

Are cultural ecology and cultural models the most important influences in human development?

LeVine, Robert A., Dixon, Suzanne, LeVine, Sarah, Richman, Amy, Leiderman, P. Herbert, Keefer, Constance H., and Brazelton, T. Berry.

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Review by Thomas S. Weisner

Imagine a neurologically sound infant a few days old. What is the single most important thing that is going to shape that child's development? I have asked colleagues and students in a variety of fields interested in human development that question. The most common answers include: Love the child; stimulate the child's cognitive and linguistic development; touch, hold the child; feed and shelter it appropriately; provide it with wealthy parents; and understand its genetic endowment.

Every one of these are important influences on children's development, and they all appear in Child Care and Culture. But rarely do most audiences give the rich answer that Robert LeVine and his coauthors offer: the single most important feature (but certainly not the only one) shaping the future of that child, is the cultural world where the child is about to grow up. How and why do parents in a particular cultural community love their child or feed it, what goals and cultural models organize the meanings behind these practices, and what adaptive problems do communities face in trying to achieve their cultural goals for children in a particular ecology?

Child Care and Culture is a study of the profound consequences for parenting and children's development of the cultural models and ecology of the Gusii of Western Kenya. It is also an exemplar of considering first of all, a

non-individualistic, culturally rich response to the question of what is the most important thing in development. The Gusii of Western Kenya are an agropastoral, as well as currently mixed cash economy, patrilineal, polygynous society of over a million. Gusii mothers cultivated their husband's land, sometimes engage in trade, and live in a heirarchical domestic economy. As in much of sub-Saharan Africa, parents face the task of insuring infant and child survival under conditions of high mortality and morbidity. This drives high fertility, a birth interval of 2 - 3 years, heavy workloads, and complex and difficult choices for women-headed households. The married woman is responsible for providing for the child; men remain more distant from direct child care, providing land and perhaps cash assistance. Sibling caretaking of children is common, as is prolonged breastfeeding, a heirarchical dominance structure in the family, and gender separation in many domains of life. Change is continuous in Gusii history, from precolonial settlement to the present.

Gusii as well as American middle class white cultural models of child care include a moral direction, a pragmatic design, and a set of conventional scripts for action that shape development. The Gusii have a Pediatric cultural model emphasizing infant protection from mortality and other threats through the use of soothing by responding to infant distress immediately and by modulating infant excitement. This pattern slowly decreases over the first 30 months of life. The American white middle class Pedagogical model in contrast, has a goal of active engagement and social exchange through the use of stimulation and protoconversations; caretakers are responding to babbling and provide elicitation frames encouraging excitement, questions, and the giving of verbal praise, which increases over the first 30 months of life. The Gusii also utilize a Respect-Obedience cultural model, emphasizing compliance, comprehension of maternal commands, infrequent praise, and

few demands by the child -- all contributing to the role of the child in the family hierarchy.

These models are presented as analytical types, definitely not as reifications of rigid practices in each culture. Each model has an adaptive history, contemporary costs as well as benefits, and shows internal variation across individuals and families in how they are used and the level of commitment to them. Early cultural models of infant care are malleable and resiliently adaptable later in childhood, and provide channels built on or revised by later development rather than fixed outcomes.

Due to these features of Gusii culture and ecology, Gusii children are more likely to initiate or receive reprimands, offers of help and support, or responsible suggestions, as well as dominance from other children than are middle class American children, who more often are involved in sociability and seek attention. Infants are attached to other adults and other child caretakers as well as to their mothers. The Gusii infant is never left alone, usually is carried by (equally) the mother or child caretaker through 18 months. The difficult adaptive choices mothers have to make are emphasized, since their heavy workloads and high fertility lead them away from as high contact with children after the first year of life, and children are weaned around 15-18 months often due to the next pregnancy.

Bayley MDI data show vigorous early development, higher than American norms, followed by decline in the second year. Infants with poorer neonatal assessments received more responsiveness from their mothers, as the authors' adaptation model would suggest. The study includes intensive analysis of infant and child survival and health through four years of life, finding that Gusii children are healthy in the early months of life, but show declines thereafter. Infant Brazelton scores are similar to or better than American low-risk norms, but Gusii children thereafter show slower height and weight gains and some malnutrition. An intensive study of

malnourished children and families showed evidence of social deviance, maternal illness, or perinatal deficit in these cases, indicating significant pressures on these families, unlike the Gusii families without signs of malnutrition or child distress.

Communication and social learning in infancy and thereafter shows evidence that the Gusii mother's adaptive concerns for nurturance and child protection in the early developmental periods, and concerns for training for compliance and task competence, are reflected in effective soothing, low rates of crying, and high responsiveness. Gusii mothers also use little deliberate verbally mediated teaching, have high rates of verbal commands and warnings and low rates of praise and less interest in teaching children to speak independently, more in getting children to attentively listen and respond.

A 1988 revisit to the Gusii (the original studies were done from 1974-1976) showed that these children were able to do well in rural Gusii schools, although not at the same absolute levels as North American children. Gusii children's health certainly shows the effects of a sometimes harsh environment, and their social and cognitive development shows that they have a different average set of competencies than Euro-American children, although they are resilient and certainly responsive to new adaptive requirements for literacy. The Pediatric and Respect-Compliance models emerged in past adaptive contexts and are of mixed value in the changing contemporary one. LeVine, et al's model shows how to monitor such expectable changes in cultural models, including both the costs and benefits, in ethnographically and developmentally informed ways.

The Pedagogical cultural model may be one way to optimize literacy and the other cultural goals of white middle class American families. But this model does not constitute a standard of minimal requirements for human development in general, or a universal set of prerequisites for cognitive

language, and emotional development. Knowledge of the true minimal requirements can only come from comparative studies such as this one and from clinical and laboratory work.

The study uses a rich mix of measurement strategies, including ethnography, life history, Bayley and other developmental assessments, systematic observations of social behaviors, detailed health status examinations of a sample of 24 infants, attachment measures, the Brazelton scale, and others. The study represents a multidisciplinary collaboration among anthropologists, pediatricians, psychologists, psychiatrists and others.

The book includes individual and family case materials, showing the diversity of experience within Gusii culture. Family and child portraits are presented of variations in infant development for instance, and in the problems facing poorer or wealthier or widowed Gusii mothers. A population-level or cultural account does not imply homogeneity of experience. The extent of shared goals and practice in a community is an empirical question.

Even though LeVine et al emphasize examining development in cultures with other goals and sociohistorical circumstances, the theoretical perspectives and methods are also deeply multivariate. The book distinguishes three fundamental perspectives regarding parenting and development: "organic hardware", or species-specific constraints from our mammalian heritage; "ecological firmware", or population-specific socioecological conditions; and "cultural software", our cultural models of parenthood, goals, meanings, scripts for conduct. The Gusii, like all human populations, vary in how they meet fundamental, panhuman adaptive needs such as subsistence (e.g. economic systems such as agrarian or industrial), reproduction (e.g. marriage and kinship systems), communication (e.g. language and symbolic systems), and social regulation (e.g. social

hierarchies, or the conventions of face to face interaction). This book exemplifies how a culturally informed study of development can simultaneously incorporate these other perspectives on development, and it offers therefore a general model for linking the study of culture to other important perspectives on development. In my view, this is the first lesson of the book.

Another proposal (not really a lesson) from Africa is that successful development can and does occur without the specific kinds of verbal stimulation, maternal care, or individualistic and achievement goals that characterize middle class family life in North America.

...the absence, during the first 2 to 3 years, of specific parental practices that promote cognitive, emotional, and language skills in Western contexts, does not necessarily constitute failure to provide what every child needs. 275

The Gusii child, having had a different set of socially organized ways of developing, did not thereby develop eventually into a Western adult, just in a different track or at a slower rate, with a few variations. Rather, he or she becomes a Gusii adult with different goals and preferences, achieving participation in hierarchical systems of apprenticeship learning with sibling caretakers and amongst a wider community. Gusii children and parents are propelled along other cultural pathways in pursuit of other cultural goals. The Gusii children do show health and developmental problems, but certainly do not show evidence of suffering "...from glaring mental deficits or psychiatric abnormalities." Every cultural model entails costs in achieving its goals, as well as the benefits, and these are clearly brought out in the

analysis. Many Gusii recognize this and their responses drive cultural change in child care and family life.

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If these findings seem surprising in the context of existing theories of child development, then that indicates how far we have to go in integrating evidence from other cultures into our own conceptions of what is possible during childhood. 278

Another lesson from this book in my view, is that it is increasingly clear that the existing measures of developmental outcomes, or family and parenting patterns, are insufficient because they are infused with a particular set of cultural goals and implicit cultural schemas regarding the sociocultural contexts of development in North America -- the Pedagogical Model. The model for cultural research in this book shows how other outcome and process measures can and should be developed empirically, but used in conjunction with current outcomes.

In the service of making a population-level case comparison emphasizing normative development, perhaps the extent to which every culture also hurts the individual in it, and selectively may favor certain temperamental dispositions, or groups, is given less attention than might be deserved. The perspectives of the different authors presented in different chapters leads to some (I would say healthy) tension and inconsistency here and there in presentation, particularly around issues of normative measurements of development and health. But this is actually valuable, opening up this topic for empirical debate based on data presented in the book.

The growing importance of the multicultural world around us is driving renewed attention to understanding culture and diversity. Child Care and Culture provides an outstanding model for how to bring population-level

cultural or ethnic variation into the study of parenting and human development not only in far-off cultural places like Africa, but everywhere. Understanding development in another cultural community should be based on empirical, ethnographically informed research on the cultural models, scripts and goals driving cultural practices in a population, goals that matter for adaptation, and give meaning to life in that community.

Editorial board, Ethos (the journal of psychological anthropology) and Child Development. Member, Committee for Child Development, Social Policy and Public Information, Society for Research in Child Development. Fellow, Center for Advanced Study in the Behavioral Sciences, 1996-97.

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