

The cultural ecology of play: Methodological considerations for studying play in its everyday contexts

By: [Jonathan R. H. Tudge](#), Jill Brown, and Lia B. L. Freitas

Tudge, J. R. H., Brown, J., & Freitas, L. B. L. (2011). The cultural ecology of play: Methodological considerations for studying play in its everyday contexts. In A. D. Pellegrini (Ed.), *The Oxford handbook of the development of play* (pp. 119-137). New York: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780195393002.013.0011>

Made available courtesy of Oxford University Press:

<http://dx.doi.org/10.1093/oxfordhb/9780195393002.001.0001>

***© 2011 Oxford University Press. Reprinted with permission. No further reproduction is authorized without written permission from Oxford University Press. This version of the document is not the version of record. ***

Abstract:

Children's play in industrialized societies such as the United States tends to be observed either under controlled conditions, in a laboratory or studied via closed-choice questionnaires, or under semi-controlled conditions in the home or child-care center. By contrast, studies of play in the majority world tend to be conducted by ethnographers who observe in any of the typical settings in which children are found. There are both disciplinary and paradigmatic reasons for this. However, even those methods that are intended to assess children's naturally occurring play in their everyday contexts may misrepresent the extent to which children play, their types of play, and their typical partners in play. Misrepresentation may occur by examining play in limited settings or by relying on parental reports (in the industrialized world) or by ignoring the heterogeneity of contexts in rapidly changing parts of the majority world. We present a method, designed explicitly to fit within a contextualist paradigm, for observing play in its everyday contexts, and use data derived from a single city from each of the United States, Kenya, and Brazil to illustrate the heterogeneity of young children's experiences and cast doubt on the generality of earlier findings.

Keywords: play | culture | ecology | ethnography | paradigms | contextualism | methods | United States | Kenya | Brazil | children | parents | everyday lives

Article:

Introduction

Play is ubiquitous. For some, play is hanging upside down; for others it is twirling around until that feeling rises in your stomach and carries an infectious smile up to your mouth; for some it is a daydream that folds upon itself several times while walking home. In its most basic form it proceeds without a complex intellectual framework and is preconscious and preverbal, arising out of ancient biological structures that existed before our consciousness and our ability to speak

(Brown, 2009). A common definition of play is a form of juvenile behavior resembling functional behavior but in a more exaggerated form, seemingly less serious, with individual components arranged in unusual sequences (Burghardt, this volume; Pellegrini & Bjorklund, 2004). From this point of view, means are more important than ends and play probably has little cost or benefit. Others, however, have focused on the adaptive and preparatory nature of play, holding that some forms of play demand heavy costs in terms of energy and risk. Traditionally, play has been described as preparing males for hunting roles and females for mothering roles (Smith, 1982). Payoffs, in this case, may also be large but deferred, in terms of developmental benefits (Bjorklund & Pellegrini, 2002; Bock, this volume; Bock & Johnson, 2004).

Given the variety of experiences that can be described as play and the difficulties of definition, it is not surprising that those who have been interested in studying it have used different methods. Ethnographers and ethologists (see Bateson, Burghardt, and Smith, all this volume) have studied it in its natural settings, trying to change those settings as little as possible. Others, typically psychologists, have either observed for less time than most ethnographers, and more often in a restricted setting (home or child-care center or during free play at school) or have gathered information from parents about their children's play, either keeping a time diary or being asked directly about the children's time spent in play. The use of different methods is in part because of the different paradigms within which scholars work. However, it is also the case that ethnographers have typically gathered their data in parts of the "majority world" (Kağitçibaşı, 1996, 2007), whereas those with a background in psychology generally collect data in parts of the industrialized world. Some scholars with an interest in cultural variations have used one method when gathering data within their own culture and a different method in a different culture (see, for example, Bloch, 1989; Harkness & Super, 1992).

One problem with the use of different methods is that it may give a false impression of the extent to which play occurs in different cultural contexts. Our goal in this chapter is thus to describe one particular method that has been used to study play in its typically occurring everyday contexts. The method is one that can be applied in many different cultures, so long as observers are highly familiar with the culture being studied or, preferably, a member of the cultural group. The goal is to show that cultures vary in the extent to which they encourage their children's involvement in different types of activities (including play) and that older members serve differentially as children's partners in play.

We will illustrate these issues with data from three different societies—Kenya, Brazil, and the United States. Kenya was chosen because, thanks in part to the Six Cultures studies (Whiting, 1963; Whiting & Edwards, 1988), a number of scholars have observed children's play in different Kenyan tribes. Almost exclusively, however, the data have been gathered from rural areas, featuring parents who have been minimally schooled at best. Only Weisner (1979, 1989) examined child rearing in an urban environment. However, Kenya, like all societies, is changing, and increasing numbers of the population live in cities and have access to education. The major focus on rural and minimally schooled groups has led commentators to make generalizations about "Kenyan" practices that ignore possible within-society heterogeneity (see, for example, Bornstein, 2006). For this reason, we will discuss data about children's play in a Kenyan city,

examining families from both middle- and working-class backgrounds, to assess similarities to and differences from the data from rural regions of that country.

In the case of Brazil there is an extensive literature on children's play conducted by Brazilian scholars. However, like in the case of the United States, most of this work examines children's play in specific settings, primarily in child-care centers (for example, Carvalho & Pedrosa, 2002; Lordelo & Carvalho, 2006; Pedrosa & Carvalho, 2006; Sager & Sperb, 1998) and sometimes under controlled or experimental conditions (see, for example, Domeniconi, Costa, Souza, & Rose, 2007; Gil & Almeida, 2000; Sperb & Conti, 1998) or "toy libraries" (Kishimoto & Ono, 2008; Macarini & Vieira, 2006; Wanderlind, 2006). By contrast, the majority of the work on parents and children that is known in the United States focuses on street children (Hecht, 1998) and their everyday mathematics (Guberman, 1996; Nunes, Schliemann, & Carraher, 1993; Saxe, 1991; Schliemann, Carraher, & Ceci, 1997), on indigenous children (Gosso, Morais, Rebeiro, & Bussab, 2005), or on parents living in poverty (Scheper-Hughes, 1985, 1990, 1992). To what extent do these data give a false impression of what children's lives are like in Brazil more generally? Again, to prevent us from treating data from some types of children in a given society as synonymous with children in the society at large, the data that we report in this chapter come from city-dwellers, but not those who are living in poverty.

There is also a good deal of research on play in the United States (see, for example, Göncü & Gaskins, 2006; Pellegrini, 2009; Pellegrini & Smith, 2005). Most of this research takes place in controlled or semi-controlled settings and does not attempt to assess children's play in their everyday contexts, but some researchers try to assess children's naturally occurring play (Bloch, 1989; Göncü, Jain, & Tuermer, 2006; Haight, 1999; Haight & Miller, 1993; Hofferth & Sandberg, 2001; Parmar, Harkness, & Super, 2004; Pellegrini, 2006; Pellegrini & Smith, 1998; Timmer, Eccles, & O'Brien, 1989). The methods used by these scholars, however, rely on observations in one or two of the many settings in which children find themselves or on parent reports of the activities, including play, in which their children engage (see Smith, this volume). What is not done in the United States is to follow children around for lengthy periods, observing their typically occurring play, alone and with others, in the various settings in which they find themselves. In this chapter, we therefore report on young children's play in a single U.S. city, using the same method as used to gather data in the Kenyan and Brazilian cities. As with those cities, we examine some heterogeneity of context by choosing African American and European American families, half of whom were middle class and half working class.

The reasoning behind the use of the same methods to study in three different societies is clearly to allow comparisons among the different groups. This is an approach fraught with danger. There is a large cross-cultural literature devoted to comparative research, from observational methods to the application of scales, developed in one society, back-translated and used in many other societies. In some cases the researchers appear to be using a single measuring stick (for a critique, see LeVine, 1989) in which those who score higher on the scale or who are observed doing more of one or other activity are treated as better than others who are viewed as having a deficit. Other scholars, however, are more interested in understanding the reasons for the difference in patterns observed or are not at all interested in making comparisons. The two

approaches are related to different views of the world, and their related ontologies, epistemologies, and related methodologies.

Paradigms and Related Methods in the Study of Human Development

Although methods can be applied well or poorly, the quality of a method cannot be discussed in the abstract; instead, our belief is that methods need to be clearly tied to the theoretical foundation or paradigm to which they are linked, whether explicitly or implicitly. As Guba and Lincoln wrote, a paradigm can best be thought of as a “basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways” (1994, p. 105). Pepper (1942) made essentially the same argument when writing about four “world views” (mechanism, organicism, contextualism, and formism). In this chapter we will focus on the two most relevant to the study of play—mechanism, a neo-positivist paradigm, and contextualism, one that is non-positivist. From an ontological point of view, neo-positivists believe that although reality as such is not directly knowable, one can use methods that allow incorrect views of reality to be disproved by subjecting different claims of reality to careful and critical examination. Epistemologically, this requires establishing clear separation between the investigator and the participants in the study so that the ideas, values, beliefs, and practices of the investigator do not influence those of the people being studied.

Neo-positivists (mechanists) have therefore designed methods to bring about that separation; great care is taken to ensure that participants are treated as similarly as possible. This is most easily accomplished by bringing participants to a university laboratory. If the researcher is interested in studying mother–child play, for example, use of the lab means that the setting is necessarily always the same, extraneous interruptions can be avoided, and identical play materials can be provided to all participants. Observations may take place in the home, but investigators working within the mechanist paradigm try carefully to control that setting—observing within each home at the same time of day, asking the mother to be available to play with her child (as opposed to engaging in any of the other tasks which might otherwise occupy her time), not engaging with the dyad as mother and child play, and so on.

Alternative methods, though equally positivistic, involve mothers responding to questionnaires about their beliefs about the value of children’s play, or about its extent; mothers might also be asked to complete time diaries to show what sort of play their children were involved in and for how long. The questionnaires most likely allow forced-choice responses or, if open-ended responses are allowed, are controlled to the extent to which the questions are always identical for each participant and always appear in the identical order. Even when mothers are interviewed about their children’s play, control is kept by ensuring that even the follow-up prompts are carefully scripted in advance. The goal is to discover the mothers’ views about their children’s play with the absolute minimum influence of the investigator (or at least an influence that is as similar as possible for all participants).

By contrast, the contextualist worldview, a non-positivist paradigm, involves completely different ontological and epistemological positions and, not surprisingly, methods that are unlike those used by neo-positivist investigators. In terms of ontology, contextualists hold that multiple realities exist, at least to the extent that “people’s perceptions of reality are necessarily

constrained and shaped by their specific circumstances” (Tudge, 2008, p. 59). This holds as true for people living during different historical periods as for people in different cultural groups, whether those cultural groups are viewed as separate societies or different groups found within a single society.

The contextualist paradigm’s epistemology is also different from that of mechanism; contextualists hold that creating a clear separation between investigator and participant is not only a chimera, but also prevents understanding the participants’ reality from their perspective. The methods that they use are lengthy observations in context, participant observation, or open-ended interviews. Their focus of attention is activities and interactions as they happen within the settings in which the participants are typically situated. If they are interested in mother–child play, for example, they might observe in and around the child’s home, to see whether the mother actually is involved in that play and, if so, the extent to which she is. In other words, the very assumption that mothers play with their children is open to assessment. Mothers might be interviewed about their beliefs about children’s play, their roles in that play, and so on, or they might be shown pictures of film of their children in play, and be asked to explain what is happening. In none of these situations would there be any control of the precise questions, or their order—what would be asked would be in part a response to what the participant has earlier said. The investigator, in other words, is expected to be a part of the context, changing it necessarily simply by being there, and not separate from it, as neo-positivist scholars would require.

It is worth mentioning that Pepper (1942) used different metaphors for the world views he described. The metaphor for mechanism is that of the machine, emphasizing cause–effect relations. Contextualism’s metaphor is the “historical event,” although this metaphor is misleading, as can be seen from Pepper’s description: “By historic event, however, the contextualist means...the event alive in its present... literally the incidents of life” (Pepper, 1942, pp. 232–233). On the one hand, then, contextualism focuses on everyday practices, but it is also clear from Pepper’s writing that for contextualists there can be no simple cause–effect relations, as individuals, the people with whom they interact, and the contexts in which they are situated, are necessarily interconnected. Moreover, the cultural relativism that is inherent in contextualism means that “optimal” development can only be judged in terms of the prevailing practices and values within a given cultural group; there can be no “single measuring stick” to evaluate competence.

To a large extent, mechanist methods are used within psychology, whereas cultural anthropologists are likely to use contextualist methods, particularly ethnography. Psychologists have been interested in testing the universality of their findings by using randomly selected samples observed in standardized settings or, if this is not possible, short-term observations under relatively controlled conditions, or questionnaires. By contrast, anthropologists have typically used ethnographic methods to describe the culturally relevant nature of their findings (see Bock, this volume; LeVine, 1989, 2007).

An ethnographic approach to studying play is a descriptive account, drawn from observations of (as well as interviews about) the daily activities, experiences, and lives of children in a particular time and place, and of the cultural, social, economic, and institutional contexts that need to be

understood to make sense of children's and their partners' behavior in that moment (LeVine, 2007). LeVine argues, as do many other ethnographers, that if childhood experiences, and play in particular, were uniform across human populations and historical period, ethnographic accounts would not be needed. Ethnographic methods to study play, emerging from the contextualist worldview, are based on the assumption that the conditions that shape play vary from one population to the next and are not fully comprehensible without intimate knowledge of the contexts, both social and cultural, that give them meaning.

Not surprisingly, given these different approaches, one can see the tension between mainstream mechanistic psychology and contextualist cultural anthropology, a tension that dates back to Freud. Levine (2007) points out that this tension began with Malinowski (1927) challenging Freud's oedipal complex in the matrilineal society of the Trobriand Islands and Mead (1928/1961) arguing that the adolescent turmoil that Hall proposed as universal did not exist in Samoa. This trend has been found more recently with the universality of Piaget's stages of cognitive development questioned by Greenfield (1976) and others, Kohlberg's views of moral development critiqued by Shweder et al. (1990), and Bowlby's ideas of attachment re-assessed by Harwood et al. (1995).

We do not wish to imply that the crucial difference is between psychology and anthropology; that would be too simplistic. There are anthropological approaches that fit nicely into the mechanist paradigm just as there are researchers using contextualist ideas within psychology. Even among psychologists who are interested in culture, one can see a split between cross-cultural psychologists, whose paradigm is mechanism, and those who term themselves cultural psychologists, who fit within contextualism (see, for example, Adamopoulos & Lonner, 2001; Shweder, 1990; Tudge, 2008). Göncü and his colleagues noted the division within the field of play, critiquing the view that norms "based on the play of middle-income children provide absolute universal criteria against which the play of children from diverse cultures should be judged" (Göncü, Tuermer, Jain, & Johnson, 1999, p. 152). Instead, they argued, "the development of play characterized in Western theories is only one of many possible cultural models of children's play" (loc cit). Nonetheless, despite these divergent positions, psychology, almost from its inception, has positioned itself within a neo-positivist or mechanist paradigm rather than a contextualist paradigm. It did not have to be this way. Wilhelm Wundt, during the late nineteenth century, actually proposed a dual approach to psychology—one approach that involved highly controlled methods and the other, that he termed "folk psychology," that did not (Cole, 1996; Miller, Hengst, & Wang, 2003). Examples of research that could be considered folk psychology (those that have taken a contextualist or ecological approach to development) have consistently been found within psychology over the past century, but they have always been peripheral to the field, and mechanist (neo-positivist) theories and methods have been clearly at the forefront (Tudge, Gray, & Hogan, 1997).

We will now focus on studies of play in their natural settings (rather than in those that are experimental or controlled), comparing what is known about the extent to which young children engage in play and, where possible, the type of play in which they engage.

Assessments of Children's Play in the United States

Göncü et al. (2006) studied low-income black and white children, observing them both in free play in child care and in one other setting in which each child was typically found, as well as interviewing their teachers and parents. They discussed the types of play in which the children engaged (including pretend, physical, language, and “sound and rhythm” play), but provided no information on the extent to which they engaged in the different types of play. Other scholars have focused their observations on a specific type of play. For example, Pellegrini and his colleagues studied rough-and-tumble play, observing extensively during children’s play time outside (see, for example, Pellegrini, 2006, 2009; Pellegrini & Smith, 1998) and found that American 4-year-old children spend about 4% of their time engaging in this type of play. Haight (1999; Haight & Miller, 1993) observed children’s pretend play in a different setting—at home with their mothers and found that when the children were three to four years of age they spent between 8 and 12 minutes every hour engaging in pretend play (the sole focus of this longitudinal research). When they were three, their mother was their primary partner in this play (70% of the time) and at age four she was still the most common partner.

Bloch (1989), by contrast, assessed the extent to which children engaged in different types of activities, including play, but did so not by observing directly but by phoning parents and asking them to report on what their preschool-aged children were doing. This had the advantage of allowing her to assess the extent to which the children were involved in numerous activities, including play, but only from the parents’ perspective. Interestingly, Bloch (1989; Bloch & Adler, 1994) also examined play in Senegal, as we will discuss later, but in this African context (as is typical) relied on observations of the children’s activities rather than parental reports. Harkness and Super (1992) did the same thing in their study of father involvement with young children, relying on observations in Kokwet, Kenya, but interviews (primarily with the children’s mothers) to assess the extent to which the fathers served as their children’s partners in their play and other activities. Other scholars, too, rely on parent reports for their assessments of children’s play in the United States, whether in small-scale (Parmar et al., 2004) or nationally representative studies (Hofferth & Sandberg, 2001; Timmer et al., 1989).

Limitations with these types of studies

The studies described above attempt, in different ways, to assess children’s play in their natural settings. Some rely on observations, others on parent reports, and some use both methods. The observational studies that focus on a specific type of play (pretend or rough-and-tumble) are very useful, but the authors, as they sometimes acknowledge, may well be over-estimating the prevalence of such play by studying it in those settings where it is most likely to be found (playing at home with the mother, in the case of pretend play, and playing outside during free play at preschool or school). Relying on parent reports may minimize this problem, but parents can only report what they see, and so are unable to provide information when their children are out of sight, whether in another area of the home or in a different setting, such as child care. Moreover, even when the respondent (typically the mother) is within ear- or eyesight of the child, she may have been occupied with other tasks around the home rather than observing carefully what her child is doing. There have been attempts to assess the accuracy of parental reports by comparing parents’ reports of television-watching with data gathered more directly (Anderson, Field, Collins, Lorch, & Nathan, 1985; Robinson, 1985; Robinson & Godbey, 1997). However,

given that television programs are of an easily calculable length, accuracy in assessing this activity may not generalize to others.

The final problem of either focusing on a single type of play or looking more broadly at play but using parental reports occurs when people make comparisons with children's play in other parts of the world, with data collected in more ethnographic fashion. Bloch (1989) and Harkness and Super (1992), for example, assume that the data that they collected from Senegal and Kenya, observationally, can be directly compared to those collected via parent reports, which seems something of a stretch.

Assessments of Children's Play in Parts of Africa and Brazil

Ethnographic approaches to childhood and play in the majority world can be traced back to the 1920s (Malinowski, 1927; Mead, 1928/1961), and a number of cultural anthropologists, most involved with the Six Cultures original study and follow-up studies (see Whiting & Edwards, 1988), have written extensively about children's experiences, including their play, in different parts of Kenya. They reported the absence of parents, or other adults, from their children's play (play occurs primarily among siblings and peers), and often goes on while the children are engaged in work (Harkness & Super, 1985; LeVine et al., 1994; LeVine & LeVine, 1963; Wenger, 1989; Whiting & Edwards, 1988; Whiting & Whiting, 1975).

As noted above, Bloch (1989; Bloch & Adler, 1994) observed extensively in a rural community of Senegal, and found that two- to four-year-olds were often involved in a mixture of play and work. Similarly, Lancy (1996) found this to be true for Kpelle girls aged five and older, although boys were not expected to be involved much in work until they were aged seven or eight, and Bock (2002, 2005; Bock & Johnson, 2004) also noted this connection between play and work in northern Botswana. Bloch (1989) noted that Senegalese two- to four-year-olds engaged in play about 25% of the time and Boch (2005) noted that four- to six-year-olds in Botswana played between 25% and 30% of the time.

Very little Brazilian research on play involves ethnographic observations, and almost none of what exists, as is true of the situation in Kenya, involves city-dwellers or, if it does, focuses on children living in poverty. Alves (2004), for example, studied the everyday activities of "street children" (i.e., those found mostly, if not entirely, on the streets of a large southern city). She noted that children and adolescents played a good deal of the time that they were on the street; not surprisingly, much of their play involved singing and using their own bodies as instruments (tapping rhythmically on their arms, for example). By contrast, Gosso and her colleagues focused their attention on the play of children in forager groups living in remote areas of the country (Gosso et al., 2005). These authors explicitly noted the differences between rural African young children's lives, which commonly involve work, and Brazilian Indian children, who spend large amounts of their time in play, and are never involved in work. Gosso and her colleagues reported that the four- to six-year-old children they studied in the Amazon rain forest spent about 60% of their time in play in the case of boys, and 52% in the case of girls.

However, Gosso and her colleagues (Gosso, Morais, & Otta, 2007) also compared these children's play with those from other groups—children in a small seashore village and three

groups from São Paulo (low, high, and mixed SES). Unfortunately, it is impossible to tell the proportion of time that these children spent in play in comparison to other activities, as play was the sole focus of attention. It is also noteworthy that the observations of all but the Indian group took place during free play at preschool; the Indian children were observed playing in various parts of the village.

Limitations with these types of studies

Although these studies do a far more comprehensive job of assessing the extent to which children play, and the types of play that occupy their time, than those focusing on children in the United States, it seems to us to be a major flaw that almost all of the work conducted on children's play in Africa features children living in rural areas with parents who are non- or minimally schooled. This seems a particular problem with countries such as Kenya developing rapidly, and increasing proportions of the population living in large cities and large majorities of young children in school (Tudge & Odera-Wanga, 2009).

Moreover, given that schooling has been a priority since Kenyan independence, many parents have had education to college-level and beyond, and are likely to treat their children quite differently than do those parents with little or no education. Moreover, once girls aged six and over are in school, they clearly are no longer available to look after younger siblings, and boys who are in school are not able to spend their time looking after the family's animals, as used to be the case. As Serpell (2008) has expressed the situation: "Despite the existence of real problems, to portray the general population... as characterized by pervasive poverty, disease, or corruption... is to commit the synecdochal error of representing the whole by one of its parts." It is only because so much attention has been focused on rural families' child-rearing styles that Bornstein can state that Kenyan mothers, among others, "eschew play with children... [and] do not believe that it is important or appropriate to play with their children" (2006, p. 115) or Lancy (2007) can argue that mother-child play does not exist in Liberia specifically, and in the ethnographic record more generally.

It is also a problem that when children from rural and urban areas are compared, whether within Brazil as in Gosso et al.'s (2007) research, or across majority and industrialized societies, as with Bloch (1989) or Harkness and Super (1992), if different methods are used to gather data but comparisons are made without taking into account methodological differences.

It would be helpful if scholars interested in children's naturally occurring play in the typical settings in which play occurs used the same methods with families living in different types of societies and, within those societies, with families living in different types of circumstances. Given what we wrote earlier about paradigms, it is clear that one's choice of method must relate to the paradigm within which the research is being conducted. As several scholars have argued, the value of a method can only be ascertained by reference to the theory and paradigm within which it fits (Eckensberger, 2002; Goldhaber, 2000; Kuczynski & Daly, 2003; Tudge, 2008; Winegar, 1997). We will therefore describe an explicitly contextualist theory and show how methods that fit within that paradigm and theory can be used to study play in its everyday contexts.

Contextualist Theories

The two most prominent examples of contextualist theories are those of Vygotsky and Bronfenbrenner; both treat development as an interaction among activities, individual characteristics, and the changing contexts within which those activities occur (Bronfenbrenner & Morris, 2006; Göncü & Gaskins, this volume; Tudge, 2008; Vygotsky, 1934/1987). A strength of Vygotsky's theory is his highlighting the idea that all practices, including interactions, can only be understood within their cultural and historical context (see also Bateson, this volume; Cole, 1996, 2005; Tudge & Scrimsher, 2003; Valsiner & Winegar, 1992). Bronfenbrenner, by contrast, put regularly occurring everyday interactions, that become progressively more complex over time ("proximal processes") at the center of his theory, and argued that they are modified simultaneously by individual characteristics, by the context in which the activity is taking place, and by historical time (Bronfenbrenner & Morris, 2006).

However, there are some clear weaknesses in both theories from a contextualist point of view. Vygotsky, because of the ideology paramount in the Soviet Union when he was writing during the 1920s and early 1930s, could hardly do other than view development in terms of a progression toward a single optimal goal. It would have been impossible for him to argue that competence within capitalist societies would not only be different from but equal to the type of competence that would be appropriate for a communist society. Vygotsky, moreover, paid little attention to the role of the individual in changing his or her own context. Bronfenbrenner was far clearer about the ways in which individuals change proximal processes but focused relatively little on the role of culture. In a single chapter (Bronfenbrenner, 1993) he provided an account of what he termed "sub-cultural" differences within a single society. However, with the first appearance of the "process-person-context-time" (PPCT) model of development (Bronfenbrenner, 1994) and its subsequent elaborations (see, for example, Bronfenbrenner, 1995, 1999, 2001/2005; Bronfenbrenner & Morris, 2006) the richer discussion of culture disappeared. Instead, what he termed "good" proximal processes were those that are clearly related to what is considered desirable in contemporary white North American middle-class values, beliefs, and practices. Another weakness, from a contextualist point of view, stems from the missing link in the writings of both theorists—that between theory and methods; neither theorist wrote explicitly about the methods that should be used to gather data in keeping with the contextualist nature of the theory.

Cultural–ecological theory

Cultural–ecological theory, by contrast, was designed explicitly as a contextualist theory and the methods were intended to fit the theory. As the first author has discussed at length elsewhere (Tudge, 2008), this theory is based largely on Vygotsky's and Bronfenbrenner's theories. However, unlike these theories, it incorporates a richer conceptualization of culture, and takes seriously the contextualist position that not only do multiple realities exist, both across and within societies, but also that different cultural groups have different conceptions of children's competence.

Central to the theory is the idea that development occurs in large part through the typically occurring everyday activities and interactions involving developing individuals and their social

partners. It is in the course of engaging in these regularly occurring activities that children come to fit into their cultural world. They learn what is expected of them, the types of activities considered appropriate or inappropriate for them, how they are expected to engage in these activities, the ways other people will deal with them, and how they are expected to deal with others. Children often initiate activities themselves, and try to draw others into those activities, and it is in the course of these activities that they try out different roles and observe the roles of others, both with regard to themselves and with others.

The culture within which these activities and interactions take place clearly plays a central role in influencing the types of activities and interactions that are available to the young of that culture, and influences which of them the children are encouraged to participate in (or discouraged from). The group's values and beliefs about raising children, the practices they consider normative or appropriate, the resources and settings available to them, and so on, clearly are implicated in the children's typically occurring activities and interactions. As Tom Weisner (1996) wrote, if you want to know how children will develop, the most important single thing to know is the cultural group of which they are a part.

Culture has been defined (see Tudge, 2008) as consisting of a group that shares a general set of values, beliefs, practices, institutions, and access to resources. The group may have a sense of shared identity, or the recognition that people are in some way connected and feel themselves to be part of the group, and the adults of the group should attempt to pass on to the young of the group the same values, beliefs, practices, and so on. Members of different countries or societies clearly constitute different cultural groups. But the same can be said of groups within any given country or society, to the extent to which their members share values, beliefs, practices, institutions, resources, etc., feel a sense of identity with other members of that group and try to pass on those shared values, beliefs, practices, and resources to their young. Rather than think about people being part of just one culture, it thus makes more sense to think of them being part of several cultures: their society, their ethnicity, their social class, perhaps their geographic region, and so on. The cultural group with which a person identifies at any one time is likely to be dependent on a relevant comparison group; someone who has grown up in Rio Grande do Sul is Brazilian when talking with a group of Europeans, a Gaúcho when talking with people from other areas of Brazil, of Italian descent when talking with Gaúchos of German descent, or a middle-class descendent of Italians when meeting working-class people from the same ethnic background.

However, even if culture is hugely important in influencing children's development, so are the children's own characteristics. In any cultural group there are children who are differentially inclined or motivated to learn some skills, ideas, practices than are others. Children themselves change the nature of the activities and interactions in which they engage simply because of their own unique natures. The same is true, of course, of the other people (children and adults) with whom they are interacting. The young of the cultural group thus do not simply imitate or internalize the practices of those who are more competent in the ways of the culture but recreate those practices in the course of engaging in them. There is thus always the possibility that those practices will change over time. The same is true for values and beliefs about raising children. Although the older generation may try hard to transmit those same values and beliefs to their young, it is not always the case that members of the younger generation accept their parents'

ideas. In cultures in which tradition is considered highly important there is greater pressure on children to accept their parents' ways; in other cultures, however, in which creativity and independence are more valued, one should expect to find faster change. Cultural groups are thus themselves developing under the influence of the new generation while at the same time they are helping that new generation become competent in the ways of the group. In other words, cultural–ecological theory treats development as a complex interplay among cultural context, individual variability, and change over time, with the key aspect being activities and interactions, where context and individual variability intersect.

Cultural–ecological methods

What, then, are the methods that should be used with such a theory? Ethnographic methods seem most applicable when the goal is to understand the types of everyday activities and interactions that occur in the everyday lives of the people being studied, particularly when the focus is on play. Play, after all, is an activity that one often does in interaction with others and, even when a solitary activity, is not one that is typically kept hidden from others. It therefore lends itself to observation. Ethnography takes many different forms (Atkinson, Coffey, Delamont, Lofland, & Lofland, 2001); nonetheless, its primary focus is on “the study of people in naturally occurring settings...by means of methods which capture their social meanings and ordinary activities” (Brewer, 2000, p. 10). As such, ethnographic methods fit well with contextualist theories.

The specific ethnographic method¹ used by the first author (Tudge, 2008) does not require long-term immersion in the field, as is often the case with ethnographic research, but is a time-sampling observational approach that can best be done by someone from the culture of interest, trained in its use. The method requires observation of activities and interactions, occurring in natural settings, over the equivalent of one complete day in the life of each participant. Data are gathered in blocks of 2 or 4 hours, such that one observational session starts prior to the child waking in the morning, another at the end of the day, and other blocks distributed over the entire day. Data are gathered for a total of 18 hours for each participant, in three blocks of 2 hours and three blocks of 4 hours, and a further 2 hours are videotaped.

In Tudge's Cultural Ecology of Young Children project (Tudge, 2008), the developing individuals of interest were three-year-olds from a variety of cultural groups. The main activities of interest included *lessons* (or explicit attempts to give or receive information) in four domains (school-relevant activities, appropriate behavior, about why and how things work, and religion), *work* (14 sub-categories), *conversations* (defined as talking about things from the past or future, rather than a part of on-going activities, sub-divided into three categories), and *play*. Play, which included exploration and entertainment, was divided into 15 different sub-categories, including two types of pretend play, three types of play with school-relevant objects, play with objects intended to be played with by children (“toys”), play with objects from the adult world, whether discarded or not, play with no object at all (for example, rough and tumble, chase, or play with one's own body or singing), and being entertained (six sub-categories, including watching television, listening to the radio or to music, etc.).

¹ An early version of the method was developed in conjunction with Barbara Rogoff and Gilda Morelli.

Each child carried a wireless mike, to enable the observer to hear what was being said by or to the child without having to be too close, and the observer also listened to an endless-loop tape that marked the passage of time. Observations were live and continuous (or as close to continuous as possible), but coding only took place immediately after a 30-second “window” that occurred every six minutes. During these windows, the observer noted the following: Any of the above-mentioned sub-categories occurring in the child’s vicinity; all activities in which the child was involved, either as an active participant or an observer; who started each of the activities (the child, another person, or the child in conjunction with someone else); who was responsible for the child becoming involved in each of the activities (the child, another person, or the child in conjunction with someone else); who else (if anyone) was involved in each activity; the roles each participant (including the child) played in each activity.

This approach captures children’s activities in an ecologically appropriate way (children are not separated from context) and it does so over enough time to give, we believe, a reasonable sense of the types of activities that typically occur in these children’s lives. The approach also allows us to examine the types of activities that are going on in which the children do not participate, or those in which they would like to participate but are discouraged from so doing.

Given the nature of the theory on which this method is based, it is also important that the observations also allow us to examine what the children themselves do to start activities, involve others in those activities, and try to get out of activities that those around them would like them to engage in. In other words, children play a highly active role. They are involved in activities not simply because others get them involved; they initiate activities themselves, and try to recruit others to be their social partners. They initiate lessons (asking questions about words, numbers, or how things work), conversations, and even work—asking to help and not simply being asked to help. Most commonly, given the nature of the activity, children are most likely to initiate the play in which they are engaged. They also, on occasion, work hard to get other people involved in their play.

Context is necessarily implicated when examining children’s activities in the locations in which they are situated. We therefore observe in any of the settings in which the children are situated, and observe any of the social partners with whom the children interact. This means that we observe in the home, child-care center if a child goes to one, with friends or relatives, at the park, in the streets, or at the shops if the child goes there. The data are gathered in any setting in which the child spends time because we believe that it is important to know more than what goes on in the home or child-care center, the most usual locations where observational data are gathered by researchers working in North America. We therefore not only follow the child wherever he or she goes during the observational session, but also find out where the child is scheduled to be for the next session, so as to be in that place at the appointed time.

These observations allow us to view more than the activities in which children are involved and the settings in which these activities take place. We also are able to see the roles played by the children and their partners in these activities, revealing both the interactions and the expectations for interactions that the children (and their typical partners) have developed. In most instances, we would expect children to be *participating* in play, but on occasion they try to *manage or direct* the play in which they are engaged (actively trying to make it occur in a certain way),

trying to *resist or stop* the play (for example, if partners in play are doing things they do not like, or if they have become bored with it), and *observing* the play of others. We also include as a role *eavesdropping*, similar to observing but from a greater distance and with no assumption that the person being watched is aware of being watched. Through these codes we create a chronicle of the actions and responses of children and their social partners. The chronicle contains the details of the ongoing adjustment and negotiation of relationships that forms the fabric of children's everyday experiences.

The context of play clearly involves more than the immediate setting, however, but also the broader socio-cultural context. It is at this level that we can see culture-relevant differences in the types of play (and all other activities) in which children engage, differences in the extent to which children are encouraged to and discouraged from participating in different activities and in initiation of those activities.

How do we instantiate culture using this methodology? In part this depends on the definition of culture; as mentioned earlier, we define culture as any group that can be differentiated on the basis of its values, beliefs, and practices, its social institutions, its access to resources, its sense of identity, and its desire to pass on those values, practices, etc., to the young of the group. Data were initially collected in the United States, where the first author works. Because of his experience in the former Soviet Union, it made sense to gather comparative data in Russia and Estonia, two distinct cultures in which the parents had been raised in a single society. We also were able to gather data in Finland, culturally and linguistically similar to Estonia but without the Soviet experience, and in South Korea, Kenya, and Brazil. In each case, the first author trained members of the respective countries to collect these data. These societies, of course, vary on many dimensions. Our goal was therefore to choose a single city in each society, of medium size by the standards of that society, with a range of cultural, educational, and professional possibilities.

Culture and society are clearly not synonymous, and within any society can be found a variety of different cultural groups, given our definition of culture. Different ethnic groups may therefore constitute separate cultural group, and so may members of different social classes. In this study we examined, in every city, children from two groups—those who were defined as either working class or middle class on the basis of their parents' education and occupation. In the city in the United States, in addition, we examined children from black and white families, equally divided by social class.

If one wishes to study development, one has to study individuals over time. In this research we gather the types of observational data discussed above when the children are of preschool age, and then gather follow-up data once the children have entered school. We are interested in examining the relations, if any, between three-year-old children's initiation of and engagement in different types of activities and their parents' and teachers' perceptions of them during the early years of school (Tudge, Otero, Hogan, & Etz, 2003). However, as noted earlier, it is important to situate research participants not simply in their physical context (whether considered as the immediate setting or as the cultural group) but also in their temporal context. The way in which even young children experience their environments depends in part on what is happening, in historical time, in the culture of which those children are a part. This is true for children in a

society that is rapidly industrializing, in an industrialized society in the midst of recession or boom, or, as in the case of our research, in societies struggling to adapt to the changes wrought by the collapse of the Soviet Union.

Observations of Children's Play in Greensboro (the United States), Kisumu (Kenya), and Porto Alegre (Brazil)

In this chapter we report data from a single city from three different societies: the United States, Kenya, and Brazil. The North American families were from Greensboro, NC, and half were African American and half European American, equally divided by social class. The Kenyan families were from Kisumu, a city on the shores of Lake Victoria, and were ethnically Luo. The Brazilian families were from Porto Alegre, the capital of the southernmost state in Brazil, and were of primarily European (Italian, German, and Portuguese) descent (although in this city, as elsewhere in Brazil, people are ethnically and racially diverse). In Kisumu and Porto Alegre, as in Greensboro, the families were equally divided by social class, as determined by education and occupation criteria. Families that we called "middle class" were those in which both parents had a college degree or higher and, if they worked outside the home, had a professional occupation. Members of "working-class" families, by contrast, did not have a college degree and, if they worked outside the home, had a non-professional occupation. We excluded from the study families in which one parent was middle class and the other was working class.

Because of the way in which the data were collected, we noted when play (including entertainment) was occurring in the same setting as the child was situated and whether the child was involved in that play. In each of the cities, play was available to the children from 60% to 70% of the time we observed, and children were actually involved in it, in each city, just under 60% of the time. Clearly it was the activity in which these three-year-olds were most involved. What sort of play were the children involved in? In this chapter we discuss eight broad categories of play: pretend play, in which children were observed to be taking on the role of someone or something else; play with toys (play objects designed or created to be played with by children); play with school-related objects (books, objects intended to help children with numbers or letters, mathematical shapes, and so on); play with objects from the adult world (whether discarded or not); play with objects from the natural world (sticks, sand, mud, etc.); play with no objects (running, chase, play with one's own body, and so on); watching television (generally not considered part of play, though included here as an activity engaged in purely for its entertainment value); and other types of relatively passive entertainment, such as listening to the radio or to music, which occurred far less frequently than did watching television.

Obviously there could be overlap across these different categories. Children could be using objects in their pretend play, or could be chasing after one another to kick a ball, or could be playing with toys in the sand. In these cases, however, we coded what appeared to be the children's overarching goal—pretend play, in the first case, ball play in the second, and playing with toys in the third. Equally, there would be times during which children were combining their play with a different type of activity—engaged in some type of lesson, for example, or working, or carrying on a conversation. In each of these cases we coded both the play and the other activity or activities that were going on at the same time. For example, while a father is reading with his daughter (play with a school-related object) he asks her how many ducks are in the

picture, and after he has counted them with her (a school-related lesson) she reminds him of when they saw ducks in the park at the weekend (a conversation). In this chapter, however, we will focus just on the children’s play.

As can be seen in Table 1, in Greensboro, in each of the four communities (divided by race/ethnicity and class) the children were most often observed playing with toys, from about 18% of their observations in the case of the white middle-class children to more than 27% of observations in the case of the white working-class children. In the black communities, middle-class children were more likely to be observed playing with toys than were their working-class counterparts. The type of play that was next most often observed was watching television; in both the white and black communities working-class children were more likely to do this than were middle-class children. Almost all of the programs that the children watched were those designed for children, although occasionally they observed programs that their parents were more interested in, whether news programming or wrestling. Other types of entertainment (listening to music or the radio) were very rarely observed, as noted above.

Children from the black communities in Greensboro were more likely than those from the white communities to play with objects from the adult world, with the middle-class white children observed least often playing with those types of objects. The black children were also twice as likely to play with no object at all as were the white children. We observed the other types of play equally rarely; white children were more likely to be observed in pretend play than were black children, and middle-class children (whether from white or black families) were more likely to be observed playing with school-related objects than were children from working-class families.

Table 1. Means and Standard Deviations for Children’s Engagement in Types of Play in Greensboro (percent of observations)

Types of Play	White MC (n=11)	White WC (n=9)	Black MC (n=9)	Black WC (n=10)
Pretend	3.71 (3.1)	3.20 (3.0)	1.86 (2.4)	1.33 (1.6)
School-related	5.26 (3.9)	4.33 (4.5)	4.21 (4.1)	3.69 (4.4)
Child-related obj.	18.06 (9.4)	27.82 (9.7)	25.29 (13.1)	19.94 (8.2)
Adult-related obj.	3.04 (1.8)	6.62 (3.6)	7.81 (4.3)	8.87 (5.8)
Natural obj.	2.35 (1.5)	3.27 (2.1)	3.27 (3.1)	3.12 (2.2)
No obj.	3.59 (1.7)	3.85 (2.3)	7.32 (3.7)	9.38 (2.8)
TV	8.32 (5.0)	13.11 (8.1)	10.99 (8.8)	14.84 (10.7)
Entertainment	1.09 (1.6)	0.37 (0.7)	1.44 (1.6)	0.66 (0.7)
All play	45.52 (11.4)	62.64 (12.7)	62.21 (12.7)	61.83 (10.5)

Our data, collected ethnographically, differ in some interesting ways from data gathered either in a restricted locale (observing on the playground, for example, or in the home) or provided by parents asked to report on their children’s daily activities. Haight and Miller (1993) observed American children at home with their mothers, and found that when the children were of a similar age to those in Tudge’s (2008) study they spent between 8 and 12 minutes every hour engaging in pretend play. Regardless of the fact that American mothers who are at home with their young children might encourage their children’s pretend play, by observing only in the home under these conditions Haight and Miller might well have overestimated the extent to which children engage in pretend play. Similarly, by focusing on children at play in school

playgrounds, Pellegrini (1988, 1995) is likely to have overestimated how much time children actually spend in rough-and-tumble play.

By contrast, those who have relied on parental reports may well have underestimated the extent to which children are engaged in some types of activities, including their play. Two nationally representative studies (Hofferth & Sandberg, 2001; Timmer et al., 1989) and one study conducted partly in Wisconsin (Bloch, 1989) revealed that three- to five-year-old children spent from between 18–30% of their time in play, and 10–14% of their time watching television. Parmar and her colleagues (2004) used parental reports and reported that both European- and Asian-American children spent about 16 hours per week in play, and between four and five hours a week watching television. Interestingly, our data were very similar for TV-watching (12% across our four groups from Greensboro) but the nationally representative data, and those from the other two studies, reported far less play than we did (on average, 48%, excluding time spent watching television). Our data were also very close to the nationally representative data in terms of time spent in child care (16%). Parents thus seem well able to assess the amount of time their children spend doing something with clearly delineated time boundaries (television programs and child care), but (not surprisingly) less able to tell how much time their children spend in other types of activities, including their play.

The situation in Kisumu looked very different from what we have just described in Greensboro. The Luo children, from both middle- and working-class families, were far less likely to play with toys than were any other group, but were more likely to play with objects from the adult world. They were also more likely to play with objects from the natural world and with no object at all than were children from either Greensboro or Porto Alegre. Middle-class Luo children were actually more likely to engage in both pretend play and play with school-related objects than were children in Greensboro, although their working-class Luo counterparts did so much less. Not surprisingly, children in Kisumu watched less television than did the children in the other cities, averaging less than 3% in both social-class groups.

Table 2. Means and Standard Deviations for Children’s Engagement in Types of Play in Kisumu, Kenya, and Porto Alegre, Brazil (percent of observations)

Types of Play	KIS MC (n=10)	KIS WC (n=10)	POA MC (n=9)	POA WC (n=10)
Pretend	4.17 (4.2)	2.0 (2.8)	3.52 (2.9)	3.67 (4.9)
School-related	6.67 (3.1)	3.33 (3.9)	3.64 (3.4)	0.33 (0.7)
Child-related obj.	12.28 (4.3)	13.11 (8.8)	25.93 (7.9)	30.0 (12.9)
Adult-related obj.	14.33 (5.0)	17.67 (6.6)	5.56 (2.1)	8.89 (4.9)
Natural obj.	9.11 (7.4)	7.44 (3.1)	1.48 (1.2)	1.83 (2.1)
No obj.	9.44 (2.7)	8.44 (3.8)	5.37 (3.0)	3.67 (2.2)
TV	2.94 (3.1)	2.05 (3.4)	8.70 (6.1)	12.72 (8.1)
Entertainment	0.28 (0.9)	0.61 (1.4)	1.91 (2.1)	1.39 (2.2)
All play	59.28 (8.2)	55.44 (12.4)	56.11 (9.8)	62.50 (12.7)

As is clear from the data that we report here, the children from Kisumu were observed in play about twice as frequently as those reported by both Bloch (1989) and Bock (2005) in Senegal and Botswana respectively. There are three possible reasons. One is that our observational approaches are different. Bloch used spot observations, randomly selected from three large (4–5 hour) blocks of time, followed by written field notes, yielding 20 observations per child. Bock

also collected approximately 20 observations of each child featured in his study, with data gathered at ten-minute intervals over three four-hour blocks of time during daylight hours. By contrast, each of our children was followed continuously in blocks of two and four hours, for a total of 180 observations per child. More important than the different methods employed, however, is the fact that we gathered our data from city-dwellers, rather than from the rural areas that feature so often in anthropological studies. As Weisner (1979) pointed out, in one of the few studies that compared family experiences in both rural and urban areas of Kenya, city-dwelling children have different options than do their counterparts in rural areas, and it is not surprising that the latter are far more likely to be involved in work than the former.

The ecologies, then, are different, but so are the parents' experiences, which links to the third reason for possible differences. Kenyan society, as is true of both Senegal and Botswana, has changed rapidly over the past 50 years; not only do many more people live in urban areas, but schooling has become of increasing importance. All of the parents in our families had at least some education, and those from middle-class families had a college education. More than half of our middle-class children in Kisumu attended a formal child-care center, as did one of the working-class children, and their experiences there included a good deal of play with school-related materials.

In Porto Alegre, children engaged in types of play similarly to those in Greensboro, in that they were most likely to be observed playing with toys in both the middle-class (26% of observations) and working-class community (30%). These children were also as likely as those in Greensboro to watch television and did so in 8% (middle class) and 12% (working class) of our observations. On the other hand, although the Brazilian children were as likely as their white counterparts in Greensboro to engage in pretend play (over 3% of our observations in both social-class groups) and with school-related objects among middle-class children (3.5%), the working-class children were almost never observed in this type of play (less than 0.5% of our observations). By contrast, they were more likely to play with objects from the adult world (6% and 8% of observations, for the middle- and working-class children) and with no object at all (5% and 4% respectively).

Thus, even within a single city one can see that children from different social classes engaged to different extents in various types of play; heterogeneity of experience is clearly not found only when comparing the majority and industrialized world or even rural and urban contexts within a single society. One must be extremely cautious about allowing any one group to "represent" an entire country.

Who were the children's partners in play? Much of the literature on young children's play in the United States and Britain focuses on the involvement of parents and siblings, with mothers featuring prominently as their children's primary partner (Dunn, 1988, 2005; Fischer & Fischer, 1963; Haight & Miller, 1993; Newson & Newson, 1968). Recently there has been greater interest in father involvement in play, with a number of scholars arguing that fathers are less involved than mothers with their children primarily because fathers spend less time in the same setting as their children; fathers are equally, or more, involved, however, in proportion to their presence in the child's environment (Lamb, 1997; Parke, 2000; Pleck, 1997). The literature on Kenya, however, paints a different picture—one in which neither mother nor father are involved in children's play, which is the domain of siblings and peers (Edwards &

Whiting, 1993; Harkness & Super, 1985; LeVine & LeVine, 1963; Wenger, 1989; Whiting & Edwards, 1988).

In our data, we found that in Greensboro, Kisumu, and Porto Alegre, children were actually more likely to play by themselves than to play with their mother, and that their most likely play partners were other children (whether siblings or not). In Greensboro, in the working-class black community, grandmothers and the children's child-care teachers were almost as likely as mothers to be involved in the children's play. The same was found in Porto Alegre, in both the middle- and working-class communities. In Kisumu, however, as past scholars have noted, mothers and fathers were only minimally involved in their children's play—in a little over 5% of our observations. In that Kenyan city, the children were playing with other children in about half of our observations of their play, but in about 40% of our observations of their play they were playing alone, which does not fit well with previous data.

As far as the father's role is concerned, we always noted whether the mother or father (defined as a social category, rather than necessarily biological) was in the same setting as the child while coding the children's participation in their various activities and interactions. We thus can answer those who say that fathers, proportionally, are as involved as mothers in their young children's play. In all of the groups from whom we collected data, mothers were always more likely to be found in the children's setting than were fathers, and so clearly had the opportunity to act as their children's partners in any of the activities in which the latter were involved. Indeed, they were far more likely to be engaged with the children than were fathers in all of the children's activities.

To what extent were fathers more engaged in play with their children than mothers when taking into account their lesser availability to the children? In Greensboro they were not; mothers were one and a half times more likely than were fathers to be observed playing with their children when expressed as a proportion of their availability. However, there were some types of play in which fathers were as likely or a little more likely than mothers to feature as partners. Middle-class fathers, both white and black, were more likely to play with their children using objects from the adult world and natural world, and white working-class fathers were proportionally more involved than were mothers in their children's pretend play, play with school-related objects and play with no objects at all (rough and tumble, running, singing, and so on). Black fathers from working-class families were also more likely, proportional to their availability, to play with their children using objects from the natural world. But for all other types of play mothers were more likely to be their children's partners, both in fact and when expressed as a proportion of their availability.

In Kisumu, as mentioned earlier, mothers were far less likely to be engaged in play with their children than were mothers in other groups, but although fathers were not often observed in play or entertainment with their children, they did not look strikingly different from fathers in other cities. However, taking into account their more limited availability, in the middle-class community fathers were more involved than were the mothers, primarily because they were three or more times as likely to be engaged with their children in play with objects from the natural world, play with no object at all, and watching television. In the working-class community in Kisumu, similarly, neither mothers nor fathers were often observed playing with their children.

However, fathers and mothers were similarly involved, both actually and proportionally to their availability.

In Porto Alegre, the situation also clearly varied by social class. In the middle-class community fathers were only slightly less likely to play with their children than were mothers and, expressed proportionally to availability, actually did so slightly more than did mothers. Of the seven different categories of play and entertainment, middle-class fathers were more involved with their children in four (school-related play, play with toys, play with no objects, and watching television) and were only slightly less likely to play with their children with objects from the adult world. By contrast, working-class fathers there were both less likely to be involved actually and proportionally, although they were proportionally more likely than were mothers to engage with their children in the course of their play with objects from the adult world, the natural world, and with no objects.

Conclusion

Different methods, from the experimental to the ethnographic, have been used to study play. To some extent, the choice of methods depends on one's disciplinary training. Scholars trained within psychology or human development are more likely to have learned to use methods that involve some degree of control, by observing play within controlled or semi-controlled settings or relying on scripted interviews or questionnaires. Scholars trained within anthropology are more likely to have learned to use ethnographic methods that require them to observe and interact relatively freely with their participants.

However, extending beyond disciplinary boundaries are the paradigms or worldviews into which our theories about play fit; their different ontological and epistemological positions are necessarily linked to methods that are viewed as acceptable. Those whose theories are mechanist (a neo-positivist paradigm) clearly look for methods that involve control as a way to predict and generalize, whereas those whose theories are contextualist (a non-positivist paradigm) hold that the conditions that shape play (and any other human activity) can only be understood by becoming immersed in them.

Those who study play as it occurs in its everyday contexts, the focus of this chapter, are clearly more likely to fit within the contextualist paradigm. Nonetheless, as we have shown, the methods are far from identical. Scholars conducting their research within the United States have either observed in a restricted number of the settings in which young children spend their time (home, or child-care center, or during free play at school) or have questioned parents about the extent of their children's involvement in different types of play. By contrast, those who do their research in the majority world have been far more likely to observe the children at play in any of the settings in which they would commonly be found.

This use of different methods to study play in different parts of the world is problematic, for example when we note that children in one group often play while working but when gathering data on children in another group do so only at times or under conditions in which they are unlikely to be found involved in work. Similarly, can one really compare data gathered from parents about their children's play in one group with data gathered observationally in another

group? Some ethnographers might respond that the purpose is not to compare one group to another, but to understand a group solely in its own terms. The problem is that this approach implicitly leaves it up to the readers of the published research to make the comparison between this group's practices and those of their own.

It is also troubling that so much of the ethnographic research on children's play that we described above, whether collected in Kenya, Botswana, Liberia, Senegal, or Brazil, was conducted in rural areas, with parents who had little or no formal education, with little attention paid to the passage of time and the impact of urbanization and education in these societies. Children's play in these countries also occurs in middle-class homes, and in child-care centers, as well as on the streets or tending cattle. These countries cannot be simply represented as exemplifying one type of community, whether it is an isolated village or a gang of street children, but as diverse heterogeneous contexts in which children are developing.

We have therefore described in this chapter a specifically contextualist theory and methods that were designed explicitly to fit with the theory. The methods are such that they can be used in a wide variety of contexts, although so far they have only been used in urban settings, given the relative lack of such data. Here we presented data only from three cities, one from the southern United States, one from the western part of Kenya, and one from the south of Brazil. Families from middle- and working-class homes were included, simply to give a taste to the heterogeneity that exists within each city.

These data on children's play reveal things that previous research has not. For example, these city-dwelling children spent a far greater proportion of their time in play than has been noted in previous literature, and the middle-class children from Kisumu engaged in more school-related play than did the children in Greensboro. Although Kisumu parents played less with their children than was the case in the other two cities, our data call into question the idea that "Kenyan" parents do not consider it acceptable to play with their children. Our data also cast doubt on the position that "American" fathers play with their children more than do mothers, once their limited availability is taken into account or that mothers are the primary partner in play. In fact, it was only in Porto Alegre that fathers were as involved as much as were mothers in their children's play; in Greensboro, other children were more likely than was the mother to be the partner in play, and in the black community in Greensboro grandmothers and the children's childcare teachers were as likely to play with the children as were their mothers.

Lancy noted that "quantitative studies of mother-child play that would yield a metric we might use in comparing incidence cross-culturally are rare" (2007, p. 275). The method we have described here should aid in this endeavor. Quantitative metrics are dangerous tools, however; too often they can be treated as a single measuring stick, with groups falling lower on the metric viewed as at a deficit or disadvantage compared to those at the top. A contextualist approach, however, eschews such a position. Instead, what we need to understand are the cultural values and beliefs that account for the different patterns of activities and interactions that are found in different groups, or in the same group over time.

Future Directions

- Given that different paradigms involve different ontologies, epistemologies, and methods, one can argue that it is impossible to do “mixed-methods” research in which the methods stem from different paradigms.
- Alternatively, a pragmatic position (see Creswell, 2003) holds that quantitative and qualitative methods are compatible and enhance the understanding of a research problem. Is a pragmatic approach to studying play inevitable given the diversity of methods?
- Given that to understand any aspect of human development, including the extent, types, and functions of play, requires insights from multiple disciplines, including history, anthropology, sociology, and psychology, what can be done to encourage multidisciplinary in universities dominated by disciplinary boundaries?
- Can the methods described here be used in any settings, and with adolescents or adults rather than with children? Young children quickly become accustomed to the presence of an observer and seem to behave quite normally, but would more time or different methods be needed when observing those who are older?

References

Adamopoulos, J., & Lonner, W. J. (2001). Culture and psychology at a crossroad: Historical perspective and theoretical analysis. In D. Matsumoto (Ed.), *The handbook of culture and psychology* (pp. 11–34). Oxford: Oxford University Press.

Alves, P. B. (2004). O estudo sobre crianças em situação de rua na perspectiva da teoria dos sistemas ecológicos: Contribuições teóricas e metodológicas [The study of street children from a systems theory perspective: Theoretical and methodological contributions]. In S. Koller (Ed.), *Ecologia do desenvolvimento humano: Pesquisa e intervenção no Brasil [The ecology of human development: Research and intervention in Brazil]* (pp. 121–141). São Paulo: Casa do Psicólogo.

Atkinson, P., Coffey, A., Delamont, S., Lofland, J., & Lofland, L. (2001). (Eds.) *Handbook of ethnography*. London: Sage.

Bjorklund, D. F., & Pellegrini, A. D. (2002). *Evolutionary developmental psychology*. Washington, DC: American Psychological Association.

Bloch, M. N. (1989). Young boy’s and girl’s play at home and in the community: A cultural-ecological framework. In M. N. Bloch & A. D. Pellegrini (Eds.), *The ecological context of children’s play* (pp. 120–154). Norwood, NJ: Ablex.

Bloch, M. N. & Adler, S. M. (1994). African children’s play and the emergence of the sexual division of labor. In J. Roopnarine, J. Johnson, & F. Hooper (Eds), *Children’s play in diverse cultures* (pp. 148–178). Albany: State University of New York Press.

Bock, J. (2002). Learning, life history, and productivity: Children’s lives in the Okavango Delta of Botswana. *Human Nature*, 13, 161–198.

Bock, J. and Johnson, S. E. (2004). Subsistence ecology and play among the Okavango Delta peoples of Botswana. *Human Nature*, 15, 63–81.

Bock, J. and Johnson, S. E. (2005). Farming, foraging and children's play in the Okavango Delta, Botswana. In A. Pellegrini and P. K. Smith (Eds.), *The nature of play: Great apes and humans* (pp. 254–281). New York: The Guilford Press.

Bornstein, M. H. (2006). On the significance of social relationships in the development of children's earliest symbolic play: An ecological perspective. In A. Göncü & S. Gaskins (Eds.), *Play and development: Evolutionary, sociocultural, and functional perspectives* (pp. 101–129). New York: Lawrence Erlbaum Associates.

Brewer, J. D. (2000). *Ethnography*. Buckingham, UK: Open University Press.

Bronfenbrenner, U. (1993). The ecology of cognitive development: Research models and fugitive findings. In R. Wozniak & K. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 3–44). Hillsdale, NJ: Erlbaum.

Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Eds.), *International Encyclopedia of Education* (2nd Ed., Vol. 3, pp. 1643–1647). Oxford, England: Pergamon Press.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 619–647). Washington, DC: American Psychological Association.

Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environment across the life span: Emerging methods and concepts* (pp. 3–28). Washington, DC: American Psychological Association Press.

Bronfenbrenner, U. (2005). The bioecological theory of human development. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 3–15). Thousand Oaks, CA: Sage. (Original work published 2001)

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon (Series Ed.) & R. M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (6th ed., pp. 793–828). New York: John Wiley.

Brown, S. (2009). *Play: How it shapes the brain, opens the imagination, and invigorates the soul*. New York: Penguin.

Carvalho, A. M. A., & Pedrosa, M. I. (2002). Culture in the play group. *Estudos Psicológicos*, 7(1), 181–188.

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Harvard University Press.

Cole, M. (2005). Cultural-historical activity theory in the family of socio-cultural approaches. *International Society for the Study of Behavioural Development Newsletter*, 47(1), 1–4.

Creswell, J.W. (2003). *Research design: Qualitative, quantitative and mixed method research*. Thousand Oaks, CA: Sage.

Domeniconi, C., Costa, A. R. A., Souza, D. G., & Rose, J. C. (2007). Exclusion-responding by 2- to 3-year-old children in a play setting. *Psicologia: Reflexão e Crítica*, 20(2), 342–350.

Dunn, J. (1988). *The beginnings of social understanding*. Cambridge, MA: Harvard University Press.

Dunn, J. (2005). Naturalistic observations of children and their families. In S. M. Greene & D. M. Hogan (Eds.), *Researching children's experience: Approaches and methods* (pp. 87–101). London: Sage.

Eckensberger, L. H. (2002). Paradigms revisited: From incommensurability to respected complementarity. In H. Keller, Y. H. Poortinga, & A. Schölmerich (Eds.), *Between culture and biology: Perspectives on ontogenetic development* (pp. 341–383). Cambridge: Cambridge University Press.

Edwards, C. P., & Whiting, B. B. (1993). “Mother, older sibling, and me”: The overlapping roles of caregivers and companions in the social world of two- to three-year-olds in Ngeca, Kenya. In K MacDonald (Ed.), *Parent–child play: Descriptions and implications* (pp. 305–329). Albany, NY: SUNY Press.

Fischer, J. L., & Fischer, A. (1963). *The New Englanders of Orchard Town U. S. A.* In B. B. Whiting (Ed.), *Six cultures: Studies of child rearing* (pp. 869–1010). New York: John Wiley.

Gil, M. S. C. A., & Almeida, N. V. F. (2000). Mother–infant interaction patterns in play situation. *Cadernos de Psicologia*, 10(1), 89–103.

Goldhaber, D.E. (2000). *Theories of human development: Integrative perspectives*. Mountain View, CA: Mayfield Publishing.

Göncü, A., & Gaskins, S. (Eds.) (2006). *Play and development: Evolutionary, sociocultural, and functional perspectives*. New York: Lawrence Erlbaum Associates.

Göncü, A., Jain, J., & Tuermer, U. (2006). Children's play as cultural interpretation. In A. Göncü & S. Gaskins (Eds.), *Play and development: Evolutionary, sociocultural, and functional perspectives* (pp. 155–178). New York: Lawrence Erlbaum Associates.

Göncü, A., Tuermer, U., Jain, J., & Johnson, D. (1999). Children's play as cultural activity. In A. Göncü (Ed.), *Children's engagement in the world: Sociocultural perspectives* (pp. 148–170). New York: Cambridge University Press.

Gosso, Y., Morais, M. L. S., & Otta, E. (2007). Pretend play of Brazilian children: A window into different cultural worlds. *Journal of Cross-Cultural Psychology, 38*(5), 539–558.

Gosso, Y., Otta, E., Morais, M. L. S., Ribeiro, F. J. L., & Bussab, V. S. R. (2005). Play in hunter-gatherer society. In A. D. Pellegrini & P. K. Smith (Eds.), *The nature of play: Great apes and humans* (pp. 213–253). New York: The Guilford Press.

Greenfield, P. M. (1976). Cross-cultural research and Piagetian theory: Paradox and progress. In K. F. Riegel & J. A. Meacham (Eds.), *The developing individual in a changing world, Vol 1: Historical and cultural issues* (pp. 322–345). Chicago: Aldine.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105–117). Thousand Oaks, CA: Sage.

Guberman, S. R. (1996). The development of everyday mathematics in Brazilian children with limited formal education. *Child Development, 67*, 1609–1623.

Haight, W. L. (1999). The pragmatics of caregiver–child pretending at home: Understanding culturally specific socialization practices. In A. Göncü (Ed.), *Children's engagement in the world: Sociocultural perspectives* (pp. 128–147). New York: Cambridge University Press.

Haight, W. L., & Miller, P. J. (1993). *Pretending at home: Early development in a sociocultural context*. Albany: State University of New York Press.

Harkness, S., & Super, C. M. (1992). The cultural foundations of fathers' roles: Evidence from Kenya and the United States. In B. S. Hewlett (Ed.), *Father–child relations: Cultural and biosocial contexts* (pp. 191–211). New York: Aldine de Gruyter.

Harwood, R., Miller, G., & Lucca-Irizarry, N. (1995). *Culture and attachment: Perceptions of the child in context*. New York: Guilford Press.

Hecht, T. (1998). *At home in the street: Street children of Northeast Brazil*. New York: Cambridge University Press.

Hofferth, S. L., & Sandberg, J. F. (2001). How American children spend their time. *Journal of Marriage and Family, 63*(2), 295–308.

Kağıtçıbaşı, C. (1996). *Family and human development across cultures: A view from the other side*. Mahwah, NJ: Lawrence Erlbaum.

- Kağıtçıbaşı, C. (2007). *Family, self, and human development across cultures: Theory and applications*. New York: Psychology Press.
- Kishimoto, T. M., & Oto, A. T. (2008). Toys, gender and education in a toy library. *Pro-Posições*, 19(3), 209–223.
- Kuczynski, L., & Daly, K., (2003). Qualitative methods as inductive (theory-generating) research: Psychological and sociological approaches. In L. Kuczynski (Ed.), *Handbook of dynamics in parent–child relations* (pp. 373–392). Thousand Oaks, CA: Sage.
- Lamb, M. E. (Ed.). (1997). *The role of the father in child development* (3rd ed.). New York: Wiley.
- Lancy, D. F. (1996). *Playing on the mother ground: Cultural routines for children’s development*. New York: Guilford Press.
- Lancy, D. F. (2007). Accountability for availability in mother–child play. *American Anthropologist*, 109, 273–284.
- LeVine, R. A. (1989). Cultural environments in child development. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 52–68). San Francisco: Jossey-Bass.
- LeVine, R. A. (2007). Ethnographic studies of childhood: A historical overview. *American Anthropologist*, 109(2), 247–260.
- LeVine, R. A., Dixon, S., LeVine, S., Richman, A., Leiderman, P. H., Keefer, C. H., & Brazelton, T. B. (1994). *Child care and culture: Lessons from Africa*. New York: Cambridge University Press.
- LeVine, R. A., & LeVine B. B. (1963). Nyansongo: A Gusii community in Kenya. In B. B. Whiting (Ed.), *Six cultures: Studies of child rearing* (pp. 14–202). New York: John Wiley.
- Lordelo, E. R., & Carvalho, A. M. A. (2006). Patterns of social partnership and play in daycare centers. *Psicologia em Estudo*, 11(1), 99–108.
- Macarini, S. M., & Vieira, M. L. (2006). The play of schoolage children in a play library. *Revista Brasileira de Crescimento de Desenvolvimento Humano*, 16(1), 49–60. Find this resource:
- Malinowski, B. (1927). *Sex and repression in savage society*. New York: Harcourt Brace.
- Mead, M. (1961). *Coming of age in Samoa*. New York: New American Library. (Original work published 1928)
- Miller, P. J., Hengst, J. A., & Wang, S. (2003). Ethnographic methods: Applications from developmental cultural psychology. In P. M. Camic, J. E. Rhodes, & L. Yardley (Eds.), *Qualitative research in psychology: Expanding perspectives in methodology and design* (pp. 219–242). Washington: American Psychological Association.

Newson, J., & Newson, E. (1968). *Four years old in an urban community*. Chicago: Aldine de Gruyter.

Nunes, T., Schliemann, A.-L., & Carraher, D. (1993). *Street mathematics and school mathematics*. New York: Cambridge University Press.

Parke, R. D. (2000). Father involvement: A developmental psychological perspective. *Marriage and Family Review*, 29(2–3), 43–58.

Pedrosa, M. I., & Carvalho, A. M. A. (1995). Social interaction and the construction of play. *Cadernos de Pesquisa*, 93, 60–65.

Pellegrini, A. D. (1988). Elementary school children's rough-and-tumble play and social competence. *Developmental Psychology*, 24, 802–806.

Pellegrini, A. D. (1995). *School recess and playground behavior*. Albany, NY: State University of New York Press.

Pellegrini, A. D. (2009). *The role of play in human development*. New York: Oxford University Press.

Pellegrini, A. D., & Bjorklund, D. F. (2004). The ontogeny and phylogeny of children's object and fantasy play. *Human Nature*, 15(1), 23–43.

Pellegrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, 69(3), 289–296.

Pellegrini, A. D., & Smith, P. K. (Eds.) (2009). *The nature of play: Great apes and humans*. New York: The Guilford Press.

Pepper, S. C. (1942). *World hypotheses: A study in evidence*. Berkeley: University of California Press.

Pleck, J. H. (1997). Paternal involvement: Levels, sources, and consequences. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp. 66–103). New York: Wiley.

Sager, F., & Sperb, T. M. (1998). Plays, toys and children's conflicts. *Psicologia: Reflexão e Crítica*, 11(2), 309–326.

Saxe, G. B. (1991). *Culture and cognitive development: Studies in mathematical understanding*. Hillsdale, NJ: Erlbaum.

Scheper-Hughes, N. (1985). Culture, scarcity, and maternal thinking: Maternal detachment and infant survival in a Brazilian shantytown. *Ethos*, 13, 291–317.

Scheper-Hughes, N. (1990). Mother love and child death in northeast Brazil. In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural psychology: Essays on comparative human development* (pp. 542–565). Cambridge: Cambridge University Press.

Scheper-Hughes, N. (1992). *Death without weeping: The violence of everyday life in Brazil*. Berkeley: University of California Press.

Schliemann, A. D., Carragher, D. W., & Ceci, S. J. (1997). Everyday cognition. In J. W. Berry, P. R. Dasen, & T. S. Sarasthwati (Eds.), *Handbook of cross-cultural psychology. Vol.2: Basic processes and human development* (pp. 177–216). Boston: Allyn and Bacon.

Shweder, R. A. (1990). Cultural psychology – what is it? In J. W. Stigler, R. A. Shweder, & G. Herdt (Eds.), *Cultural psychology: Essays on comparative human development* (pp. 1–43). New York: Cambridge University Press.

Shweder, R. A., Mahapatra, M., & Miller, J. (1990). Culture and moral development. In J. Stigler, R. Shweder, & G. Herdt (Eds.), *Cultural psychology: Essays on comparative human development* (pp. 130–204). New York: Cambridge University Press.

Smith, P. K. (1982). Does play matter? Functional and evolutionary aspects of animal and human play. *The Behavioral and Brain Sciences*, 5, 139–184.

Sperb, T. M., & Conti, L. (1998). The metarepresentative dimension of pretense. *Padéia*, 8(14–15), 75–89.

Timmer, S. G., Eccles, J., & O'Brien, K. (1985). How children use time. In F. T. Juster & F. P. Stafford (Eds.), *Time, goods, and well-being* (pp. 353–382). Ann Arbor: Survey Research Center, University of Michigan.

Tudge, J. R. H. (2008). *The everyday lives of young children: Culture, class, and child rearing in diverse societies*. New York: Cambridge University Press.

Tudge, J., Gray, J., & Hogan, D. (1997). Ecological perspectives in human development: A comparison of Gibson and Bronfenbrenner. In J. Tudge, M. Shanahan, & J. Valsiner (Eds.), *Comparisons in human development: Understanding time and context* (pp. 72–105). New York: Cambridge University Press.

Tudge, J. R. H., & Odero-Wanga, D. (2009). A cultural–ecological perspective on early childhood among the Luo of Kisumu, Kenya. In M. Fler, M. Hedegaard, & J. R. H. Tudge (Eds.), *The world year book of education 2009: Childhood studies and the impact of globalization: Policies and practices at global and local levels* (pp. 142–160). New York: Routledge.

Tudge, J., Otero, D., Hogan, D., & Etz, K. (2003). Relations between the everyday activities of preschoolers and their teachers' perceptions of their competence in the first years of school. *Early Childhood Research Quarterly, 18*, 42–64.

Tudge, J. R. H., & Scrimsher, S. (2003). Lev S. Vygotsky on education: A cultural-historical, interpersonal, and individual approach to development. In B. J. Zimmerman & D. H. Schunk (Eds.), *Educational psychology: A century of contributions* (pp. 207–228). Mahwah, NJ: Lawrence Erlbaum Associates.

Valsiner, J., & Winegar, L. T. (1992). Introduction: A cultural-historical context for social “context”. In L. T. Winegar & J. Valsiner (Eds.), *Children's development within social context: Volume 1, Metatheory and theory* (pp. 1–14). Hillsdale, NJ: Erlbaum.

Vygotsky, L. S. (1987). *The collected works of L. S. Vygotsky: Vol. 1, Problems of general psychology* (R. W. Rieber & A. S. Carton, Eds.; N. Minick, Trans.). New York: Plenum. (Original publication, 1934, written between 1929 and 1934.)

Vygotsky, L. S. (1994). The problem of the environment. In R. Van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338–354). Oxford: Basil Blackwell. (Original work published 1935)

Wanderlind, F. (2006). Gender differences in play of preschool and school children at a toy library. *Padéia, 16*(34), 263–273.

Weisner, T. S. (1979). Urban–rural differences in sociable and disruptive behavior of Kenya children. *Ethnology, 18*(2), 153–172.

Weisner, T. S. (1989). Cultural and universal aspects of social support for children: Evidence from the Abaluyia of Kenya. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 70–90). New York: Wiley.

Weisner, T. S. (1996). Why ethnography should be the most important method in the study of human development. In R. Jessor, A. Colby, & R. A. Shweder (Eds.), *Ethnography and human development: Context and meaning in social enquiry* (pp. 305–324). Chicago: University of Chicago Press.

Wenger, M. (1989). Work, play, and social relationships among children in a Giriama community. In D. Belle (Ed.), *Children's social networks and social supports* (pp. 91–115). New York: Wiley.

Whiting, B. B. (Ed.). (1963). *Six cultures: Studies of child rearing*. Cambridge, MA: Harvard University Press.

Whiting, B. B., & Edwards C. P. (1988). *Children of different worlds: The formation of social behavior*. Cambridge, MA: Harvard University Press.

Whiting, B. B., & Whiting, J. W. M. (1975). *Children of six cultures: A psycho-cultural analysis*. Cambridge, MA: Harvard University Press.

Winegar, L. T. (1997). Developmental research and comparative perspectives: Applications to developmental science. In J. Tudge, M. Shanahan, & J. Valsiner (Eds.), *Comparisons in human development: Understanding time and context* (pp. 13–33). New York: Cambridge University Press.

Notes

We would like to thank the parents and children from Greensboro, Kisumu, and Porto Alegre, who gave so generously of their time, and Sarah Putnam, Judy Sidden, Fabienne Doucet, Nicole Talley, Dolphine Otero-Wanga, Giana Frizzo, Fernanda Marques, and Rafael Spinneli, who collected the data reported in this chapter. We are also grateful to the Spencer Foundation, CAPES (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior), and the Council for the International Exchange of Scholars (Fulbright Program) for grants and awards to the first author which assisted in the gathering of the data and the writing of this chapter.