

# Perception of association between normal development and environmental stimulation by mothers of children in the first three years of life

*Percepção da associação entre estimulação ambiental e desenvolvimento normal por mães de crianças nos três primeiros anos de vida*

*Percepción de la asociación entre estimulación ambiental y desarrollo normal por madres de niños en los tres primeros años de vida*

Lila Isabel C. de Paula<sup>1</sup>, Cibelle Dutra Pires<sup>2</sup>, Tamara Santiago Mascarenhas<sup>3</sup>, Joyce Pinheiro L. Costa<sup>4</sup>, Luciane Maria O. Brito<sup>5</sup>

## ABSTRACT

**Objective:** To evaluate the perception of mothers with children aged zero to three years old on the association between environmental stimulation and normal development of these children assisted at a Health Unit in São Luís, Maranhão, Northeast Brazil, and to identify the level of maternal understanding on the stimulation of the family environment in which the child is inserted.

**Methods:** Qualitative research that enrolled 15 mothers of children aged zero to three years old treated in the Health Unit Antonio Carlos Reis, *Cidade Olímpica*, in São Luís, Maranhão, Brazil, from October 2009 to March 2010. Data collection instruments were medical records, semi-structured interviews applied in household with parents, participant observations, and home visits.

**Results:** Most mothers were teenagers, single, did not work outside the household, had incomplete primary education, and family income from 0 to 0.5 minimum wage. The main difficulties were: lack of preparation to raise their children, low level of resolution of everyday situations, and father absence on family life. It was identified how mothers associated environmental deprivation with normal child development.

**Conclusions:** The mothers presented perception on the environment in which their children lived and that the lack of

stimulation in these places affected the children's development. Therefore, there is a need for improved levels of stimulation and of the links between child, family, and health professionals.

**Key-words:** family relations; cultural characteristics; child development.

## RESUMO

**Objetivo:** Avaliar a percepção das mães de crianças entre zero e três anos sobre a associação da estimulação ambiental e o desenvolvimento normal das crianças atendidas em uma unidade de saúde em São Luís, Maranhão, e identificar o nível de entendimento das mães quanto à estimulação do ambiente familiar em que a criança está inserida.

**Métodos:** Realizou-se pesquisa qualitativa exploratória. Os sujeitos estudados foram 15 mães de crianças de zero a três anos atendidas na Unidade de Saúde Antônio Carlos Reis, Cidade Olímpica, em São Luís, Maranhão, de outubro de 2009 a março de 2010. Os instrumentos da coleta de dados foram prontuários médicos, entrevistas semiestruturadas aplicadas em domicílio com pais, observação participante e visita domiciliar.

**Resultados:** A maioria das mães pesquisadas era adolescente, solteira, do lar, com ensino fundamental incompleto e renda familiar de 0 a 0,5 salário mínimo. As principais

Instituição: Universidade Federal do Maranhão (UFMA), São Luís, MA, Brasil  
<sup>1</sup>Médica de família; Mestre em Saúde Materno-infantil pela UFMA, São Luís, MA, Brasil

<sup>2</sup>Mestranda em Saúde Materno-infantil pela UFMA, São Luís, MA, Brasil

<sup>3</sup>Graduanda em Medicina pela UFMA, São Luís, MA, Brasil

<sup>4</sup>Enfermeira; Graduanda em Medicina pela UFMA, São Luís, MA, Brasil

<sup>5</sup>Ginecologista; Doutora em Mastologia pela Universidade Federal do Rio de Janeiro (UFRJ); Professora-associada do Departamento de Medicina III e Vice-Coordenadora do Programa de Pós-Graduação em Saúde Materno-Infantil da UFMA, São Luís, MA, Brasil

Endereço para correspondência:

Luciane Maria O. Brito  
Praça Gonçalves Dias, 21, 2º andar  
CEP 65020-240 – São Luís/MA  
E-mail: lucianebrito@ufma.br

Fonte financiadora: O projeto foi financiado pelos próprios pesquisadores e recebeu ajuda da bolsista-autora pela Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) e pelo programa de Reestruturação e Expansão das Universidades Federais (REUNI), de 2008 a 2010, conforme edital Edital PROEX no. 08/2008

Conflito de interesse: nada a declarar

Recebido em: 28/8/2012

Aprovado em: 4/2/2013

dificuldades encontradas foram: despreparo em educar os filhos, baixo nível de resolutividade das situações cotidianas e ausência paterna na convivência familiar. Analisou-se o modo como as mães associam as carências ambientais e o desenvolvimento infantil normal.

**Conclusões:** As mães apresentaram percepção relativa ao ambiente em que seus filhos vivem e que a falta de estimulação nestes ambientes interfere no desenvolvimento de tais crianças. Observou-se, assim, a necessidade de melhora dos níveis de estimulação e dos vínculos entre criança, família e profissionais de saúde.

**Palavras-chave:** relações familiares; características culturais; desenvolvimento infantil.

## RESUMEN

**Objetivo:** Evaluar la percepción de las madres de niños entre 0 a 3 años sobre la asociación de la estimulación ambiental y el desarrollo normal de los niños atendidos en la Unidad de Salud en São Luís, Maranhão (Brasil), e identificar el nivel de entendimiento de las madres sobre la estimulación del ambiente familiar en el que el niño está insertado.

**Métodos:** Se realizó investigación cualitativa exploratoria. Los sujetos estudiados fueron 15 madres de niños de 0 a 3 años de edad atendidos en la Unidad de Salud Antônio Carlos Reis, Cidade Olímpica, São Luís, Maranhão (Brasil), de octubre de 2009 a marzo de 2010. Los instrumentos de recolección de datos fueron prontuarios médicos, entrevistas semiestructuradas aplicadas en domicilio con padres, observación participante y visita domiciliar.

**Resultados:** La mayoría de las madres investigadas era adolescente, soltera, ama de casa, con primaria incompleta e ingresos familiares de 0 a 0,5 sueldos mínimos. Las principales dificultades encontradas fueron: falta de preparo en educar a los hijos, bajo nivel de resolutividad de las situaciones cotidianas y ausencia paterna en la convivencia familiar. Se analizó el modo como las madres asocian las carencias ambientales y el desarrollo infantil normal.

**Conclusiones:** Las madres presentaron percepción relativa al ambiente en el que sus hijos viven y que la falta de estimulación en estos ambientes interfiere en el desarrollo de esos niños. Se observó, así, la necesidad de mejora de los niveles de estimulación y mejora de los vínculos entre niño, familia y profesionales de salud.

**Palabras clave:** relaciones familiares; características culturales; desarrollo infantil.

## Introduction

A stimulating family environment constitutes a minimal condition to ensure sensory, motor, cognitive, language, social, and emotional development in the early years, being also an important prerequisite for learning, providing young children opportunities to interact with social, cultural, physic, and socio-moral environments<sup>(1)</sup>. Dessen<sup>(2)</sup> claims that it is through motricity that intelligence materializes, because, through it, perceptions are established, images are designed, and representations are built. Cultural diversity enables the construction of different ways of upbringing and education of children<sup>(3)</sup>.

According to studies by Evangelista<sup>(4)</sup>, the permanence of the child (0–3 years old) in unprivileged environment, without environmental stimulation, people, toys, physical space, among others, may lead to delays in its normal global development. The family is considered the basic social entity and having a well-structured family is a protective factor for the development and growth of the child<sup>(5)</sup>. Spitz<sup>(6)</sup> states that the psychosocial function of the family is closely related to affection, being essential for human survival. Family expectations are: to produce care, protection, affection learning, construction of identities, and relational bonds of belonging, able to promote a better quality of life for its members and effective social inclusion in the community and society in which they live<sup>(7)</sup>.

A child's family environment is of great importance to their development, because it is where the child establishes a relationship with the world and with people, and what is going to guarantee their education and their social, moral, psychological and cultural quality of life. Learning begins at home, with basic activities in which the family teaches respect, love, and solidarity, which are basic for sociability.

The physical environment is characterized by the set of exterior and material qualities of man, including all the spaces in which the individual lives. As for children's social environment, it can be characterized by the set of spaces in which they interact, whose attachment and ownership are facilitated by familiarity: the house, the neighborhood, and the school, for instance. The socio-moral environment refers to the interpersonal achievements that the child has within its social environment, while the cultural environment is related to the culture in which the child is inserted, its ability to live and develop<sup>(8)</sup>.

Due to the importance of these aspects in the lives of children, the present study aimed to assess the perception of mothers of children from 0–3 years of age on the association between environmental stimulation and normal development of children, to identify the level of understanding on this matter, and to characterize the family environment in which they live.

## Method

The present study adopted a descriptive qualitative exploratory research design, since it is a study in the area of health care that is related with the social sciences. In qualitative research, the researcher describes, analyzes and interprets the apprehended phenomena, giving them an “ultra-signification”, i.e., the researcher captures the meaning given by the individual/ social group that experiences the problem and reinterprets this meaning grounded in theoretical approach concepts that will enable another version of reality and, therefore, of the meanings of the observed phenomena<sup>(9)</sup>.

The subjects studied were 15 mothers of children treated at the Health Unit Antônio Carlos Reis, Cidade Olímpica, in the municipality of São Luis, state of Maranhão. Inclusion criteria required that the women interviewed were mothers of children from 0–3 years old, and that the sequence of attendance of these children at the Health Unit be respected, in the period from October 2009 to March 2010. To preserve the privacy of mothers, Arabic numerals from 1 to 15 were randomly attributed to them, as indicators of their accounts.

The instruments for data collection were the medical records from the Health Unity, which were analyzed to collect general information regarding the socioeconomic and demographic characteristics of the sample. There was a script with a few questions, enough to grasp the point of view on the social factors previewed in the objectives of the research. According to Minayo<sup>(9)</sup>, a semi-structure interview is one in which the interviewer “attempts to grasp the reality of the subject, in a way that is not totally free as an open interview, but from their assumptions and definitions of their objects of study”. For the analysis of the reports, maternal representations were organized in categories after repeated readings of the interviews. Some theoretical concepts of Discourse Analysis<sup>(9-10)</sup> were used as reference to search for meanings of the unities of analysis.

Collection procedures to characterize children were made from the analysis of medical records where socioeconomic data were documented, individual interviews with parents to obtain information about the research, signature of the Informed consent form, visit to the environment in which the children lived, where, after permission, interviews were recorded in cassette tape recorders, in addition to use of some children’s toys in the households; observations on home visits, notes on the journal, participant’s observation, and interviews in the household. Participant’s observation was the procedure by which “the presence of the observer is kept in a given social situation, aiming to perform a scientific investigation, being the observer in a face to face relationship with those observed and, by participating in their lives, in their cultural environment, collects data”<sup>(9)</sup>.

For data analysis through medical records, indicators of socioeconomic and demographic features of the family were studied in order to characterize the studied group.

During the visits, the researchers observed the following: how children lived in the household; the environmental and socioeconomic conditions; the affective interactions mother-son; how mothers stimulated their children and which material was used for this purpose; and how the mother was related to the other children and the partner in the household.

In interviews: the analysis of accounts and maternal representations were organized into categories and identified by Arabic numbers from 1 to 15 that were related to the nickname of every mother. Each individual’s report carries the history of the individual and the relevant groups that were closest and most distant to him or her; each report constitutes an own space inside an inter-discourse, reflecting the specificity of a particular social group or category. The ideas of Minayo<sup>(9)</sup>, were taken as a basis, who stated that: “maternal representations for analysis of discourse must be organized into categories, after repeated reading of the interviews, to search for meaning in the units of analysis, taking as reference some concepts defended by theorists of discourse analysis”.

This study was not based on statistical significance; it consisted on a method that, given the complex and global problems, sought to understand the repetitive structural patterns and recurrent behaviors of human reality. Graphs were used to demonstrate the protocol of socioeconomic and demographic records.

The present study was approved by the Research Ethics Committee of Universidade Federal do Maranhão under number n° 000701/2009.

## Results and discussion

### Analysis of data obtained from medical records

The tables show elements that characterize the sample regarding the social, economic, and demographic situation of the mothers. Most mothers were in the age group of 13–20 years old. Around 53.0% had incomplete elementary education, 79% were housemaids and 80% had no partner. The house was given in 53.3% of cases, and 66.7% of the houses were made of masonry without finish. The per capita income was of 66.7% and ranged from 1 to 1/2 minimum wages.

Among children the predominant age was 6 months to 1 year (in 46.7%), and 60% were female. Out of the children analyzed, 26.6% had among two and three siblings and 6.7% had more than three siblings.

**Table 1 - Maternal characteristics**

Variables	n	%
Age		
13 to 20 years old	8	53.0
21 to 30 years old	5	33.5
Older than 30 years old	2	13.5
Maternal education (in years)		
Incomplete elementary school	8	53.3
Complete elementary school	4	26.7
Incomplete high school	2	13.3
Complete high school	1	6.7
Occupation		
Housewife	12	79.0
Secretary	1	6.7
Sales consultant	1	6.7
Insurance supervisor	1	6.7
Marital status		
No partner	12	80.0
Has a partner and lives together	1	6.7
Has a partner but does not live together	2	13.3

**Table 2 - Economic characteristics of the family**

Variables	n	%
Relationship of property with housing		
Rent	5	33.3
Given	8	53.3
Homeownership	2	13.4
Type of house		
Masonry with finish	5	33.3
Masonry without finish	10	66.7
Per capita income		
From 0 to 0.5 wages	10	66.7
From 0.5 to 1.0 wages	2	13.3
From 1.0 to 1.5 wages	1	6.7
From 1.5 to 2.0 wages	2	13.3

**Table 3 - Characteristics of the children studied**

Variables	n	%
Child's age		
0 to 6 months	2	13.3
From 6 months to 1 year old	7	46.7
From 1 year to 3 years old	6	40.0
Sex		
Female	9	60.0
Male	6	40.0
Number of children		
From 0 to 1	10	66.7
From 2 to 3	4	26.6
Over 3	1	6.7

### Participant's Observation

Regarding participant's observation it was found that, although there was no refusal by mothers to participate in the survey, most of them felt embarrassed when the need for home visits was explained, causing some clear expressions of embarrassment for some mothers who did not live according the conventional familiar pattern (conjugal nuclear model). For all of them, difficulties in the resolution of daily situations were perceived, as well as the presence of resentment, expressed through grins, gestures, and voice intonation, as they shared their views on each situation.

Many reported difficulties in educating their children, identifying themselves with the leniency dramatized in the situations, as well as the feeling of inadequacy, helplessness, fear, anxiety, fatigue, and loss of control. What most caught attention was how these feelings were crystallized in the maternal role, leading mothers to often forget leisure, care of other children, husbands, study, work, and even personal care. It should be highlighted that many mothers do not work outside the home and, according to them, this occurred because of the attention they had to give to their children.

Another matter observed was the lack of participation of the fathers at the time of the home visit, often justified by reasons of work; however, wives also complained about the poor participation of fathers in the relationship of children, leaving the responsibility for children's education and care to women. Regarding the economic condition, many mothers presented as income only the pension granted by *Bolsa Família* (family grant) and survived with the help of donations of clothes, shoes, medications, and food. Others, besides the benefit received by the child, also added to the family income some odd jobs.

### Categories Formed

The resulting themes were:

- Assessment of mothers on how to stimulate the development of their children at home. In this theme the following categories were grouped: Complicated due to lack of time; Difficult to stimulate; Don't find it difficult.
- Maternal understanding regarding the family environment where they live. In this theme the following categories were grouped: Socioeconomic difficulties; Alcoholism and/or drugs; Violence.
- Perception of mothers regarding the need for stimulation at home, for a better normal development of the child. In this theme the only category identified was: Needs stimulation.

**“Complicated due to lack of time”**

During home visits, it was verified that mothers felt overwhelmed and hardly followed the orientations regarding cognitive and sensory stimulation.

The third mother said: “In the afternoon I have to make dinner, I have to wash her clothes, then, I can’t. And on the weekend I have to rest, so, sometimes, I do it, sometimes I don’t”.

According to Maciel<sup>(11)</sup>, compliance with the prescriptions, orientations, monitoring and stimulation are many times hampered due to incompatibility of schedule, with professional responsibilities that oblige parents to relinquish or to readjust because of professional difficulties. During home visits it was verified that, in some cases, the mother does not receive help (husband, aunts, neighbors, grandmothers) in activities related to home care. These mothers then feel burdened and hardly have time to follow the recommendations related to cognitive and sensorial stimulation. Parents’ activities with children at home, reading or playing games, can strengthen parent-child emotional bonds and reinforce the child’s capacities<sup>(12)</sup>. Increasingly, men and women participate in the paid workforce, with the consequence that the time for unpaid work becomes scarce. This generates worries regarding the impact that children may have in losing the valuable attention of parents<sup>(13)</sup>, especially from the mothers, who are usually the primary caregivers.

**Difficult to stimulate**

During home visits, the feeling of insecurity, anxiety, and fear in stimulating their children could be perceived, as said by the eleventh mother: “I don’t stimulate my son at home because I’m afraid of doing it wrong, you know, ain’t it? She taught me many things, but I find it a little hard. Many things, but I find it difficult. Everything, isn’t it? Everything, everything, I guess”.

The recommendations made to the mother were, firstly, to stimulate the formation of the bond, of closer relationship for the development of affection, acceptance, and knowledge of the child. Because they feel insecure, they are unable to comply with the instructions received regarding the stimulation of their children. According to Ribeiro<sup>(14)</sup>, the main problem of those who are responsible for the child is the prolonged exposure to very intense stress, which hinders the development of the abilities prescribed and the observation of children’s behavior. Due to all these factors, training, made especially with the mothers, should involve more than reporting information and abilities. Mothers should be active in this process. The relationship of understanding and listening they establish with the health professional is the basis for effective learning.

The literature shows that, in general, women retain the primary responsibility for the care of children and, therefore, tend to spend more time with them compared to fathers<sup>(15)</sup>. This might be explained by cultural characteristics generally existing in Western societies that childcare is usually responsibility of women. Studies show that, on average, children of working mothers spend less time with them, compared to children whose mothers are not employed<sup>(16,17)</sup>. The difference is, however, relatively small and tends to affect primarily the time spent in passive surveillance instead of time spent in activities directly with the children<sup>(16)</sup>. Thus, the time factor may not be the main determining factor in the stimulation of the child by the mother.

In the study by Moussaoui and Braster<sup>(18)</sup>, which explored the perceptions of mothers and their stimulating activities to promote cognitive development in relation to the socialization of their children, most mothers who could not read or were less instructed emphasized the importance of social and moral development. Mothers who could not read seemed to expect certain cognitive abilities in their child at an older age. On the other hand, all these mothers recognized the influential role that educated mothers have on the development of their children. In the same study, half of these women reported that they wished to encourage this development, but they are unable to do so because of their illiteracy. Numerous studies have found that parents with high educational level tend to spend more time with their children than those who were less educated<sup>(19,22)</sup>. A better level of education by the parents allows them to recognize the influence that a largest investment of time has on a child’s development and, therefore, make an effort to increase the time in activities with their children<sup>(22,23)</sup>.

**Don’t find it difficult**

Despite many efforts, household chores and other activities, it was common to find parents who changed their routines to participate more actively in the normal development of their children<sup>(24)</sup>. Mother six reported: “I have no difficulty in doing it, because I make a huge effort”.

According to Lebovici e Soulé<sup>(25)</sup>, “we are only good fathers and mothers when we recognize ourselves in that being we love and when we have pleasure with this specular identification”. However, mothers who have a good adequacy towards their child have an adequate basilar family. In some households it was verified that when the father or the grandmother is present, the mother seems to demonstrate higher levels of security in daily care with their children and following recommendations. Literature also shows that single or divorced parents spend less time with their children<sup>(26)</sup>.

### **Socioeconomic Difficulties (extreme poverty, deprivation, and unemployment).**

In early infancy the main bonds, as well as the necessary care and stimulation for growth and development are provided by the family. Mother two complained: "My life is bad...we live out of the *"Bolsa Família"*, my partner is unemployed. Sometimes we don't have what to eat, let alone toys! A toy here is a tin, trash really".

Carvalho and Benício<sup>(27)</sup> mention an issue of significant representativeness when they say that: "the access to goods and services is hindered by paternal absence because the mother tends to depend on other family members for her income, which is not necessarily directed to meet the demand of the child". According to Buscaglia<sup>(28)</sup>, it is accepted in the scientific community that the socioeconomic status may exert a great influence on the quantity and quality of environmental stimuli directed to promote children's development. Poverty and financial difficulties often negatively affect the ability of the parents to provide nutrition, support, control, and the amount of time they spend with their children<sup>(29)</sup>. Regarding the involvement of parents with children, it was found by Stacer and Perrucci<sup>(30)</sup> that the socioeconomic resources of a family, coming from parental education and family income, had consistent positive effects on parental involvement in school and the community in which the child is inserted.

### **Alcoholism and /or drugs**

Alcohol and drugs may cause dependence and are also associated with domestic violence, leading to the production of feelings and emotions that favor the rupture of relations and the emotional life of different members<sup>(31)</sup>. The mothers 15 and 12 said, respectively: "I live well, I have fun, I take drugs, I enjoy my life. I live in a party, I don't have time for these things, to play with children"; "I hope to get rid of coke, I have hope, to take better care of my son".

Buscaglia<sup>(28)</sup> confirms that alcohol and drugs cause serious individual, family, and social repercussions, compromising the quality of life of the user and the people who live with him. Family issues, such as poor communication between parents and the child, parental rejection, hostility, family history of psychopathology and substance abuse may be associated with many somatic symptoms presented by the children<sup>(32,33)</sup>.

### **Violence**

Violence is a serious health problem in the population caused by the climate of hostility and fear<sup>(31)</sup>.

"My partner drinks every day, you know, he is an alcoholic, we fight a lot, he hits me and the children, which is bad. But I have nowhere to go." (Mother 1)

The problem of violence is not individual, it is a social problem that should be solved collectively. It is necessary that all people be aware that the victims of violence cannot suffer alone<sup>(34)</sup>. The roots and expressions of violence are multiple and the escalating violence in the last decades has reached epidemic proportions. The prevention and control should be seen as a public health problem, demanding interventions at several levels<sup>(34)</sup>.

In the study by Hart *et al*<sup>(35)</sup>, the stress factors analyzed, such as school stress, exposure to community's violence, family conflicts and violence, were associated to clinically significant somatic complaints on the child's report, while none was associated on the parents' report. The lack of awareness of caregivers about the physical symptoms experimented by their children may delay of prevent parents from looking for medical or psychological intervention for their children<sup>(35)</sup>.

### **Needs stimulation**

In this category, all mothers reported to realize the need for stimulation as important in the development process of their children: "Yes, I do! I think, I'm sure she needs. It helps a lot, and it has improved her development a lot" – Mother 4. "She needs, it is was really helps her. I think she's been improving a lot" – Mother 9.

The benefits of early intervention on developing children go beyond neuromotor gains, because it helps the child to get an optimized development for its condition in particular and can enable children and their families to live higher degrees of stability and security<sup>(34)</sup>. In the first moments of childhood, the home environment and the characteristics and actions of parents dominate the cognitive development of children<sup>(36)</sup>. The house can be seen as a learning environment that provides children with informal opportunities to acquire relevant knowledge<sup>(37)</sup>. This environment of informal learning that parents give to their child depends on the complex interaction of status, not only socioeconomic, but also cultural, ethnic and educational<sup>(38)</sup>.

### **Final considerations**

Given the results and discussion presented, it should be considered that there are limitations on the present study. Firstly, the small sample size could be mentioned. In addition, the group was composed mostly by women with little education and poor socioeconomic conditions. It would be ideal to compare this sample with a group of higher educational and socioeconomic status, in order to identify factors associated to environmental stimulation and its relation with the development of the child. Future studies should also expand this research to other caregivers, besides the mother, so that a scenario can be formed including

all those who deal with the child, once they also influence on their development.

Among the limitations perceived in mothers for their role in the stimulation of their children, it can be highlighted that they are overburdened due to their own difficulties, discrimination, and social reaction to the child, and often due to little or no support from the family and the lack of a more effective public support in primary health care for these children and their families.

We may conclude that the household visits helped to clarify meanings and complement contents that assisted the

triangulation of the data analyzed in the research. Maternal reports were obtained about the relative perception of the environment where their children live and the fact that the lack of stimulation in these environments interferes with their development. The orientation by a health professional regarding the environment where the child lives is a support for motivation on the child's development. According to the present study, the creation and maintenance of the mother-child bond is the basis for the creation of expectations and desires for better development, well being, and social integration of children.

## References

- Vygotski LS. A formação social da mente: o desenvolvimento dos processos psicológicos superiores. 5 ed. São Paulo: Martins Fontes; 1994.
- Dessen MA, Costa Junior AL. A ciência do desenvolvimento humano: tendências atuais e perspectivas futuras. Porto Alegre: Artmed; 2005.
- Sinha SR. Childrearing practices relevant for the growth of dependency and competence in children. In: Valsiner J, editor. Child development within culturally structured environment. Norwood, NJ: Ablex Publishing Corporation; 1995. p. 105-135.
- Evangelista LM. Novas abordagens do diagnóstico psicológico da deficiência mental. São Paulo: Vetor; 2002.
- Dessen MA, Lewis C. How can we understand families and fathers. *Paideia* 1998;8:105-21.
- Spitz RA. Hospitalism: an inquiry into the genesis of psychiatric conditions in early childhood. *Psych Study Child* 1945;1:53-74.
- Brant Carvalho MC. A família contemporânea em debate. 6 ed. São Paulo: Cortez; 2005.
- Silva NL, Dessen MA. Mental retardation and family: implications for child development. *Psic Teor Pesq* 2001;17:133-41.
- Minayo MC. O desafio do conhecimento: pesquisa qualitativa em saúde. 8 ed. São Paulo: Hucitec; 2004.
- Laville C, Dionne J. A construção do saber. Belo Horizonte: Universidade Federal de Minas Gerais; 1999.
- Maciel MR. Portadores de deficiência: a questão da inclusão social. *Sao Paulo Perspec* 2000;14:51-6.
- Benson L, Mokhtari M. Parental employment, shared parent-child activities and childhood obesity. *JFEI* 2011;32:233-44.
- Craig L. How employed mothers in Australia find time for both market work and childcare. *J Fam Econ Iss* 2007;28:69-87.
- Ribeiro GP. Diabetes tipo 1: práticas educativas maternas e adesão infantil ao tratamento [tese de mestrado]. Paraná (PR): Universidade Federal do Paraná; 2004.
- Monna B, Gauthier AH. A review of the literature on the social and economic determinants of parental time. *JFEI* 2008;29:634-53.
- Hofferth S. Women's employment and care of children in the United States. In: Van T, der Lippe L, Van. Dijk, editors. Women's employment in a comparative perspective. New York: Aldine de Gruyter; 2001. p. 151-74.
- Sandberg JF, Hofferth SL. Changes in children's time with parents: United States, 1981-1997. *Demography* 2001;38:423-36.
- Moussaoui N, Braster S. Perceptions and Practices of Stimulating Children's Cognitive Development Among Moroccan Immigrant Mothers. *J Child Fam Stud* 2011;20:370-83.
- Chalasan S. The changing relationship between parents' education and their time with children. *EIJTUR* 2007;4:93-117.
- Craig L. Parental education, time in paid work and time with children: an Australian time-diary analysis. *Br J Sociol* 2006;57:553-75.
- Sayer LC, Bianchi SM, Robinson JP. Are parents investing less in children? Trends in mothers' and fathers' time with children. *AJS* 2004;110:1-43.
- Sayer LC, Gauthier AH, Furstenberg Jr FF. Educational differences in parents' time with children: Cross-national variations. *J Marriage Fam* 2004;66:1152-69.
- Kalenkoski CM, Foster G. The quality of time spent with children in Australian households. *Rev Econ Household* 2008;6:243-66.
- Arruda PM, Zannon CM. Tecnologia comportamental em saúde. Santo André: ESETEC; 2002.
- Lebovici S, Soulé O. Conhecimento da criança pela psicanálise. Rio de Janeiro: Zahar; 1980.
- Marsiglio W, Amato P, Day RD, Lamb ME. Scholarship on fatherhood in the 1990s and beyond. *J Marriage Fam* 2000;62:1173-91.
- Carvalhoes MA, Benício MH. Mother's ability of childcare and children malnutrition. *Rev Saude Publica* 2002;36:188-97.
- Buscaglia LF. Os deficientes e seus pais: um desafio ao aconselhamento. 4 ed. Rio de Janeiro: Record; 2002.
- Demo DH, Cox MJ. Families with young children: a review of research in the 1990s. *J Marriage Fam* 2000;62:876-95.
- Stacer MJ, Perrucci R [homepage on the Internet]. Parental involvement with children at school, home, and community. *J Fam Econ Iss* 2012 [cited 2012 Aug 14]. Available from: <http://link.springer.com/article/10.1007/s10834-012-9335-y?no-access=true>
- Deeke LP, Boing AF, Oliveira Wfd, Coelho EBS. A dinâmica da violência doméstica: uma análise a partir dos discursos da mulher agredida e de seu parceiro. *Saúde Soc* 2009;18:248-58.
- Bursch B, Lester P, Jiang L, Rotheram-Borus MJ, Weiss R. Psychosocial predictors of somatic symptoms in adolescents of parents with HIV: a six-year longitudinal study. *AIDS Care* 2008;20:667-76.
- Garralda ME. Unexplained physical complaints. *Child Adolesc Psychiatr Clin N Am* 2010;19:199-209.
- Kubler-Ross E. Sobre a morte e o morrer. 8 ed. São Paulo: Martins Fontes; 1998.
- Hart SL, Hodgkinson SC, Belcher HM, Hyman C, Cooley-Strickland M [homepage on the Internet]. Somatic symptoms, peer and school stress, and family and community violence exposure among urban elementary school children. *J Behav Med* 2012 [cited 2012 Aug 4]. Available from: <http://rd.springer.com/article/10.1007/s10865-012-9440-2>
- Raviv T, Kessenich M, Morrison FJ. A meditational model of the association between socioeconomic status and three-year-old language abilities: the role of parenting factors. *ECRQ* 2004;19:528-47.
- Dockrell J, Stuart M, King D. Supporting early oral language. *Literacy Today* 2004;40:16-7.
- Petrilli SA, Pike A, Price T, Plomin R. Chaos in the home and socioeconomic status are associated with cognitive development in early childhood: environmental mediators identified in a genetic design. *Intelligence* 2004;32:445-60.