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The Adaptation of Early Childhood Care and Education to Cultural and Local Characteristics in West Africa: Challenges for Educational Psychology Research

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Abstract: This critical review aims to question whether or not the enthusiasm around early childhood care and education (ECCE) programmes is producing premature models, ill-adapted to West African socio-cultural contexts. Reviewing research that investigates the impact of ECCE on cognitive development and school readiness, we first focus on the universal valuing of formal ECCE, supported by both scientific research and international education agendas. Second, we present a classification that provides a framework to grasp the multiplicity of ECCE programmes and models across West African countries and their relevance to local contexts. Based on the literature reviewed, we conceptualise a multilevel model of ECCE within a holistic and ecologic approach. In the third part, we present research that underlines the challenges for educators and their central role in the design of culturally relevant ECCE. The fourth part will draw from research findings and stress the need to rethink appropriate methods and research tools to assess the quality and outcomes of ECCE programmes in West Africa. We conclude by proposing to move away from ECCE perspectives in which marginalised communities are perceived as deficient towards locally relevant and socially just models.

Keywords: Cultural Relevance; Early Childhood Care and Education; Eco-Cultural Perspective; Quality; West Africa.

Introduction

Having established the importance of early development on later school achievement, there is a growing momentum to expand access to early childhood care and education (ECCE) and an international consensus that ECCE should be considered a priority. Indeed, significant advances in the understanding of early brain development have been made in recent years and developmental neuroscience research indicates that early brain development, rapidly evolving in the first three years of life, can be positively affected by environmental stimulation (Dreyer, 2011; Farah et al., 2008; Shonkoff & Phillips, 2000). In this sensitive period, when the brain is particularly susceptible to external influences, it is critical for children to engage in cognitively challenging activities and benefit from a stimulating environment (Burger, 2010; Rushton, Juola-Rushton & Larkin, 2010) Consequently, Sub-Saharan African educational policies, like the rest of the world, have integrated current scientific knowledge, recognizing the early years as critical to cognitive development and later school achievement (Akkari, 2018; Bruner, 2015; Aboud & Hossain, 2011).

The positive impact of ECCE on child development and later school achievement underlie the economic argument for public investment. There appears to be a consensus in the literature on the beneficial long-term effects of high-quality early childhood interventions (Barnett, 1998; Egert, Fukkink & Eckhardt, 2018; Raynolds, Temple, Robertson & Mann, 2001; Rouse, Brooks-Gunn & McLanahan, 2005). The most well-documented effect is related to economic return on investment from preschool education (Heckman et al., 2010; Heckman, 2011). Investing in ECCE provision seems to be one of the soundest, most effective and beneficial public investments for national governments; improving the efficiency and equity of education systems and access to life-long learning.

Notwithstanding the foregoing, there are serious doubts about the applicability of these econometric studies and findings in Sub-Saharan African contexts. The scope and parameters of cost-effectiveness analysis carried out in Europe or North America are not relevant for most majority world contexts (Dasen & Akkari, 2008) (e.g., possible savings in special needs education programmes and penitentiary systems, crime reduction and additional income taxes). Long term impact of ECCE in Sub-Saharan Africa cannot be predicted without an in depth understanding of the complex political and socio-economic reality. Furthermore, great caution must be exercised when extrapolating research findings across the majority world or non-Western Societies. As is correctly underlined by Serpell and Nsamenang (2017), research on child development has been widely based on western middle-class children and been carried out by researchers sharing the same background. Moreover, despite the growing body of scientific evidence, research-policy linkage is not yet sufficiently explicit. Further research is needed to effectively conceive ECCE programmes and identify models able to foster cognitive competence (Blakemore & Frith, 2000; Stone & Lindsey, 1998).

Nevertheless, the widely accepted view that preschool education fosters cognitive development and provides a critical foundation for future learning has led the Education 2030 Agenda to set the ambitious goal (Sustainable Development Goal target 4.2) for governments to ensure equal access to quality ECCE for both girls and boys and improve school preparedness for children entering primary education (UNESCO et al., 2015).

This global agenda has led to increased attention to ECCE from diverse stakeholders. Funding and support provided, among others, by the Global Partnership for Education (GPE) and the World Bank have made possible the implementation of ECCE programmes within education sector plans in many low-income countries. Thereby, by funding basic education including ECCE, GPE has recently become one of the most influential actors in educational policy in the Global South (Menashy, 2016).

The effectiveness of pre-primary and early childhood education has become a universal belief, supported by both scientific research and international education agendas. The scaling-up of programs and the reinforcement of ECCE are central components of the 2030 Agenda for sustainable development (Richter et al., 2017), representing global key policy challenges. Sub-Saharan Africa is no exception to the universal valuing of formal preschool education. This paper will thereby stress the need to reflect on the relevance of imported western scientific knowledge of child development in African contexts and curb the enthusiasm for ECCE programmes heavily influenced by Western culture, insufficiently adapted to the realities of local contexts in the Global South.

Rethinking Models of Early Childhood Care and Education: the case of West Africa

Growing international advocacy and recognition of the importance of ECCE by United Nations and international cooperation agencies have contributed to popularise and promote the idea that early childhood education is costeffective and necessary for inclusive and equitable education. Consequently, Sub-Saharan African countries strive to expand ECCE but unequal access to early childhood education remains a major challenge. Sub-Saharan Africa shows the lowest levels of access to pre-primary education in the majority world. Only 18% of pupils entering primary school have prior ECCE experience and the average expected duration of pre-primary schooling is only 0.5 years (Marope & Kaga, 2017a). Moreover, children aged 3 to 4 from the richest households are six times more likely to attend preschool education than children from poorer households (UNESCO, 2016). "Across world regions, the disadvantaged are least served by quality ECCE, despite the fact that they benefit most from such intervention" (Marope & Kaga, 2017b, p. 6). This wide enrolment gap and low preschool enrolment ratios are major obstacles to achieving equal opportunities for all in Sub-Saharan African countries. It is therefore fitting that ECCE constitutes, at least in political discourse, an important educational and social policy focus. As an example, to illustrate our analysis, let's focus on statistics from four West African countries. In this region, it is important to note that ECCE provision varies significantly across countries. For example, in 2018, the gross enrolment ratio in pre-primary education at the national level had reached 4.4 % in Burkina Faso, 16.9 % in Senegal, 7 % in Mali, and 8 % in Niger (Isu-UNESCO, 2018a, 2018b, 2018c, 2018d). These statistics demonstrate the disparities in access among countries in the region. Moreover, preschooling remains limited in this region despite an increase in access over the last decade. As an illustration, we can compare pre-primary school-age population with enrolment in pre-primary education in these same countries in 2016 (see table 1).

Table 1 Pre-primary School-age Population and Enrolment in Pre-primary Education

Countries	Pre-primary school-age population	Enrolment in pre-primary education
Burkina Faso	1'802'876	55'003
Senegal	1'416'202	224'617
Mali	2'441'802	106'544
Niger	2'133'310	168'879

Source: (Isu-UNESCO, 2016a, 2016b, 2016c, 2016d)

In order to meet the SDG 4.2 target, governments endeavour to increase pre-school enrolment rates (UNESCO et al., 2015) and in some cases, employ alternative strategies. For instance, over the last decade, the Senegalese government has pursued a policy referred to as a "modernization" of traditional Koranic pre-schools (D'Aoust, 2013) in order to integrate these religious institutions to national statistics. In spite of that, the country still has a long way to go to achieve the SDG 4.2 target, particularly regarding quality (Fuentes, 2021). Overall, in the African context, there is a need for clearer ECCE policy and coordination between different state bodies since the plurality of policy actors causes difficulties in terms of resource allocation (Zubairi & Rose, 2016). Based on the research conducted by Fuentes (2021), we propose the following classification that provides a framework to grasp the multiplicity of ECCE programmes and models across West African countries and their relevance to local contexts.

Private Centre-Based Preschool Education

This preschool model responds to a growing demand for preschool education and takes a market-oriented approach.

State-Run Centre-Based Preschool Education

This top-down model refers to preschool provision where the main objective is to prepare children for primary school by developing their school readiness. This model includes pre-school education and pre-primary classes integrated within a public primary school. It has expanded in West Africa largely thanks to external funding for organisations, including the GPE.

Community-Based ECCE:

This bottom-up model, grounded in local communities, results from community initiatives and mobilisation. Its main goal is to foster cognitive, social and emotional development. Government decentralization strategy, adopted by many West African countries, has helped the expansion and development of community-based ECCE programmes often funded by international NGOs.

Religious Preschool:

The overall goal of this ECCE model is to foster religious socialisation which is valued by a large number of parents. This model has developed through the dynamism of religious communities.

The proposed categories are neither fixed nor mutually exclusive. For example, "Cases de Tout-Petits" programmes in Senegal falls between two categories, i.e., arising from community-led initiatives yet mostly relying on public funding, and focusing on both child development outcomes and school readiness. Likewise, a number of Koranic "Daaras" preschools can in many cases be considered both community-based and religious (Fuentes, 2021). In addition, there is a blurring of the boundary between public and private preschool provision. One such example, in Senegal, is the public "maternelles" preschool programme which charges registration and school fees. The financial burden of state-run and private preschool education on families excludes most poor households and leads many families to turn towards community-based ECCE and religious preschool programmes. Fuentes (2021) therefore argues that the Senegalese government pursues a deceptive policy of equal access to public ECCE provision.

Research carried out in Sub-Saharan African contexts fosters a critical perspective of ECCE and challenges universal valuing of western practices and models of ECCE and its imposition in post-colonial, non-Western settings. Broadly speaking, centre-based preschool education in Sub-Saharan Africa is, to a large extent, strongly influenced by Western culture (Hyde and Kabiru, 2008) and has retained western conceptions and standards of ECCE (Serpell & Nsamenang, 2017). Imported centre-based models are, in many cases, inconsistent with local cultural practices and beliefs, out of line with prevailing parental ethnotheories (i.e., parents' cultural beliefs and value system) and ill-adapted to distinctive African realities. Moreover, they fail to incorporate West Africa's rich cultural and linguistic resources. Official languages, imposed by former Western European colonial powers, remain the principle objective of a large majority of centre-based preschool education programmes. Therefore, Pence and Marfo (2008) stress the need to

provide culturally appropriate preschool education, freed from colonial legacies in Africa (Pence & Marfo, 2008). "The origins of much of Africa's difficulty with Western models are embedded in colonial failures to take into account the cultures and knowledge of the African people, including those related to early care and development learning that Africans have preserved for centuries, and which longstanding 'interventions' have not entirely erased" (Pence & Nsamenang, 2008, p. 34). Loomis and colleagues (2018) have further criticised the imposition of centre-based ECCE models as the costs involved in achieving the required quality standard is economically unbearable for most lowincome countries, resulting in poor quality ECCE interventions that have limited impact on child development and school readiness.

While community-based ECCE and religious preschool categories include a wide variety of programmes, with differences in infrastructure, school functioning and levels of educators' qualifications, many authors argue they are more likely to provide contextually relevant educational experience (Fuentes, 2021; Loomis et al., 2018). We can for example easily recognise that community-based and Koranic 'Daaras' or 'Madrasa' programmes take a culturally relevant curricula approach (1) using a familiar language (indigenous languages or liturgical languages); (2) in conformity with prevailing parental ethnotheories and (3) creating a fluid transition between formal and informal education. Evidence is accumulating which indicates that cultural relevance is positively linked to effectiveness of ECCE in Sub-Saharan African contexts. Notably, research conducted by Mwaura, Sylva and Malmberg (2008) in three Eastern African countries (Kenya, Uganda et Tanzania) shows that children who attend Koranic 'Madrasa' preschool programmes have higher cognitive outcomes compared to children attending classes in regular ('nonmadrasa') preschool programmes. Likewise, Martinez, Naudeau and Pereira (2017) research evaluated the impact of community-based ECCE on child development and schooling outcomes in highly impoverished areas of rural Mozambique. Their findings show that community-based programmes have a positive impact on both child development and schooling outcomes. In other words, community-based ECCE and religious preschool models, that are to a large extent culturally relevant and adapted to local contexts, have potentially a greater impact on child development than centre-based programmes and may also foster parental involvement. An important aspect of cultural relevancy resides in the pivotal role of mother tongue and indigenous languages. An extensive body of research, prominently Cummins (2001) work on bilingual education, has challenged the established widespread subtractive education in favour of additive mother tongue-based multilingual education (Ball, 2010a). Mother tongue education in early years brings substantial benefits to child literacy competence in multilingual Sub-Saharan African contexts such as Tanzania and builds literacy foundations for the acquisition of additional languages (John, 2017). Carter Dillon (2013) highlights that "mother tongue education is not only a practical means of improving children's education engagement and attainment, but also sends an important message about the value a government places on indigenous culture and capabilities" (p. 58). Furthermore, research carried out in rural African settings has established that parents can play an important role in their child's literacy development and readiness for school when supported by home and family literacy programs that encourage literacy practices and foster literacy-rich environments using local knowledge and resources (Ngwaru, 2014).

However, the linguistic plurality and language policy in education in West African countries raises important challenges. In West African multilingual societies, children are immersed in multiple languages in different social settings. In Senegal for example, local indigenous languages, mostly used in daily interactions, exist alongside two main exogenous languages: Arabic that is prevalent amongst Senegal's predominantly Muslim population and French the language of government and instruction inherited form the colonial past. The latter is rarely used in daily interactions and remains unfamiliar to most children until school enrolment. The promotion of additive mother tonguebased multilingual education is hindered by a lack of clear language policy for pre-primary education (Ssentanda, 2015) and a social context in which colonial inherited languages retain great social prestige (Serpell & Nsamenang, 2017) and are valued as the medium of instruction by parents (Ephias, Newman & Lilian, 2015).

The research we have reviewed implies that the relevancy of early childhood interventions is key to its effectiveness and supports the call for a paradigm shift in the Global South, stressing the need for indigenising early childhood education. Comparative analysis of ECCE programmes and notably Soudée (2009) work in Gambia, Senegal and Mali has further underlined this need to incorporate and adapt indigenous cultural resources, knowledge and practice into ECCE curricula. Her findings "may be a springboard for UNESCO and partners to further develop ECCE with indigenous knowledge and practice in Africa" (Soudée, 2009, p. 15). This standpoint introduces "a 'stutter' into a powerful international narrative, thereby creating a space for other ideas and perspectives" (Pence & Nsamenang, 2008, p. 5). This entails a move beyond the international and Western-derived singular image of the 'global child' (Pence & Nsamenang, 2008) and global agendas to a more contextualised conception of ECCE quality. As suggested by Campbell-Barr and Bogatić (2017) "The global-to-local paradox is therefore perhaps less about meeting global expectations for quality ECCE and finding culturally located solutions to local problems, but about developing a multidirectional and dynamic relationship between the two" (p. 1468). Therefore, we believe that the adaptation of ECCE in West African contexts should build on the strengths of existing models and develop a relevant multidimensional model of ECCE within a holistic and ecological approach to both child development and school readiness. Bringing formal early childhood education more in line with informal education could be an effective means of fostering culturally sensitive approaches and practices, since informal education is 'embedded in daily life' (Dasen, 2008). This may bridge formal and informal early learning experiences, foster parental involvement, and empower teachers to integrate traditional indigenous languages and knowledge into their practice. Drawing from these research findings, we believe that ECCE in West Africa should pursue two overarching objectives: promote child health, adequate nutrition and proper hygiene through a holistic approach and create a fluid transition initially from families to preschool and then from preschool to school by replacing subtractive education with additive mother tongue-based multilingual education and designing culturally appropriate and meaningful curricula.

Indigenising Early Childhood Education: Challenges for Educators

Community empowerment in the designing and implementation of ECCE programmes is the most reliable way of insuring relevancy (Lauwerier, 2016). Policy-makers therefore need to provide a platform for community involvement and reform the existing educational systems in which educational policy decisions are taken by actors of international cooperation and national governments but often fail to involve communities in the decision-making process (Lauwerier, Brüning & Akkari, 2013). Community stakeholders, in particular preschool teachers and parents, should be recognised as valuable and central partners in ECCE quality assurance mechanisms. Improving governance and provision of culturally relevant education brings, however, significant challenges for educators. Consequently, vocational preschool teacher training plays a key role in ensuring relevancy and good quality. Furthermore, the following points deserve to be emphasised in preschool teacher training programmes in today's West African contexts: develop skills and tools that encourage collaborative relationships with parents and promote parental involvement in formal education; develop strategies to cope with adverse conditions and overcrowding in classrooms; provide necessary skills to ensure a healthy and safe environment for children under their care and promote health and hygiene practices; embrace rather than dislocate children from their cultural heritage. Regarding this last point, we consider that local relevance can be approached from multiple perspectives:

Adapting Educational Materials to Local Context

Preschool teachers should be empowered to design and adapt educational and learning materials to local and cultural contexts, relying on local cultural heritage, knowledge and languages. Africa's rich oral tradition, including proverbs and stories, can for example provide a base for culture-sensitive educational material. A major challenge is however for preschool teachers to recognise local knowledge, as a rich resource that can be included in curricula material (Ngwaru, 2014). Ngwaru (2014) further adds that "in the African context, literacy-rich environments need not be created form western conventional books and school-based activities but from the vast sociocultural resources embedded in daily activities in a variety of settings" (p. 73).

Integrating African Games

One of the most promising strategies is to encourage preschool teachers to integrate local African games in ECCE programmes. This approach not only places value on indigenous culture and builds a bridge between family and preschool culture, it is also affordable, sustainable and generally uses local games made out of locally available and easily recyclable materials. Moreover, indigenous African games have a high potential to foster the development of sensory-motor skills and support socio-cognitive and emotional development (Berinstein & Magalhaes, 2009; Burnett & Hollander, 2004; Nyota & Mapara, 2008). In a participatory action-research carried out in Madagascar between 2010 and 2015, Akkari and Rakotozafy (2014) were able to underline both the great potential and the difficulties of integrating local indigenous games into ECCE programmes. We started by asking preschool teachers to identify traditional games that could be used in preschools. Initially, the teachers were not able to recognise any games as valuable resources for educational practices. After numerous discussions, they found several games, both regional and national and were able to classify them according to age and type. This resulted in a brochure presenting 29 traditional Malagasy games appropriate for preschool education to be used by preschool teachers. This experience shows that it is difficult to convince early childhood educators that their culture holds a great potential in making ECEC more relevant. But, when they observe the potential of their culture heritage they become creative.

Overall, research in African contexts have shown evidence of abundant resources to support child development. This treasure, neglected and underestimated by teachers and policy-makers, has significant educational potential. The African child develops when not culturally uprooted and when the first years of schooling are not reduced to a forced conversion to exogenous 'modernity'.

Embracing African Dances and Music

Music and dance, that play an important part of a child's social enculturation in Africa, has great potential to provide a culturally relevant and developmentally appropriate educational experience (Serpell & Nsamenang, 2017) and ensure a natural transition from home-life to ECCE. Furthermore, evidence shows that enjoyable and rewarding experiences of engaging with music can positively impact child development and strengthen motor, social, emotional and communication skills (Hallam, 2010). Preschool teachers should therefore embrace this rich cultural heritage and incorporate traditional dances and songs to ECCE curricula. Fuentes (2021) study in Senegal shows that children greatly appreciate music and dance activities within ECCE programmes but the availability and/or condition of musical instruments prevents the wide-scale uptake of such activities.

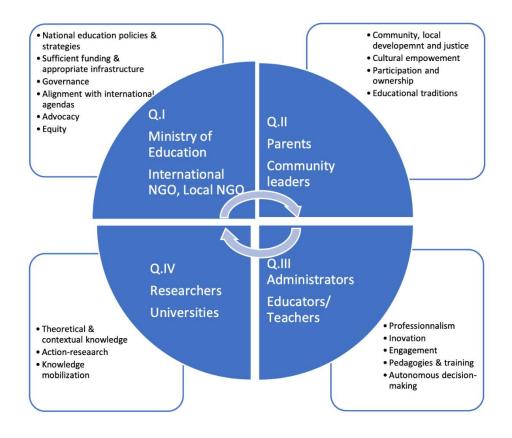
In this section, we have chosen to focus on the aspects that directly involve educators in the development of relevant and context-specific preschool education. However, preschool development must be conceived in a broad approach that involves all stakeholders. In this regard, the Multilateral Model for Decolonising African Educational Leadership developed by Loomis and Akkari is insightful.

The Authors Explain

The impact of educational leadership is particularly pronounced in African contexts, which confront educational actors with particular challenges such as poverty, malnutrition, alienation, violence. Educational leadership can lead actors to tackle these problems and resolve their differences, to abandon their power struggles and unite around a common project of developing quality education, the design and implementation of which is coordinated by a group of competent people. (Loomis & Akkari, 2021, p. 635)

This model is based on the past-present continuum (inner most arrows) circulating across four dynamically interacting core groups of actors (inner quadrants) to generate and ensure several responsibilities (outer quadrants) (Loomis & Akkari, 2021). The authors offer suggestions "for analysing educational leadership policies and research that will decolonise educational leadership in post-colonial African countries" (Loomis & Akkari, 2021, p. 636).

Figure 1 Multilateral Model of African Educational Leadership



Source: Loomis & Akkari (2021)

Indigenising Early Childhood Education: Implications for Educational Psychology Research

The call to adapt early childhood education to cultural and local characteristics is in conflict with an international agenda driven by accountability, in which both quality and impact are evaluated through quantitative methods and standardised tools for the purpose of international comparison. We can question the relevance and implications of using tools based on a Western conception of ECCE quality in Sub-Saharan African contexts. Despite efforts to adapt imported standardised tools, they remain inadequately adapted to contemporary African contexts (Serpell & Haynes, 2004) and show limited ability to evaluate community-based and religious ECCE quality and outcomes. Moreover, tools such as The Early Childhood Environment Rating Scale-Revised (ECERS-R), are "increasingly used as a global standard of quality" (Pérez & Saavendra, 2017, p. 8), unattainable for most majority world countries (Loomis et al.,

2018). Hence there is an urgent need to design and adapt methods and indicators that reflect both local conceptions and locally relevant determinants of early childhood educational quality. This can be achieved through applied qualitative research involving local experts, educators and community members, often ignored by the international community. Likewise, the adoption of Western standardised cognitive development and school readiness assessment tools in Sub-Saharan African contexts give rise to problems of validity; creating construct, method and item bias (Abubakar & Van de Vijver, 2017). Although some tools have attempted to adapt to different local contexts by modifying items to better take into account the child's socio-cultural context, the adaptations remain superficial as they do not question the underpinning western-centric understanding of child development. These standardised tests are based on psychological child development theories, erroneously considered universally valid and applicable.

Although challenged by ecological models of human development, mainstream developmental psychology still essentially operates within an epistemological framework that considers "development as a series of universal and natural ("biologically based") processes within the child that are largely independent from the relevant historical and cultural context" (Demuth, 2017, p. 213). The vast majority of developmental psychology theories are empirically established "on a minute fraction of humanity" (Dasen, 2012, p. 55) from a narrow and unique cultural context. Crosscultural psychology has attempted to overcome ethnocentrism and test the universal validity of psychological theories, notably Piaget's theory of cognitive development. "Many aspects of human development and functioning are no doubt universal, such universality cannot be postulated on the basis of research in a single cultural group; it must be demonstrated empirically across a variety of human populations" (Dasen & Jahoda, 1986, p. 413). Cross-cultural psychologists and educational anthropologists have demonstrated the influence of ecocultural context on the developmental niche (Super & Harkness, 1997) and child development. Although their findings invalidate the universal scope of western child developmental theories (Berry et al., 2002) their influence on mainstream psychology remains minimal (Dasen & Akkari, 2008). The 'Reconceptualizing Early Childhood Education' movement, which first began in 1989 in the United States, informed by research in the field of cross-cultural psychology, social and cultural anthropology, advocates for ECCE free from positivist epistemology and the dominance of developmental psychology (Bougère & Vandenbroeck, 2007). This postcolonial and postmodern movement rejects the concept of a standardised model of child development and the use of standardised quality and outcome assessment tools in ECCE (Tobin, 2007). It is part of an emerging paradigm, in which psychology is downgraded in favour of ethical and political considerations and where quality is understood within an ecological framework (Brougère & Vandenbroeck, 2007). Moreover, this movement calls for researchers to design contextually appropriate tools capable of taking into account diversity in ECCE.

In light of the foregoing and the growing call to indigenise ECCE, the need to rethink and develop culturally appropriate and adequate assessment tools for Sub-Saharan African contexts is stronger than ever. To this end, we incite researchers to use a mixed-method approach, allowing for both etic (i.e., between cultures) and emic (i.e., within a culture) approaches to child development. "Cross-cultural psychology should combine the etic and emic methods, which are not conflicting but mutually enriching. On the etic side, it is useful and even indispensable to put existing theories (whatever their cultural origin) to the cross-cultural test, but only with an emic approach is it also possible to discover previously unknown phenomena" (Dasen, 2012, p. 62). Emic data can be collected through various methods such as ethnographical observations, interviews, focus groups and participatory research methods that place community members at the centre of the process. These qualitative approaches can contribute to better understand, African ontology, parental ethnotheories, parenting practices and infer what can be considered healthy child development in a specific eco-cultural context (Abubakar & Van de Vijver, 2017).

"The most useful and culturally appropriate approach may be for educators and other practitioners to rely upon members of cultural communities to describe and explain optimal and normative development and developmental supports and to identify indicators and exemplars of development that represent deviations from normative expectations within the child's cultural context. These within-community standards can be discussed with reference to developmental norms based on research, and decisions about the goals for early learning programs and interventions can be guided through a negotiation of culturally based reference points and by external considerations, including considerations of the task demands that children will face in the school they will attend" (Ball, 2010b, p. 3).

Etic data collection based on imported standardised tests needs to be adapted to local contexts through a systemic approach where local experts and community members are involved in all stages of the adaptation process, e.g., translations, accurate reformulation and refining scales through pretesting and piloting (Abubakar & Van de Vijver, 2017).

We postulate that a triangulation of etic and emic data may be an effective method to determine healthy development within the child's ecocultural context.

Likewise, readiness for school needs to be evaluated within a comprehensive understanding, socially constructed and ecological framework which "requires the research community to move beyond tests of efficacy and effectiveness" (Snow, 2006, p. 30) A child's readiness for school resides in the interaction between child development and multiple elements of a child's environment (Snow, 2006) and goes far beyond a narrow range of individual performance tasks (Falchi & Friedman, 2015).

Conclusion and Implication for Future Research

In this critical review, we have attempted to provide a critical reading and analysis of the universal valuing of formal preschool education in West Africa. This exercise leads us to draw some conclusions: First of all, the African continent, more than other regions of the world, needs to rethink its school model: from early childhood education to university. The model inherited from colonisation and prolonged by nation-states has proved sterile and unable to meet neither the needs of learners nor the demands of socio-economic development. As suggested by Brock-Utne (2002) 'education for all in Africa turns out to be Western primary education for some, and nothing for others. Her incisive analysis demonstrates how this construct robs Africans of their indigenous knowledge and language and thereby perpetuates Western dominion. Second, we need to identify what are the most determinant factors of ECCE quality in West African contexts in order to conceptualise a relevant multidimensional model of ECCE within a holistic and ecological approach to both child development and school readiness, build partnerships with families and local communities and design a culturally rooted and meaningful curricula. This model needs to provide mother tongue education and include West Africa's rich cultural and linguistic resources. Thirdly, there is a need to determine appropriate research methods to evaluate ECCE quality in Sub-Saharan contexts. As noted by Alexander (2008) and Buckler (2011), there is an over-reliance on quantitative indicators to measure educational outcomes. The use of standardised tools remains the predominant means of measuring quality in education (O'Sullivan, 2006). Although these tools can give some indications of quality, their scope is limited and their relevance to Sub-Saharan contexts is questioned. These authors therefore argue that we need more classroom observations and qualitative measures.

Finally, the indigenisation of psychology is useful to better adapt ECCE outcome evaluation tools and to reconceptualise what school-readiness and healthy child development means in African ecocultural contexts. Researchers, psychologists and educators ought to conduct the delicate mission of efficiently adapting outcome evaluation tools while finding a balance between ensuring validity within local contexts and international comparability. Rethinking early childhood education is a priority that will remain so for the coming years. This will require a deconstruction of the dominant conceptions in this sector, in Africa and elsewhere (Cannella, 1997). As advocated by Pérez and Saavedra (2017), we need to move away from ECCE perspectives in which marginalised communities are perceived as deficient towards a more equitable and socially just early childhood education.

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