senegal." *Child Development* 88 (5): 1513–26.
- Weber, Anne M., Yatma Diop, Diane Gillespie, D., Lisy Ratsifandrihamanana, and Gary L. Darmstadt. 2021. "Africa Is not a Museum: The Ethics of Encouraging New Parenting Practices in Rural Communities in Low-Income and Middle-Income Countries." BMJ Global Health 6 (7): e006218.
- Weisner, Thomas S. 2002. "Ecocultural Understanding of Children's Developmental Pathways." Human Development 45 (4): 275-81.
- Weisner, Thomas S., ed. 2005. Discovering Successful Pathways in Children's Development: Mixed Methods in the Study of Childhood and Family Life. Chicago: University of Chicago Press.

- Weisner, Thomas S., and Ronald Gallimore. 1977. "My Brother's Keeper: Child and Sibling Caretaking." Current Anthropology 18 (2): 169–90.
- Whiting, Beatrice B., and Carolyn P. Edwards. 1992. Children of Different Worlds: The Formation of Social Behavior. Cambridge, MA: Harvard University Press.
- Whittemore, Robert D. 1989. "Child Caregiving and Socialization to the Mandinka Way: Toward an Ethnography of Childhood." PhD diss., University of California, Los Angeles.
- WHO and UNICEF. 2012. Care for Child Development: Improving the Care of Young Children. Geneva: World Health Organization.
- WHO, UNICEF, and WBG. 2018a. Executive Summary: Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential. Geneva: World Health Organization.
- WHO, UNICEF, and WBG. 2018b. Nurturing Care for Early Childhood Development: A Framework for Helping Children Survive and Thrive to Transform Health and Human Potential. Geneva: World Health Organization.
- Wilinski, Bethany C. 2012. "Conceptualizing the Child: An Analysis of Early Childhood Care and Education Policy in Tanzania." In African Childhoods: Education, Development, Peacebuilding, and the Youngest Continent, edited by Marisa O. Ensor, 141–55. New York: Palgrave.
- Woodhead, Martin. 2016. Early Childhood Development in the SDGs. Policy Brief 28. Oxford, UK: Young Lives.
- Yates-Doerr, Emily. 2020. "Reworking the Social Determinants of Health: Responding to Material-Semiotic Indeterminacy in Public Health Interventions." *Medical Anthropology Quarterly* 34 (3): 378–97.

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