Children Development and Socioeconomic Status of Parents: An Analysis of Families in the Far North **Region of Cameroon**

Galy Mohamadou,PhD
Higher Teachers' Training College Maroua,
University of Maroua, Cameroon

doi: 10.19044/esj.2017.v13n26p331 <u>URL:http://dx.doi.org/10.19044/esj.2017.v13n26p331</u>

Abstract

Socioeconomic status (SES) is one of the most widely studied constructs in the social sciences. Several ways of measuring SES have been proposed, but most include some quantification of family income, parental education, and occupational status. Research shows that SES is associated with a wide array of health, cognitive, and socioemotional outcomes in with a wide array of health, cognitive, and socioemotional outcomes in children, with effects beginning prior to birth and continuing into adulthood. A variety of mechanisms linking SES to child well-being have been proposed, with most involving differences in access to material and social resources or reactions to stress-inducing conditions by both the children themselves and their parents. For children, SES impacts well-being at multiple levels, including both family and neighborhood. Its effects are moderated by children's own characteristics, family characteristics, and external support systems.

Keywords: Socioeconomic status, poverty, achievement, adjustment, child well-being

Introduction

The far north region of Cameroon is characterized by extreme poverty that (SES) remains a topic of great interest to those who study children's development. Officially, the region of the far North is the most populated of Cameroon, followed by the Centre. Its population is estimated at 4,803,414 inhabitants or 17.9% of the total population of Cameroon. In this region where there is Boko Haram, poverty is at its peak.

According to a study conducted by the Ministry of the economy, the

Plan and planning under the technical supervision of the national Institute of statistics, in 2007, the proportion of the population living below the poverty line increased from 18.8 to 24.6 between 2001 and 2007 in the region of the

far North. "The poor have become poorer," it reads. While in the same period, at the national level there were down 0.3 point (Le Jour 18 august 2014). The region of the far North is therefore the poorest throughout Cameroon. 65.9% of its population is bathed in an ambient poverty. Its young population, one of the largest of the country, is under educated: 28.9%, the lowest rate of Cameroon.

28.9%, the lowest rate of Cameroon.

There is growing interest in the belief that high SES families are able to provide their children with a variety of services, facilities, goods, and social connections that potentially give tremendous benefits to children. Children from low SES families may lack access to the aforementioned resources and experiences found in high SES families. This state may put these children at risk for developmental problems (Brooks-Gunn and Duncan 1997). Since the far north region is the poorest in the country, children may experience developmental problems in the three areas of concern of this study. The interest in SES as a global construct persists despite evidence that there is wide variability in what children experience within every SES level, despite evidence that the link between SES and child well-being varies as a function of geography, culture, and recency of immigration, and despite evidence that the relation between SES and child well-being can be disrupted by catastrophes and internal strife (Bradley and Corwyn, 1999; Wachs, 2000) by catastrophes and internal strife (Bradley and Corwyn, 1999; Wachs, 2000) and in our case with the advent of unrest caused by Boko Haram. Many studies have shown that SES is associated with better health among younger children (Marmot, 2005). Other studies have reported similar findings (Koivusilta and Rimpela, 2006).

In this paper we review the history of SES and provide an overview of the association between SES and children's well-being in the domains of cognitive, socioemotional and health development. The study focuses on models that attempt to show the connection between SES and these aspects of development.

History and definitions

Social scientists have continued to show great interest in SES although there is no consensus on what exactly SES represents (McLoyd, 1997). There are conflicting views amongst proponents of SES as representing class (or economic position) and proponents of SES as representing social status (or prestige). The idea of capital (Coleman 1988) perhaps best describes the current meaning psychologists have with regards to SES (Entwistle and Astone, 1994, Guo and Harris 2000). Capital (resources, assets) has become a way of thinking about SES because access to financial capital (material resources), human capital (nonmaterial resources such as education), and social capital (resources achieved through social connections) are related to processes that directly affect well-being.

Capital is linked to historic ideas about SES, such as social and material "deprivation," and it brings into focus the important dimension of social relationships (Krieger, Williams, and Moss, 1997).

Socioeconomic factors and social class are fundamental determinants of human functioning across the lifespan, including development, wellbeing, physical and mental health (American Psychological Association, Task Force on Socioeconomic Status, 2007). SES is a complex phenomenon predicted by a broad spectrum of variables that is often conceptualized as a combination of financial, occupational, and educational influences Mueller (1981). Financial capital is measured by household income, but is more often indexed by occupational status. However, neither fully captures the notion of wealth as described by economists (Smith 1999); wealth may be a better measure of the financial resources available in that it is often a more accurate barometer of access to opportunities (Oliver & Shapiro 1995, Williams & Collins 1995). Most social scientists agree that a combination of income and occupational status provides a better approximation to financial capital than either alone. To more fully capture financial capital, Entwisle and Astone (1994) recommend gathering data on what the family pays for rent or housing. Ostrove, Feldman, and Adler (1999) simply asked respondents to estimate the total value of their assets.

Entwisle and Astone (1994) also recommend expanding data collections pertaining to social capital (e.g., number of parents in the home, presence of a grandparent in the home), a suggestion that may garner increasing support given that many children live in households with only one parent. In this case, there is unrest in the region and as such children may not benefit from the financial support of both parents and/or grandparents. It could be found that either one parent is not available or both. Research showing that occupation often partially determines one's social network suggests that occupational status may also provide some indication of social capital. Likewise, research showing a link between the type of employment parents engage in and parenting practices suggests that occupational status may also capture some of human capital (Kohn and Schooler, 1982, Parcel and Menaghan, 1990, Rodrigo, Janssens and Ceballos, 2001).

and Menaghan, 1990, Rodrigo, Janssens and Ceballos, 2001).

Although there is general consensus that income, education, and occupation together represent SES better than any of these alone (White, 1982), there is no consensus on (a) how best to composite the set of indicators; (b) whether it works best to examine relations between SES and child outcomes using a composite, a statistical procedure that includes each indicator, or each indicator singly; or (c) how best to measure each component (Krieger, Williams, and Moss, 1997). At times the different indicators seem to be tapping into the same underlying phenomenon, as indicated by their intercorrelations and their similar correlations with

outcome measures. At other times, they appear to be tapping into different underlying phenomena and seem to be connected to different paths of influence, as indicated by only modest correlations even among different SES composites and links with different mediating variables (Ostrove et al. 1999). Relatedly, there remains some uncertainty as to whether SES has the same underlying meaning in all ethnic and cultural groups (Williams and Collins, 1995).

Collins, 1995).

In summary, choosing how to measure SES remains open and there is high susceptibility of various measurement approaches. One should bear in mind that this will be determined partly by the question being examined, and partly by some practical considerations concerning collecting data, and lastly by the population from whom the data are collected. Regarding this last issue, both theory and empirical findings indicate that SES indicators are likely to perform differently across cultural groups (Bradley 1994, Bronfenbrenner 1995), the general conditions of the nation and the context. Many studies have shown a significant inconsistent relationship between socioeconomic status (SES) and health across the life course although it is found to be significant in both European and American samples.

Socioeconomic status and well-being

For years, studies of adults have established a relation between SES and health (Adler, Marmot, McEwen, and Stewart, 1994). Children from low-SES families are more likely to experience growth retardation. They are more likely to be born prematurely, at low birth weight, or with asphyxia, a birth defect, a disability, foetal alcohol syndrome if the mother drinks alcohol, (Crooks, 1995; Hawley and Disney 1992). Health and Human Services (2000). Early health problems often result from poor prenatal care, maternal substance abuse, poor nutrition during pregnancy, maternal lifestyles that increase the likelihood of infections (smoking, drug use), and living in a neighborhood that contains hazards affecting foetal development (toxic waste dumps) (US Dep. Health and Human Services, 2000).

During childhood, SES is implicated in many diseases, including respiratory illnesses (Cohen, 1999, Rosenbaum 1992). Low SES is associated with an increased likelihood of dental caries (Health and Human Services, 2000b), iron deficiency (Starfield, 1989), stunting (Brooks-Gunn & Duncan 1997; Korenman and Miller, 1997; Kotch and Shackelford 1989), and sensory impairment (Starfield, 1989, Wilson 1993). These outcomes likely reflect an array of conditions associated with low SES, including inadequate nutrition, exposure to tobacco smoke, failure to get recommended immunizations, and inadequate access to health care (Sandel and Schrfstein, 1999). On the other hand, SES is not implicated in all illnesses, and the SES/health gradient appears less steep in more egalitarian nations (Adler et

al. 1999). Moreover, the relations between particular SES indicators and health factors may be quite complex.

When low-SES children

When low-SES children experience health problems, the consequences are often more severe. Children from low-income families are consequences are often more severe. Children from low-income families are two to three times as likely to suffer complications from appendicitis and bacterial meningitis and to die from injuries and infections at every age. Equally important are findings that early insults to health may have long-term consequences (McLoyd, 1998). For example, premature children who lived in poverty for the first 3 years of life manifested more problems in growth, health status intelligence, and behaviour (Bradley, Whiteside-Mansell, Mundfrom, Casey, Kelleher, and Pope, 1994).

Among adolescents, SES is related to health status, but relations are less consistent than for adults (Macintyre and West 1991). Goodman (1999) found that SES was related to depression, obesity, and self-rated overall health (Call and Nonnemaker, 1999). Biologic impacts during childhood create vulnerabilities that result in adverse health outcomes in adulthood.

Power (1991) found that SES measured in middle childhood and adolescence was related to health status at age 23. Hertzman (1999) refers to this as the "biological embedding" of early experience and notes that there is evidence for "latent" effects of early biologic damage (e.g., a higher propensity for adult cardiovascular disease for low-birth weight children). Also, Treiber, Harshfield, Davis, Kapuku and Moore (1999) found evidence that low SES was associated with increased systolic blood pressure and increased left ventricular mass among adolescents. ventricular mass among adolescents.

Cognitive and Academic Attainment

Various studies have documented that poverty and low parental education are associated with lower levels of school achievement and IQ later in childhood (Bloom, 1964; Escalona, 1982; Walberg and Marjoribanks, 1976). Although the findings may be old enough, Kennedy, Van de Riet and White (1963) also reported results from a random sample of first- through sixth-grade African American children selected to represent African Americans living in the southeastern United States. The mean IQ of the highest SES group was 25 points higher than the mean of the lowest SES group. This could be relevant to our case because poverty may limit access to facilities that could facilitate cognitive development.

There has been some debate regarding which aspects of SES most strongly influence cognitive development. Mercy and Steelman (1982) found that each SES measure used in the Health Examination Survey (family income, maternal education, paternal education) predicted intellectual attainment, with education being the best predictor. Maternal education was a stronger predictor than paternal education. Among the traditional measures

of SES, family income accounted for the greatest amount of variance, but SES measures that combined two or more indicators accounted for more variance than single indicators. In a study carried out by DeGarmo, Forgatch, and Martinez (1999), it is found that each SES indicator (income, education, occupation) was associated with better parenting, which consequently affected school achievement.

Few researchers have concentrated on the relation between parental

Few researchers have concentrated on the relation between parental occupation and cognitive development. Surprisingly, Parcel and Menaghan (1990) found that mothers who worked in occupations with a variety of tasks and problem solving opportunities provided more warmth and support and a greater number of stimulating materials. Their children manifested more advanced verbal competence. There is also evidence that the connection between SES and cognitive performance applies to many societies. Mpofu and Van de Vijver (2000) found that among Zimbabwean children social class predicted the frequency with which children used taxonomic rather than functional classification strategies. In a cross-cultural analysis, SES indicators were strongly related to cognitive development from infancy through middle childhood Bradely and colleagues (1996).

The relation between SES and cognitive attainment may be quite complex, with different components of SES contributing to the development of particular cognitive skills in different ways and with some components of SES serving to moderate the effects of other components. DeGarmo et al (1999) examined the relationships between maternal education, occupation, and income and found evidence of both similarities and differences in their connections to school achievement among 6- to 9-year-olds. Several analyses have indicated that the relations for family income and parental education depend on the number of siblings present in the household (Mercy and Steelman, 1982; Walberg and Marjoribanks, 1976). Others have discussed the importance of showing the effects of socioeconomic status owing to the high level of confounding between socioeconomic and family demographic indicators. indicators.

SES also appears to affect school attendance and number of years of schooling completed (Haverman and Wolf, 1995, Brooks-Gunn and Duncan, 1997). The impact on years completed appears to be less than the impact on school achievement. Whereas in the far north region completion of secondary schools is not common even within well to do families. SES remains one of the most consistent predictors of early high school dropout, with evidence suggesting that it is connected both to low parental expectations and to early initiation of employment by youngsters found in the streets of various towns villages and cities across the region.

Socioemotional Development

Although the link between SES and children's social and emotional well-being is not as consistent as the link with cognitive attainment, there is substantial evidence that low-SES children more often manifest symptoms of psychiatric disturbance and maladaptive social functioning than children from more affluent circumstances (Brooks-Gunn and Duncan, 1997, McLeod and Shanahan (1993), Starfield (1989). It is not easy to indicate the precise relation between SES and socioemotional problems in children. It is often difficult to identify mental illness in young children, owing to the various standards and methods used to assess mental illness. For very young children, there is little evidence of a relation between SES and

standards and methods used to assess mental illness. For very young children, there is little evidence of a relation between SES and socioemotional well-being (Earls, 1980). However, the relation emerges in early childhood and becomes reasonably consistent (especially for externalizing problems) in middle childhood (McLeod and Shanahan, 1993). Among adolescents, low SES is often associated with poor adaptive functioning, an increased likelihood of depression, and delinquent behaviour (McLoyd 1997). Simons, Johnson, Conger, and Lorenz (1997), however, did not find a relation between poverty and adolescent problems.

The strength of the relationship between SES and mental disorders varies by type of disorder and race (McLoyd, 1997). The relationship is most consistent with schizophrenia and personality disorders, reasonably consistent with mild depression. Among children 6-17 years old referred to a psychiatric clinic, SES was associated with parent and teacher reports of aggressiveness and delinquency (McCoy, Firck, Loney, and Ellis, 1999).

Higher rates of substance abuse have been reported for low-SES teens, but findings are inconsistent. The relation is often mediated through friends' influence on the use of substances, academic competence, and parental supportiveness. It is also connected with the experience of negative life events as in the loss of a parent or close family relations especially due the frequent attacks by members of the terrorist group boko haram.

To conclude, we can say that there is substantial evidence linking low SES to less optimal outcomes in nearly every area of functioning. Unfortunately, most studies examined only a single outcome and, even when they examined more than one outcome, little attention was given to whether individual children experienced multiple bad outcomes. According to developmental systems theory, it is very difficult to predict developmental pathways with precision in highly complex, self-constructing organisms like humans (Ford and Lerner, 1992; Wachs, 2000). Th those circumstances.

It is not easy to determine with precision the processes through which SES influences child well-being, partly because low SES frequently cooccurs with other conditions that purportedly affect children (e.g., minority and immigrant status, single parenthood, a family member with a disability or serious mental illness, exposure to teratogens and other potentially hazardous environmental conditions)--the classic "third variable" problem. It is difficult to disentangle SES from such cofactors when there is evidence that they may exacerbate the effects of SES. Low-SES children are more often the victims of child abuse, peer aggression, and community violence (Garbarino, 1999). This aspect is also found in various villages and towns in the Far north region where children are sent in their early ages to Quranic schools. In these kinds of settings, physical abuse is common as children are abandoned under the care of the Quranic teacher with scarce resources to feed them. feed them.

To conclude, for a given child from a low-SES family, the mechanism leading to a poorer developmental outcome could be a combination of various factors that could be moderated by a third variable for instance family conflict or the large scale conflict resulting from boko haram' attacks. For preschool children, living in a deteriorated neighbourhood may mean less access to stimulating resources and recreational facilities. For an adolescent, the same neighbourhood may mean increased likelihood of affiliation with deviant peers. In our case, it is found that many adolescents who join Boko Haram group are influenced by their peers' lack of adequate living resources or proper education.

Resources

Nutrition among the most oft-cited linkages between SES and well-being is access to resources (Klerman, 1991). Klerman's model includes seven paths linking low income to health, inability to purchase goods and services essential for health and inability to secure appropriate health services. Mortorell (1980) identified inadequate dietary intake as a key pathway to poor health. According to his model, inadequate dietary intake results in defective nutrient absorption, defective nutrient utilization, and poor defenses against infection. Poor nutritional status, in turn, contributes to an array of morbidities and mortality. Pollitt, Golub, Gorman and Grantham-McGregor (1996) offer a similar formulation. In addition, they present evidence that poor nutritional status affects brain growth both pre- and postnatally postnatally.

Access to health care

It is difficult to determine how much poor nutrition contributes to developmental problems because children who lack access to adequate

nutrition also tend to lack access to other resources, such as adequate medical care. It is not easy to determine if a condition connected to poor nutrition actually results from poor nutrition or whether it reflects inadequate prenatal care and inadequate preventive care for the child (e.g., failure to obtain all recommended immunizations). For instance in relation to health obtain all recommended immunizations). For instance in relation to health inputs, the analysis of (Fambon, McKay, Timnou, Kouakep, Dzossa, and Tchakoute, 2014) shows that vaccination rates are consistently much lower in Adamaoua/North/Far North, and especially in the latter two regions, and the rate actually fell in the Far North between 2004 and 2011. Increased exposure to infection owing to poor personal hygiene (Rushing and Ortega 1979). For example, prematurity and low birth weight are also associated with delayed or absent prenatal care (Crooks, 1995).

Many poor families cannot purchase needed health care services. Poor families cannot afford to have medical insurance. The generally inadequate educational backgrounds of many poor adults may also reduce the likelihood of their seeking help for symptoms of illness because of beliefs about the causes and cures for symptoms that do not require with modern medical practice according to their views. In effect, there may be both a lack of money to purchase service and a lack of fit between the care that is available and the care that is wanted (Bradley and Kelleher, 1992).

both a lack of money to purchase service and a lack of fit between the care that is available and the care that is wanted (Bradley and Kelleher, 1992).

In developed countries relative material deprivation may account for much of the SES differential in well-being. Low social status may limit one's social ties (capital) and lead to feelings of helplessness and lack of control, as material deprivation reducing one's protection from potential threats to well-being, the second limiting one's own efforts to deal effectively with those threats (Marmot, 1999). Dilapidated and crowded housing has long been cited as one of the factors responsible for the SES gradient in child health (Marmot, 1999). Poor children often live in homes that have cracks in the floor, and leaky ceilings (Guo and Harris, 2000; Mayer, 1997). These conditions lead to increased illnesses and injuries. Guo and Harris (2000) have also linked the physical quality of the home environment to children's intellectual and social well-being. Evans, Maxwell, and Hart (1999), have likewise, linked household crowding to cognitive and emotional functioning.

Conclusion

The reviewed literature above presents a complex picture of the relation between SES and child development. Researchers have specified, and examined quite a number of mechanisms linking SES and child well-being. Not yet fully known is how the various components of SES interact synergistically with each other or with other aspects of family, neighborhood, peer, and institutional contexts to affect the course of development (McLoyd, 1998). It is also difficult to attribute causality to SES

because children's environments interact with other factors to influence wellbeing in many different ways (Wachs, 2000). Research in the next decade should help explicate how SES operates through multiple mechanisms simultaneously to affect developmental course, how those paths vary across ethnic and cultural groups and contexts, and how different components of SES function conjointly to effect different developmental systems.

References:

- 1. Koivusilta, L.K., Rimpela, S. M. (2006). Health inequality in adolescence. Does stratification occur by familial social background, family influence or personal social position. *BMC Public Health*, 6,
- 2. Marmot, M.G. (2005). Social detrminants of health inequlities, Lancet, 365, 1099-1104.
- 3. American Psychological Association, Task Force on Socioeconomic Status. (2007).
- 4. Report of the APA Task Force on Socioeconomic Status. Washington, DĈ:
- 5. American Psychological Association.6. Mueller, C.W, Parcel, T.L. (1981). Measures of socioeconomic status: alternatives and recommendations. *Child Development*, 52,13-30.
- Le Jour, General News of Monday, 18 August 2014. Far North marked as the poorest region in Cameroon
 Fambon, S., A. McKay, J.-P. Timnou, O. S. Kouakep, A. Dzossa, and R. T. (2014). Growth, Poverty, and Inequality: The Case Study of Cameroon, WIDER Working Paper 2014/154.
 Adler, N. E, Marmot M, McEwen, B. S, Stewart J. (1999). Socioeconomic Status and Health in Industrialized Nations. New North NY Applications of Sciences
- York: NY Academy of Science.
- 10. Bloom, B. (1964). Stability and Change in Human Characteristics. New York: Wiley
- 11. Bradley, R.H., Corwyn, R.F. (1999). Parenting. In *Child Psychology: A Handbook of Contemporary Issues*, (ed.). Tamis-LeMonda, C., Balter, L.pp. 339-62. New York: Psychology Press

 12. Bradley, R.H., Corwyn, R.F., Whiteside-Mansell, L. (1996). Life at home: same time, different places. *Early Development. Parent.* 5,
- 251-69.
- 13. Bradley, R.H., Whiteside-Mansell, L., Mundfrom, D.J., Casey, P.H., Kelleher, K.J., Pope, S.K. (1994). Early indications of resilience and their relation to experiences in the home environments of low

- birthweight, premature children living in poverty. Child Development. 65, 346-60.
- 14. Bronfenbrenner, U. (1995). Developmental ecology through space and time: a future perspective. pp. 619-48
 15. Brooks-Gunn, J., Duncan, G.J. (1997). The effects of poverty on
- children. Future Child. 7(2):55-71
- 16. Brooks-Gunn J, Klebanov PK, Liaw F. 1995. The learning, physical, and emotional environment of the home in the context of poverty: The Infant Health and Development Program. Child. Youth Service. Review. 17, 251-76.
- 17. Call, K.T., Nonnemaker, J. (1999). Socioeconomic disparities in *adolescent health: contributing factors.* pp. 352-55 18. Coleman, J.S. (1988). Social capital in the creation of human capital.
- 18. Coleman, J.S. (1988). Social capital in the creation of numan capital. American. Journal of. Sociology, 94 (Suppl.),95-120.
 19. Compas, B.E., Colmor-Smith, J.K., Saltzman, H., Thomsen, A.H, Wadsworth, M.E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. Psychological Bulletin. 127, 87-127.
- 20. Crooks, D. (1995). American children at risk: poverty and its consequences for children's health, growth, and school achievement.
- Year Book of Physical. Anthropology, 38, 57-86.
 21. DeGarmo, D.S, Forgatch, M.S., Martinez, C.R. (1999). Parenting of divorced mothers as a link between social status and boys' academic outcomes: unpacking the effects of socioeconomic status. *Child Development*, 70,1231-45.
- 22. Earls, F., McGuire, J., Shay, S. (1994à. Evaluating a community intervention to reduce the risk of child abuse: methodological strategies in conducting neighborhood surveys. Child Abuse Neglect. 18,73-85.
- 23. Entwisle, D.R., Astone, N.M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. Child Development, 65, 1521-1540.
- 24. Escalona, S. (1982). Babies at double hazard: early development of infants at biologic and social risk. Paediatrics, 70, 670-75.
- 25. Evans, G. W., Maxwell, L. E, Hart, B. (1999). Parental language and verbal responsiveness to children in crowded homes. Developmental Psychology. 35, 1020-1023
- 26. Ford DH, Lerner RM. 1992. Developmental Systems Theory: An Integrated Approach. Newbury Park, CA: Sage
- 27. Garbarino, J. (1999). The effects of community violence on children. In Child Psychology, A Handbook of Contemporary Issues, (ed.)

- Balter, L, Tamis-LaMonda, C. Pp. 412-25. New York: Psychology
- 28. Goodman E. 1999. The role of socioeconomic status gradients in explaining differences in US adolescents' health. American. Journal of Public Health, 89, 1522-1528.
- 29. Guo, G., Harris, K.M. (2000). The mechanisms mediating the effects of poverty on children's intellectual development. *Demography*, *37*,431447.
- 30. Haverman, R., Wolfe, R. (1995). The determinants of children's attainments: a review of methods and findings. Journal of Economics. Literature, 33, 1829-1878
- 31. Hawley, T., Disney, E. (1992). Crack's children: the consequences of maternal cocaine abuse. *Child Devevelopment*, *6*(*4*),1-22.
- 32. Hertzman, C. (1999). The biological embedding of early experience and its effects on health in adulthood. PP. 85-95.
- 33. Huston, A. C., McLoyd, V.C, Garcia, Coll, C. (1997). Poverty and behavior: the case for multiple methods and levels of analysis. Development Review. 17, 376-93.
- 34. Kennedy, W., Van de Riet, V., White, J.A. (1963). A normative sample of intelligence and achievement of Negro elementary school children in southeastern United States. Monogr. Child Development, 28(6), whole issue.
- 35. Klerman, L.V. (1991). Alive and Well? New York: National. Centre
- Children Poverty, Columbia University.

 36. Kohn, M.L., Schooler, C. (1982). Job conditions and personality: a longitudinal assessment of their reciprocal effects. *American Journal* of Sociology, 87, 1257-1283.
- 37. Krieger, N., Williams, D. R., Moss, H. W. (1997). Measuring social class in US public health research: concepts, methodologies, and
- guidelines. *Annual Review of Public Health*, *18*,341-378.

 38. Macintyre, S., West, P. (1991). Lack of class variation in health in adolescence: an artifact of an occupational measure of class. *Social* Science and Medicine, 30, 665-673.
- 39. Marmot, M. (1999). Epidemiology of socioeconomic status and health: Are determinants within countries the same as between countries? pp. 16-19
- 40. McCoy, M. B., Firck, P. J, Loney, B. R., Ellis, M. L. (1999). The potential mediating role of parenting practices in the development of conduct problems in a clinic-referred sample. *Journal of Child and* Family Studies, 8, 477-494
- 41. McLeod, J., Shanahan, M. (1993). Poverty, parenting, and children's mental health. American Sociological Review, 58, 351-366.

- McLoyd, V.C. (1997). The impact of poverty and low socioeconomic status on the socioemotional functioning of African-American children and adolescents: mediating effects. In Social and Emotional Adjustment and Family Relations in Ethnic Minority Families, ed. RD Taylor, M Wang, pp. 7-34. Mahwah, NJ: Erlbaum.
 McLoyd VC. 1998. Socioeconomic disadvantage and child development. Am. Psychol. 53:185-204
- 44. Mercy, J. A, Steelman, L. C. 1982. Familial influence on the intellectual attainment of children. *American Sociological Review*, *47*, 532-542.
- 45. Mortorell, R. (1980). Interrelationships between diet, infectious disease, and nutritional status. In *Social and Biological Predictors of Nutritional Status, Physical Growth and Neurological Development*, (ed.). Greene, H. S., Johnson, F. E. pp. 188-213. New York: Academic.
- 46. Mpofu, E., Van de Vijver, F. J. R. (2000). Taxonomic structure in early to middle childhood: a longitudinal study of Zimbabwean schoolchildren. *International Journal of Behaviour Development*, 24, 204-312.
- 47. Ostrove, J.M., Feldman, P., Adler, N.E. (1999). Relations among Socioeconomic indicators and health for African-Americans and
- whites. *Journal of health Psychology, 4,* 451-463.

 48. Parcel, T. L., Menaghan, E. G. (1990). Maternal working conditions and children's verbal facility: studying the intergenerational transmission of inequality from mothers to young children. *Social. Psychology Quarterly, 53,* 132-147

 49. Paris, J. (1999). *Genetics and Psychopathology: Predisposition-Stress Interactions.* Washington, DC: American Psychiatry Press.

 50. Plomin, R., Crabbe, J. 2000. DNA. *Psychological Bulletin, 126,* 806-828

- 51. Pollitt, E., Golub, M., Gorman, K., Grantham-McGregor, S. (1996). A reconceptualization of the effects of undernutrition on children's biological, psychosocial, and behavioral development. *Child Development*, 10(5), 1-24.
- 52. Power, C. (1991). Social and economic background and class inequalities in health among young adults. Social Sciences Medicine, *32*, 411-417.
- 53. Rushing, W.A., Ortega, S.T. (1979). Socioeconomic status and mental disorder: new evidence and a sociomedical formulation. American Journal of Sociology, 84,(1),175-200.

- 54. Smith, J.P.(1999). Healthy bodies and thick wallets: the dual relation between health and economic status. *Journal of Economics Perspective*, 13, 145-166.
- 55. Rodrigo, M. J., Janssens, J.M., Ceballos, E. (2001). Reasoning and action complexity: sources and consequences on maternal child-rearing behavior. *International Journal of Behaviour Development*, (25), 50-59
- 56. Simons, R. L., Johnson, C., Conger, R. D., & Lorenz, F. O. (1997). Linking community contexts to quality of parenting: A study of rural families. Rural Sociology, 62, 207-230.
- 57. Starfield, B. (1989). Child health care and social factors: poverty, class, race. *Bulletin. NY Academy of Medicine*, *65*, 299-306.
- 58. Treiber, R., Harshfield, G., Davis, H., Kapuku, G, Moore, D. (1999). Stress responsivity and body fatness: links between socioeconomic status and cardiovascular risk factors in youth. pp. 435-38
- 59. US Dep. Health Human. Service. 2000a. *Child Health USA 2000*. Washington, DC: US GPO
- 60. US Dep. Health Human. Service. 2000b. *Healthy People 2010*. Washington, DC: US GPO
- 61. Wachs TD. 2000. Necessary but Not Sufficient. Washington, DC: Am. Psychol. Assoc.
- 62. Walberg HJ, Marjoribanks K. 1976. Family environment and cognitive development: twelve analytic models. *Review of Educational Research*, 46, 527-51.
- 63. White KR. 1982. The relation between socioeconomic status and academic achievement. *Psychological Bulletin*, 91, 61-81.
- 64. Williams, D. R., Collins, C. (1995). U. S. socioeconomic and racial differentials in health: patterns and explanations. *Annual Review of Sociology*, 21, 349-386.