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What does 'child development' tell us about early childhood programming and the participation of children?

Dr Helen Penn

The author is Professor of Early Childhood at University of East London. She is also a Research Fellow at the Institute of Education, London University.

The background to child development

Child development is a highly academic subject. Most of the work in the field is empirical and theoretical. It is conducted mainly by psychologists through experiments which investigate very specific aspects of children's social and cognitive functioning. For example, the most recent edition of the prestigious journal *Child Development* contains articles with titles like "Infant vocal-motor co-ordination: precursor to the gesture speech system" and "The development of symbol-infused joint engagement." There are no longer any over-arching theories of child development – as Piaget, 70 years ago, seemed to promise. Piaget assumed that child development was in one sense a journey towards the acquisition of logic. Rational thought could only be achieved in adolescence or adulthood. Children had to pass through many stages – aided by adults – before being able to think logically. This assumption has been fairly conclusively rejected in the psychological literature. Children, even young children, are capable of reasoning and thinking logically within the limits of their knowledge and experience, and there are many experiments that demonstrate children's ability to reason.

This Commentary section is intended to contribute to the international debate on early childhood issues by presenting the views and observations of a noted practitioner or academic in the field. The views expressed are those of the authors and do not necessarily reflect the policies or views of the Foundation. Join with us in stimulating dialogue on the topic under review by sending your thoughts on the article that follows or, indeed, any other section of this issue of *Early Childhood Matters.* All correspondence should be sent to: ecm.epi@bvleerf.nl

Instead of grand theories, there are many technical discussions about tiny and often peripheral aspects of children's behaviour. These do not add up to a coherent whole, and are certainly not intended as guidance to practitioners working with children.

The author of one best-selling contemporary textbook on child development, leading psychologist Michael Cole, says that it is best to think of child development as a series of useful – but probably, in the end, unanswerable – questions about childhood. Is nature more important than nurture? Does genetic inheritance matter more than good environments? Are the early years the most important, or can children – and adults – develop and change at any age if the circumstances are right? Does the development take place in identifiable stages, each stage building on the previous one, or is development a much more irregular and uneven process? Over the years, psychologists have come up with different slants to these questions and have given different answers to all of them.

Cole sums up by saying *"the practice of developmental psychology cannot rely heavily on precise scientific formulas to explain and produce dependable solutions to problems the way the formulas of physics guide engineers".* In his view there are no definitive answers. Child development offers some signposts to practice, which may be useful in some circumstances, but useless in others;

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much depends on how practitioners interpret these imponderable questions and technical findings. The famous US psychologist William Kessen suggested there were fads and fancies in the way early childhood is investigated; child development offers *"a history of rediscovery… with some modest advances towards truth"*.

Does early intervention work?

However, driven by economic and policy concerns in the USA, there is a sub-branch of child development concerning 'early interventions', which is much more positivistic and less prone to self-doubt. 'Early Interventions' is the name given to attempts to shape or change children's behaviour through teaching parenting skills, offering education programmes in centre-based care, home visiting and so on. Some psychologists believe that these early interventions can be systematically measured and tell us what works best. The most famous intervention study of all, cited over and over again in the World Bank and other literature, is the Perry High Scope project. A group of 123 children were randomly assigned to an intervention group who took part in the High Scope part-time early education programme, and a control group who did not. The intervention group appeared to perform better in the long run, and seemed less likely as young adults to get into trouble. (The High Scope project estimated that for every dollar spent on early childhood, 8 dollars would be saved: a figure that has been repeated again and again in the ECEC literature). Other long-term interventions, for example the Abecedarian project in North Carolina, offered a more intensive intervention, which offered childcare and education over a longer period, but although it has some positive effects, it did not produce the same results for crime-reduction and did not make the same kinds of long-term savings.

These early intervention studies are used by US economists and policy makers as the main source of evidence for investing in early childhood education and care. Perhaps such studies can prove that early intervention makes a difference in later life? There have been a number of recent, weighty, cost-benefit reviews in the USA with titles like "Diverting children from a life of crime". Is it cheaper in the long term to invest in early childhood interventions to stop poor (usually black) children from becoming criminals? As the economist Janet Currie notes in a review paper on early intervention for the US National Science Foundation, *"many would argue that the ultimate goal of early intervention is to produce 'better' adults, where 'better' is measured in terms of things like schooling attainment, earnings, welfare use, and crime rates."*

Early interventions are intended to turn children into 'better' people who will contribute to society rather than being a drain on it. Not everyone agrees with this perspective of course. In a recent article, the North American psychologist Jeanne Brooks-Gunn has written a scathing report about early intervention programmes entitled *"Do you believe in magic?: What we can expect from early childhood intervention programs"*. She argues that although children might benefit from ECEC, being brought up in an impoverished environment is damaging to children at any age. The biggest problem for children and their families is not so much an individual one (i.e. learning useful skills) but a structural one: living in a poor community in an unequal society.

The limitations of research in child development

Apart from the thorny, but important, question of early intervention, there are broader criticisms of child development. Some critics suggest that much research in child development is seriously flawed in its scope and sampling. For example another recent article in *Child Development* entitled "Studying the effects of early child care experiences on the development of children of color in the United States: Towards a more inclusive research agenda" suggested that research in child development has downplayed the importance of context and largely ignored or misunderstood the position of poor blacks and Hispanics in the USA.

Research in child development focuses almost exclusively on North American and European children. It has been accused of misrepresenting the position of people of colour in the USA. But it could also be accused of failing to investigate the position of children in the South (the developing countries). Certainly, topics like HIV/AIDS, war and migration, very common experiences for many of the world's children, barely figure in psychological discussions on child development – for example in discussions about attachment. This is partly because many psychologists assume that, like the development of the body, the development of cognitive, social and emotional attributes in children is universal. Although children's life circumstances may differ considerably, the processes of development are said to apply to all children. Piaget for example thought he was uncovering universal age-related stages, which every normal child would pass through. If it follows that child development patterns are universal, it does not matter too much where research is carried out.

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But not all psychologists would agree with this assumption that normative behaviour patterns can be established. Robert Serpell, a psychologist who has worked for a long time in Africa, has pointed out that the major life experiences of so many children have been excluded from psychological investigation. US children constitute less than 5% of the world's children; children in the developed world make up roughly a further 18%. If we consider that the environment in which children grow up is a critical one, then we have to be very careful about the generalizing from the behaviour of such a small percentage of children who live in the USA. We need to know much more about other kinds of environments, both highly adverse environments and much more egalitarian ones.

Culture counts

Anthropologists are still more critical of the universalist assumptions of child development. Robert LeVine, the highly respected Harvard anthropologist, and the group of colleagues working with him, systematically compared caregiving in East Africa and in the USA. He describes the intensely collective upbringing of the East African children where there is little or no explicit caregiver focus on the development of word games or language (although there may well be bilingualism or multi-lingualism), and that of a typical North American child. Compared with Africans, American infants experience a particularly sharp distinction between situations in which they are alone and those in which they are with others. African infants are never alone and are often present as non-participants in situations dominated by adult interaction, while the American infant is often kept in solitary confinement when he is not the centre of adult attention. This creates (for the American) a bifurcation between the extremes of isolation and interpersonal excitement that is unknown in Africa and may underlie some of the striking differences in interactive style between peoples of the two continents.

> *'From infancy onwards, the (American) child is encouraged to characterize himself in terms of his favourite toys and foods and those he dislikes; his tastes, aversions and consumer preferences are viewed not only as legitimate but essential aspects of his growing individuality – and a prized quality of an independent person'.*
>
> (LeVine, 2003: 95).

Other anthropologists, for example Alma Gottlieb at the University of Illinois, have also investigated in detail the upbringing of non-American children. Gottlieb's study of the caregiver styles and infant responses of a small community in Côte d'Ivoire is a brilliant demonstration of how deeply culture matters – and how culture in turn is shaped by social and economic factors.

Child development unfortunately does not offer neat interpretations of childhood. It is a fragmented collection of ideas and inspired guesses; a patchwork of experiments and investigations. As a discipline it is unique in focusing on young children, and, as Michael Cole suggests, may help us try to frame some key questions about early childhood; but it also encompasses many contradictory viewpoints. For example the idea of *Developmentally Appropriate Practice,* the manual issued by NAEYC (The National Association for the Education of Young Children), has heavily influenced early childhood education programming worldwide. It draws strongly on the assumption of universalism. Its basic underlying assumption is that we know enough about young children to be able to issue a prescriptive guide to practice which can be used, with minor adaptations,

anywhere in the world. Others would argue that such a guide is heavily influenced by a particular societal viewpoint, that of the USA, and cannot be universally applied.

Children's participation

Where does participation of children figure in all this? The debate about the rights of the child is one which has only marginally influenced child development, most noticeably in the field of ethics. Psychologists are much more careful about experimenting with children, and much stronger guidelines are in place from the various associations of psychologists about respecting child rights.

To a greater or lesser extent, in child development there is an emphasis on what can be done with or to children to help them acquire certain kinds of cognitive and social skills, since these skills will help them cope better with the adverse circumstances of their life. In some of the early intervention studies, in particular, there is an instrumental view of children, as creatures to be shaped so that they do not cause trouble later on. A dose (the actual word used in one report) of early childhood programming can act as a vaccination against poverty and crime Such an approach (as well ignoring the relationship between poverty, inequality and crime) is oblivious to any exploration or discussion of what young children themselves might enjoy doing; what might give their lives pleasure and purpose in the here and now. In these accounts children are disregarded as people and seen as less than fully formed.

Another, related, underlying assumption of most psychological research in child development is that the norm for children is to grow up in a benign environment under adult supervision, and protected against harm. Children are seen as essentially vulnerable and in need of adult protection. Yet a benign environment does not exist for many millions of young children. More research about children's coping strategies, or young children's ability to undertake informed decisions on major life crises, is surely necessary in the light of HIV/AIDS.

More challenging illustrations of young children's autonomy and competence have hardly been studied at all in the field of child development. Gottlieb in her Côte d'Ivoire study notes how independent some very young children are – 4, 3 and 2-year olds confidently playing out of sight of adults, or going shopping, or helping with household chores – using adult cooking utensils. Other anthropologists have also noted how children as young as 2 can run errands, and fetch and carry. Care for siblings is normal. (My own 6-year-old African grandson cares willingly and capably for his 3-month-old baby sister – carries her, comforts her and entertains her). Encouraging this degree of autonomy and self-reliance in children would be regarded as wilfully risky or exploitative in many developed societies.

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Self-esteem is regarded as an important issue in some of the work on children's learning. Clearly, motivation and belief in one's efficacy as a learner plays an important part in learning. We learn because we want to learn and we know we can. The West-African novelist Camara Laye described how he felt beginning school.

> *"We were remarkably attentive, and we found it no strain to be so. Young though we were, we all regarded our school work as something deadly serious. Everything we learned was strange and unexpected; it was as if we were learning about life on another planet; and we never grew tired of listening... An interruption was out of the question; it simply did not occur to us."*

But how do children gain self-esteem and a belief in themselves and their own efficacy? As Camara Laye implies this is also partly a cultural question. LeVine argues that in contributing to household and communal tasks in the African societies he observed, young children are needed and wanted. They belong, without requiring praise or reward.

Clearly, motivation and belief in one's efficacy as a learner plays an important part in learning

> *"The constant presence of young children in family life whilst rarely being the focus of attention, and their participation in the productive and other activities of the household from an early age appear to offer emotional security without the verbal expressiveness by the mother and others… Making sense of this will require changes in our notions of emotional and communicative development".*

In societies in the developed world where children are age segregated and generally lead separate lives from adults, promoting a sense of belonging and participation needs careful planning. Conversely 'participation' and 'consultation' may seem strange concepts in communities where children are seen less as separate individuals and more as necessary participants in communal tasks. Respect for elders is a cornerstone of some communities. Children may be treated as minors who do not achieve adulthood and the right to speak and challenge their elders until they are married, with children of their own, or perhaps not even then. ("You are my son and you will always obey me" I heard one of my African relatives say!) Physical chastisement of children is common in some communities; and how to address it as an outsider is highly problematic. Similarly, gender inequalities may be very oppressive. But paradoxically, children's level of participation in such patriarchical communities may still be greater in some ways than in a conventional middle-class white Euro-American community. As Boyden has pointed out, the Convention on the Rights of the Child, whilst a useful benchmark, presumes a level of individualism which does not fully take account of the wide cultural variation in the way in which children join in and are seen as part of their immediate community.

New directions

The early childhood lobby draws heavily on universalistic assumptions such as the belief that all children develop in similar ways, and there

are universally recognized good practices which support such development. It has also relied heavily on instrumental justifications for early childhood programmes and repeats the argument that children who participate in early childhood programmes will do better in school, be more economically active adults and be less inclined to take to a life of crime. Both the universalistic approach and the instrumental approach rely in turn on highly specific research evidence from North America (and to a lesser extent Europe). Some commentators argue that it is relevant to take such evidence into account, because all societies will follow the same path as the USA in the end:

> *…[F]actors commonplace in industrialized countries are inherited by developing countries as they advance. Thus the developmental outcomes of poor children in the United States may be predictive of outcomes of children in developing nations.*
> (Scott et al 1999: *Food and Nutrition Bulletin)*

Other commentators are much more critical and argue that child development, if it is worth its salt, must engage more with the everyday contexts of the majority of the world's children. At the very least the early childhood lobby needs to engage with the conceptual boundaries of child development and the limitations of the evidence on which it draws. The new emphasis on child participation makes it more urgent that they do so. Child development is intrinsically concerned with young children. Psychologists attempt to define and explain what children can do in what kind of circumstances, and how those working with or caring for them can support or foster various kinds of skills and attributes. These are important aims. But as Gerison Lansdown has also pointed out, children do not live in a world apart, they are also thinking, feeling people, living their lives with us adults. They live and experience life with all its victories and vicissitudes in the present, as we all do – perhaps more intensely. As well as being the object of psychologist's scrutiny, they are movers and shakers in their own right. Gerison has argued that the Convention on the Rights of the Child is a legally binding obligation that requires us to take children's views very seriously indeed. This is a timely lesson for child development, which has so far erred in the other direction.

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The school under the mango tree

Mighty children grow from little seeds

An interview by Rosangela Guerra with Tião Rocha, President at Centro Popular de Cultura e Desenvolvimento

The Popular Centre for Culture and Development (CPCD) is a non-profit-making NGO based in Minas Gerais, south east Brazil. Founded in 1984, it has won national and international acclaim for its creative work in combining popular education with community development. This interview explores the Sementinha ('little seed') Project, which creates schools distinguished by their lack of a physical base and their determination to treat young children as equal partners in their own education.

Sementinha was the first project created by the CPCD. Aimed at 4–6-year olds, it focuses on such objectives as developing mutual respect and cooperation, self-esteem and identity, citizenship and awareness of hygiene and health. It was held up as an 'exemplar of an educational model for third world countries' by the Organização Mundial de Educação Pré-Escolar (World Organisation for Pre-School Education) in 1987 and has since spread to 13 locations in Brazil and been replicated in Mozambique.

Can you tell us why the Sementinha Project is also known as the 'school under the mango tree'?
We started this project because many young children were not attending school in the city of Curvelo in Minas Gerais. It was clear that something had to be done, but it would be a problem to put up new school buildings. So we posed the question: 'Is it possible to provide an education without making buildings?' Because there were a lot of mango trees in the city, we asked: Is it possible to make a school under a mango tree?

And that was how the Sementinha, or school under the mango tree, was created. The name is a metaphor for a school that does not necessarily need a building to be able to offer quality education for early childhood. The Sementinha is an itinerant school. Teachers and children meet somewhere in the community that is known to them all – it could be a church hall, a room belonging to some district association, or somebody's house.

The children move around various community spaces, doing activities that entertain them, challenge them and form them as citizens. The school is the neighbourhood, the streets, the squares, the houses. The education is inspired by the community's culture, the knowledge and practices and aspirations of the local people. The teachers are all those who sit in the circle: the schoolteacher, the children, their parents and grandparents. We believe that education must be an equal relationship that involves learning on all sides.

You first developed the Sementinha Project 20 years ago. Who was involved and how did you come up with the idea?
We were a group of around 26 community members, teachers and volunteers who were interested in discussing these issues. We got talking and thinking about what such a school would be like, what its concept and design would be. In the end we observed that we spent more time talking about the kind of school that we didn't want than the kind we did. So we turned all of this into 13 'non-objectives'. In other words the project started off back-to-front, with the things that we didn't want to reproduce.