

## **DYSFUNCTIONS IN THE SOCIO EMOTIONAL DEVELOPMENT OF INFANTS AND ITS RELATED FACTORS: AN INTEGRATIVE REVIEW**

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### **ABSTRACT**

**Objective:** to synthesize factors related to dysfunctions in the socioemotional development of infants.

**Method:** integrative review carried out between April and August 2016 with defined criteria for inclusion and exclusion of studies, search strategies, extraction and synthesis of data. The exposure factors underwent categorical thematic analysis and systematization according to the levels of the context (Microsystem, Mesosystem, Exosystem and Macrosystem) of the Bioecological Model of Human Development.

**Results:** in the context of the Microsystem and Mesosystem, the factors found were: limitations in care; adversities in family relationships and in the social support and illness situation of the caregivers that influence the proximal processes. In the Exosystem and the Macrosystem, they were: social vulnerabilities of caregivers and fragilities of public policies that determine the material and social conditions of the family.

**Conclusion:** the synthesis of evidence on exposure factors favors the construction of measurement scales of the contextual elements related to the social emotional development of young children. Beyond the milestones, present or not, in the evaluation of a child, these technologies can be predictive, with great potential of anticipation of the factors of exposure and prevention of developmental dysfunctions.

**DESCRIPTORS:** Infant. Child development. Developmental Disabilities. Child development disorders, pervasive. Pediatric nursing.

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## DISFUNÇÕES NO DESENVOLVIMENTO SOCIOEMOCIONAL DE LACTENTES E SEUS FATORES RELACIONADOS: UMA REVISÃO INTEGRATIVA

### RESUMO

**Objetivo:** sintetizar os fatores relacionados às disfunções no desenvolvimento socioemocional dos lactentes.

**Método:** revisão integrativa realizada entre abril e agosto de 2016 com critérios definidos de inclusão e exclusão dos estudos, estratégias de busca, extração e síntese dos dados. Os fatores de exposição sofreram análise temática categorial e sistematização segundo os níveis do contexto (Microsistema, Mesossistema, Exossistema e Macrossistema) do Modelo Bioecológico de Desenvolvimento Humano.

**Resultados:** no contexto do Microsistema e Mesossistema, os fatores encontrados foram: limitações no cuidado; adversidades nas relações familiares e no apoio social e situação de adoecimento dos cuidadores que influem nos processos proximais. No Exossistema e no Macrossistema, foram: vulnerabilidades sociais dos cuidadores e fragilidades das políticas públicas, que determinam as condições materiais e sociais da família.

**Conclusão:** a síntese de evidências sobre os fatores de exposição favorece a construção de escalas de medida dos elementos contextuais relacionados ao desenvolvimento socioemocional de crianças pequenas. Muito além dos marcos, presentes ou não, na avaliação de uma criança, essas tecnologias podem ser preditivas, com grande potencial de antecipação dos fatores de exposição e de prevenção das disfunções no desenvolvimento.

**DESCRITORES:** Lactente. Desenvolvimento infantil. Deficiências do desenvolvimento. Transtornos globais do desenvolvimento infantil. Enfermagem pediátrica.

## DISFUNCIONES EN EL DESARROLLO SOCIOEMOCIONAL DE LACTANTES Y SUS FACTORES RELACIONADOS: UNA REVISIÓN INTEGRATIVA

### RESUMEN

**Objetivo:** sintetizar los factores relacionados con las disfunciones en el desarrollo socioemocional de los lactantes.

**Método:** revisión integrativa realizada entre abril y agosto de 2016 con criterios definidos de inclusión y exclusión de los estudios, estrategias de búsqueda, extracción y síntesis de los datos. Los factores de exposición sufrieron análisis temáticos categorial y sistematización según los niveles del contexto (Microsistema, Mesosistema, Exossistema y Macrossistema) del modelo bioecológico de desarrollo humano.

**Resultados:** en el contexto del Microsistema y Mesosistema, los factores encontrados fueron: limitaciones en el cuidado; adversidades en las relaciones familiares y en el apoyo social y situación de enfermedad de los cuidadores que influyen en los procesos proximales. En el Exossistema y en el Macrossistema, fueron: vulnerabilidades sociales de los cuidadores y fragilidades de las políticas públicas, que determinan las condiciones materiales y sociales de la familia.

**Conclusión:** la síntesis de evidencias sobre los factores de exposición favorece la construcción de escalas de medida de los elementos contextuales relacionados al desarrollo socioemocional de niños pequeños. Mucho *más* allá de los marcos, presentes o no en la evaluación de un niño, esas tecnologías pueden ser predictivas, con gran potencial de anticipación de los factores de exposición y de prevención de las disfunciones en el desarrollo.

**DESCRITORES:** Lactante. Desarrollo infantil. Discapacidades del desarrollo. Trastornos generalizados del desarrollo infantil. Enfermería pediátrica.

## INTRODUCTION

Child development can be defined as a process of continuity and change of the child's biopsychological characteristics to acquire new skills that can contribute to their survival and autonomy throughout their life.<sup>1-2</sup> It is a phenomenon that can be apprehended in several interrelated domains, nominated and organized according to the diverse perspectives of the scholars' approaches.<sup>3</sup>

In this study, we adopt the concept of Bronfenbrenner and Morris<sup>2</sup> which classify development according to the intellectual, physical and social emotional skills or abilities that can manifest themselves in combination. These competencies result from complex interactions between (personal) and contextual (environmental) elements throughout the child's life and can be defined as a demonstrated acquisition through the development of knowledge, ability or capability to conduct and direct their behavior over of life.<sup>1</sup>

Thus, socio emotional development is the process of intersection of child development in social and emotional perspectives and is related to the expression of emotion in social contexts, in the social triggers of emotional expressions, in the social construction of emotional experience and understanding, in the social ramifications of social reactions, and the effects of emotion on social behavior.<sup>4</sup>

There is a theoretical convergence that infants have common patterns of socioemotional development. However, it is also understood that since the end of the neonatal period, they have distinct personalities and reactions, reflecting both their biopsychological and environmental characteristics, the child's interactions or their social relationships.<sup>2,4</sup> Emotions, temperament and confidence are basic foundations of socioemotional development, which will outline the infant's early experiences with the parents and the infant's skills acquisition in this area.<sup>4</sup> From these psychosocial foundations, the social-emotional development can be apprehended by the evaluation of developmental milestones from the following domains: attachment, social competence, emotional competence and self-perception.<sup>5</sup>

Socio emotional development is closely linked to the physical development of the brain and the interactions or proximal processes experienced by the infant from birth.<sup>2,6</sup> There is evidence of the influence of neurological maturation on the socioemotional development of the infant, which are related to physiological events.<sup>7</sup> Small child development, specifically the socio emotional domain, is largely conditioned by context-related exposure factors and care received from caregivers, which demonstrate the child's vulnerability to socio emotional dysfunction.<sup>8</sup>

This study assumes that knowledge of these exposure factors can guide the construction of health technologies that promote social-emotional care and development,<sup>8</sup> by the strengthening of the proximal processes, which are the specific forms of interaction between the child and their environment.<sup>1-2</sup>

The field of socio emotional development is a field of potential nurses, who regularly attend the child from birth, through consultations, health education actions, home visits, which require the construction of ties with caregivers.<sup>8</sup> However, the technologies available for monitoring child development, such as scales based on marks and objective signs, are based on the child's abilities, but may consider little the contexts that condition their development process.<sup>5</sup>

Nurses can use instruments that identify the vulnerability conditions of infants to be harmed to propose interventions that strengthen the protection, stimulation, care and construction of bonds with the child<sup>3,8</sup> and that produce positive results in social-emotional development.<sup>2,4</sup> Thus, the synthesis of the factors related to social-emotional development dysfunctions, proposed in this review, can help nursing professionals to monitor the socioemotional development of the infant beyond the momentary performance, and to establish assistance priorities according to their real needs in health.<sup>8</sup>

Thus, this study aimed to synthesize factors related to dysfunctions in the socioemotional development of infants.

## METHOD

Integrative review, from the research question: “What exposure factors are related to dysfunctions in the socioemotional development of infants?” Methodological steps were followed: definition of the inclusion criteria of the studies (participants, exposure factors, outcomes and types of studies, definition of search strategies, extraction and synthesis of data), seeking the clarity and rigor required for the study.<sup>9</sup>

The inclusion criteria were: studies on children from zero to two years of age, as well as studies with children at preschool or school age, whose exposure to the conditioning factors occurred in the zero to two years period, and their outcome was measured afterward. We established as exposure factors: behaviors, actions and activities related to child care and contextual, socioeconomic, political and cultural issues related to care actions. Signs of dysfunction in social-emotional development were selected as outcomes, through the study of attachment, social competence, emotional competence and self-perception. We included studies that adopted any evaluation of the child, such as developmental scales, or other tests or specific evaluations that allow diagnosis or classification of social-emotional dysfunction only.

The types of studies in the final sample were original observational longitudinal studies of *cohort* or case-control, or transverse; quasi-experimental, or qualitative exploratory, theoretical, ethnographic, action-research, or case study.

The research, carried out between April and August 2016, had as strategies: studies published in English, Portuguese and Spanish; in the period 2011-2015 (five years retrospective); in the bases or portals: PubMed (US National Library of Medicine National Institutes Database Search of Health); CINAHL (Cumulative Index to Nursing and Allied Health Literature); LILACS (Latin-American and Caribbean Center on Health Sciences Information); Web of Science; Scopus; ERIC (Education Resources Information Center) and PsycNET.

To guarantee the most focal and specific search, considering the need to identify the exposure factors, the following keywords were used: [“emotional development” OR “emotional and social development” OR “social-emotional development” OR “socioemotional development”]. Each database or portal had its search strategy established and validated by a librarian.

The articles selected after applying the inclusion and exclusion criteria, by reading the abstracts, were read in full. The data extracted from the articles were organized in a spreadsheet with information such as: the age of the participant, classification of the participant according to the *Medical Subject Headings* (MeSH), the exposure factor(s) found; and outcome(s): domains of socioemotional development (DSE),<sup>5</sup> reference number, database/portal, location in the database, year of publication, reference, type of study, purpose and nature of the study.

For the data synthesis, the exposure factors were submitted to the categorical thematic analysis<sup>10</sup> and systematized according to the context levels (Microsystem, Mesosystem, Exosystem and Macrosystem) described in the Bioecological Model of Human Development.<sup>1-2</sup> Thus, the categories were elaborated from the data and reflect the factors that condition the socioemotional development of the infant. These are: limitations in care; adversities in family relationships and in the social support and care situation of caregivers, which are presented in the Microsystem and Mesosystem; social vulnerabilities of caregivers, and weaknesses in policies and programs that are in the Exosystem and the Macrosystem.<sup>2</sup>

## RESULTS

In the initial search, 652 articles were identified, which were tabulated in the Endnote® platform. This tabulation allowed to eliminate 111 articles repeated in more than one database/portal, remaining 541 articles for the floating reading of titles and abstracts. In this reading, 429 articles were excluded, which did not include defined inclusion criteria. Thus, the final sample of articles included for data extraction was 109 articles. The results of this methodological step are detailed in Table 1.

**Table 1** - Number of articles retrieved, excluded by repetition and by floating reading, and included in the final sample for data extraction. São Paulo, SP, 2016. (n=652)

Database / Portal	Articles initially retrieved	Articles without repetition	Deleted articles after floating reading	Final sample	References
CINAHL	26	19	13	<b>6</b>	11-16
ERIC	77	74	65	<b>9</b>	17-25
LILACS	5	5	4	<b>1</b>	26
PsycNET	59	59	57	<b>2</b>	27-28
PubMed	104	104	62	<b>42</b>	29-70
SCOPUS	309	232	206	<b>26</b>	71-96
Web of Science	72	48	25	<b>23</b>	97-119
<b>Total articles</b>	<b>652</b>	<b>541</b>	<b>429</b>	<b>109</b>	

Table 2 shows the distribution of the studies according to their purpose and methodological nature. Most studies are quantitative in nature and longitudinal and cross-sectional observational studies.

**Table 2** - Distribution and indication of the bibliographic references of the studies included in the final sample, according to the type. São Paulo, SP, 2016. (n=109)

Type of study	Articles n	References
Longitudinal observational	54	12-14,16,21, 23-25, 30-31, 34-35, 41-43, 46-48, 50-53, 55-58, 61-62, 69-70,74,76,79,82, 85-86, 89-91, 93-95, 97-100, 106-108,110,113,115, 118-119
Transverse observational	25	19-20,22,26, 28-29,32, 36-37, 39-40, 44-45,49,60,67,73, 80-81,84,88,96,102, 116-117
Theoretical	13	17,33,38,54,66,68,75,77,83,87,101,109,111
Experimental	12	59, 63-65, 71-72,78,92,103-104,112, 114
Descriptive	3	11,15, 18
Methodological	1	105
Almost experimental	1	27
<b>Total</b>	<b>109</b>	

Table 3 presents the profile of study participants and shows that most of the investigations focused on the measurement of outcomes in children under five years of age. However, many studies have measured their outcomes until adolescence.

**Table 3** - Distribution of the studies included in the final sample according to the participants and classified according to o Medical Subject Headings (MeSH). São Paulo, SP, 2016.

Participants	Articles n	References
Newborns (0-28 days)	1	32
Infants (1 month - 2 years old)	39	12, 14-15,30, 33-35, 37-40,43,46, 48-49, 53-54, 57-59,61, 63-64, 66-69,78-79,81,84,86,90-94, 118-119
Infants/preschoolers (1 month - 5 years old)*	30	11,16, 20-22,25,31,36, 41-42, 44-45,47, 50-52,55,62,65, 71-74,76, 100-101, 108-110, 113
Infants/preschoolers/schoolers*	20	17-18,23,26,60,75,77,80, 82-83, 87-88, 97-99,103, 105-107, 111
Preschoolers (2 years old - 5 years old)*	16	13,19,24, 27-29,56,70, 95-96,102,112, 114-117
Preschoolers/schoolers (2 years old - 12 years old)*	1	85
Preschoolers/schoolers/teens (2 years old - 17 years old)*	1	89
Schoolers (6 years old - 12 years old)*	1	104
<b>Total</b>	<b>109</b>	

\* Studies evaluating the outcome in a period after the infancy (greater than two years). However, the exposure occurred before two years old.

In Table 4, the outcomes investigated in the studies included in the final sample are the groupings performed.<sup>5</sup> The results show that, most of the studies are focused on investigates the social and emotional competence outcomes, and the most studied domains of socioemotional development.

**Table 4** - Distribution of the studies included in the final sample, according to the outcomes. São Paulo, SP, 2016.

Outcomes	Articles n	References
Social competence / Emotional competence	76	11-25,27,32,35, 38-39, 42-45, 47-48,50-51, 53-54, 56-59, 62-66, 68-81,84, 87-89, 94-96, 98-108,111, 113-115, 118
Emotional competence	18	28-29,31,33,37,49, 60-61,67,82, 85-86,91,97,110,112, 116-117
Social competence	5	26,30,36,41, 55
Self-perception	5	34,40,46,52, 90
Bond	2	92-93
Bonding / Emotional competence	2	109, 119
Bonding / Emotional competence / Social competence	1	83
<b>Total</b>	<b>109</b>	

The full reading of the included articles allowed the extraction of the exposure factors that were categorized and systematized according to the context levels, according to the Bioecological Model. Within the context of the microsystem and mesosystem, the factors related to the behavior and biopsychosocial conditions of the child's caregivers are present.

The category "Limitations in Care" refers to the caregiver's actions toward the child regarding their protection, interaction, and affectionate relationships. In this category, the exposure factors were: Difficulties in interacting with the child,<sup>13,15-16,18,20,27,32,35,38,53,55,67,75-76,81,86,90,93,96,101,116,119</sup> Difficulties in meeting the socioemotional needs of the child,<sup>61,79,91,99</sup> Low duration of breastfeeding,<sup>81</sup> Attitude of overprotection towards children,<sup>26</sup> Anxiety of parents facing difficulties of the child,<sup>112</sup> Absence of caregiver affection towards the child,<sup>118</sup> Negative perception of children,<sup>47,59</sup> Absence of reading and learning moments with the child,<sup>19,108</sup> Excessive control and regulation of parents due to cultural influence,<sup>110-111</sup> Authoritative posture towards the child,<sup>47,117</sup> Presence of violence and abuse against children,<sup>47,60,68,83,113</sup> Absence of protection against accidents<sup>36,42,62</sup> and Neglect against the child,<sup>59,68</sup> Adverse behavior of caregivers due to negative experiences.<sup>27-28,56,65,77</sup>

The category "Caregivers' illness situation" refers to health-disease conditions that may impair the caregivers' ability to bond and provide affective relationships. In this category, the exposure factors were: presence of depression and stress of caregivers,<sup>14,33,36,38,56,60,67,73,75-76,78-79,94,98</sup> schizophrenia and other mental disorders of caregivers,<sup>39,68,89,97</sup> anxiety of caregivers,<sup>59</sup> compulsive disorders in caregivers,<sup>40</sup> depression and pre and postnatal stress,<sup>12,18,28,30,43,46,48,51-52,57,64-65,68,70,85,100,103</sup> nutritional impairment during prenatal care<sup>38</sup> and caregivers' chemical dependence.<sup>15,18,36,60,97,100,106</sup>

The category "Adversities in family relationships and social support" reveals the difficulties of the family relations experienced by the caregivers and the restrictions in the social support network that may hinder the provision of child care. In this category, the exposure factors were: separation of the child from his parents,<sup>68,82</sup> family instability,<sup>25,74</sup> one-parent family,<sup>13,29,36,50,56,80,84,89,94,97,103,108,115</sup> non-acceptance of pregnancy,<sup>34,50</sup> caretakers in detention or serving sentences,<sup>36</sup> crime/delinquency of

caregivers,<sup>34,60,65</sup> marital conflict,<sup>49,61,68,82</sup> presence of domestic violence against caregivers,<sup>17,23,34,36,58,65,80</sup> and not adherence to prenatal care.<sup>59</sup>

Within the context of the Exosystem and Macrosystem, the factors related to socio-cultural, socioeconomic and political-programmatic conditions that condition child care are present. The category “Social vulnerabilities of caregivers” is related to the precariousness of socioeconomic issues, which guarantee the material sustenance of the child, and inequalities in the sociocultural issues of caregivers that determine their autonomy and empowerment in child care. In this category, the exposure factors were: lack of autonomy/empowerment due to adolescent status,<sup>29,36,84</sup> lack of autonomy/empowerment due to ethnic status,<sup>23,51,80,82,98,101–103,108,110,115</sup> absence of fixed housing/family unit,<sup>22,41,45,63,109</sup> stigmatization due to the situation of violence and/or harassment,<sup>28,75</sup> situation of stress and anxiety due to the situation of war or war<sup>88</sup>, difficulties in accessing social rights,<sup>21,51,54,66,87,104</sup> difficulty in the availability of family resources,<sup>13,20–21,24,28–29,38,71–72,74,77,80,87,97,101–103,114</sup> low level of schooling of caregivers,<sup>20,24,28–29,36,51,56,71–72,74,101–103,107</sup> difficulties in the availability of work,<sup>11,13,29,36–37,56,70–72</sup> precariousness in housing,<sup>36,66</sup> contamination in housing.<sup>44</sup>

The category “Policy and program fragilities” shows how government policies and actions are proposed and formatted to meet the needs of the child. In this category, the exposure factors were: limitations of nutritional programs,<sup>31</sup> inadequate prenatal care,<sup>95</sup> insufficient social support and promotion programs,<sup>34,36,71,72,78,89,92</sup> inadequate educational services.<sup>74,105</sup>

## DISCUSSION

The category “Limitations in care” represents the form and quality of care and interactions offered to the infant<sup>15–16,118</sup> as well as the necessary protection by the caregivers.<sup>36,42,62</sup> Care and protection within a more proximal context (Microsystem and Mesosystem), in which the human development process is triggered, directly influence the regularity in the form and duration of the proximal processes with the child, which has consequences in the results of the social-emotional development.<sup>1–2</sup> It should be understood that the care and protection of family/caregivers is influenced by the local culture<sup>110</sup> and of the forms of democratic organization or power in which they are inserted.<sup>47</sup>

In the category “Caregiver’s illness situation”, the exposure factors express the health-disease conditions of the parents/caregivers and are characterized by the presence of psychic disorders,<sup>14,33,59</sup> besides other injuries.<sup>38</sup> Such factors are indicative of insufficiency in care actions, which can provoke precariousness in the proximal processes and generate dysfunctions.<sup>2</sup>

These health conditions indicate how caregivers are able, according to their health condition, to provide quality care for the child. The presence of mental disorders is related to a lower degree of affection for the child, as well as to the building of more fragile bonds.<sup>33,59</sup> Such conditions often reflect sociocultural conditions that impose on women a very large burden to bear, such as the condition of being pregnant and having to work outside, or to endure conditions of domestic violence and other adversities, such as coexistence with drug trafficking and drug addiction. Such adverse situations may cause limitations in the care and promotion of child development due to poor interaction and stimulus activities.<sup>87,103,120</sup>

The category “Adversities in family relationships and support social network” refers to exposure factors characterized by issues of family adversity, lack of social support, and detention and crime situations in the context of child care. Such factors may generate a lack of support for caregivers in daily child care and lead to neglect and exposure of the infant to dangerous situations. Research in all these areas shows that significant adversity can lead to excessive activation of stress response systems, which can impair brain development. The lack of adequate context can produce stressful processes, caused by the elevation of hormones such as cortisol, in response to stress, which can damage neurodevelopment and, consequently, the social-emotional domain.<sup>7</sup>

In the perspective of health care, the first three categories reflect elements related to the behaviors, subjectivities and conditions of the child caregivers, which can be used by Nursing in the operationalization of interventions during the child's care.<sup>8</sup> Such actions may strengthen the proximal processes when incorporated into health education of caregivers, strengthen their capacity to promote development, institutional assistance to situations of addition and articulation with the social and community network in support of child care.<sup>120</sup>

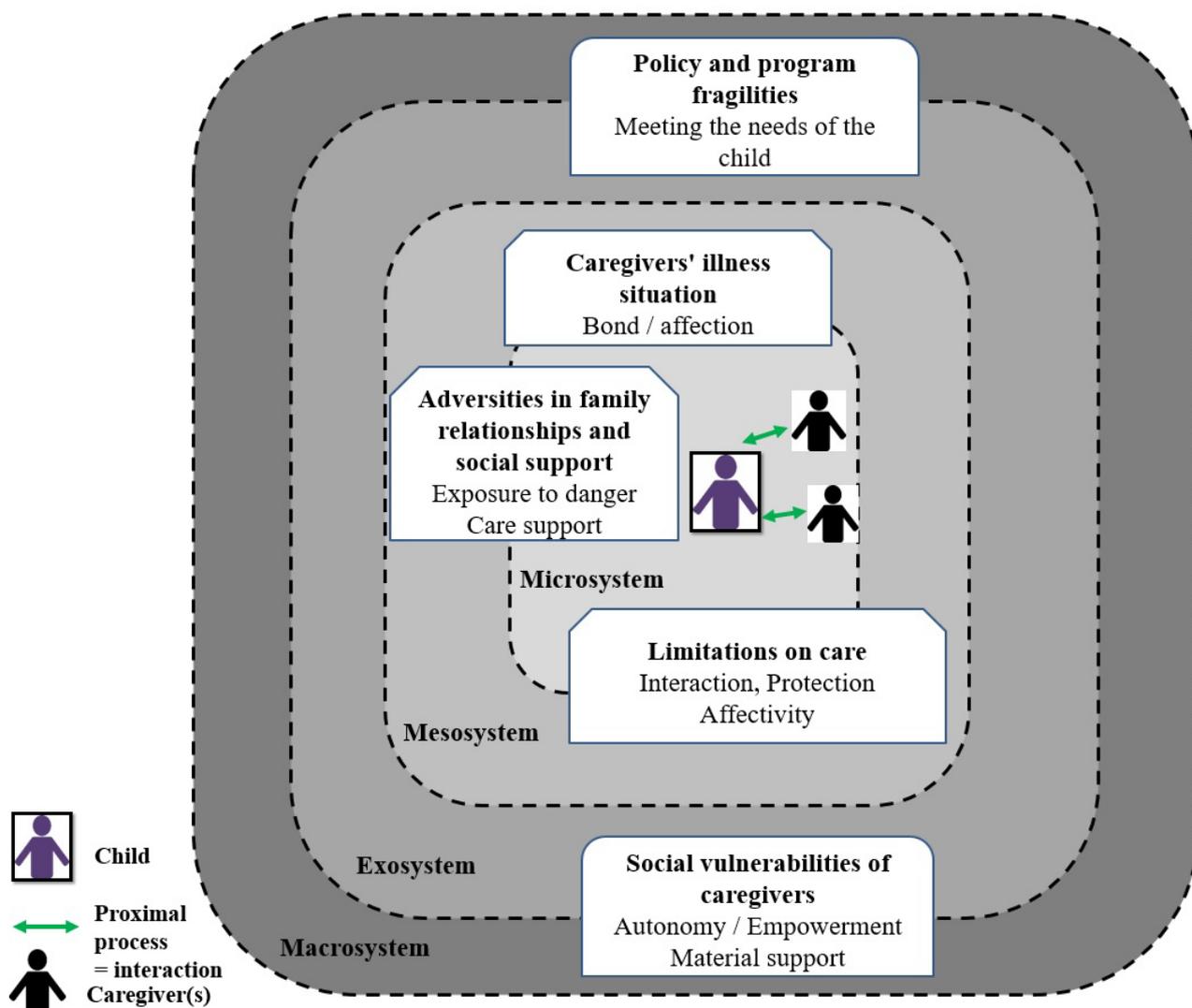
On the other hand, in more distal contexts such as the Exosystem and the Macrosystem, exposure factors condition caregivers in the provision of care due to social, cultural and economic influences. Thus, the category "Social vulnerabilities of caregivers" shows the exposure factors characterized by situations of lack of autonomy/empowerment due to sociocultural conditions that impose stigma and oppression on caregivers, and the socioeconomic conditions that determine the material conditions of the family.<sup>3,8</sup>

Sociocultural conditions are more relevant in influencing social-emotional development, as they delineate a set of beliefs, values, goals, attitudes and activities that guide the way a group of people lives, which determines the forms of care offered to women children.<sup>121</sup> Socioeconomic conditions directly affect socio emotional development, as growth in poverty exposes the child to poor sanitation, overcrowded housing, malnutrition or malnutrition, lack of psychosocial stimulation, and precarious household resources.<sup>3</sup> In this way, the social insertion of the family directly affects the conditions of providing the child's material sustenance and attending to his needs.<sup>8</sup>

The category "Policy and program fragilities" shows exposure factors related to insufficient programs to meet the needs of children. These shortcomings are characterized by precarious working conditions of the health teams, with a low supply of human resources and inadequate facilities for child care.<sup>8</sup> An inadequate supply of services for the care of the child, such as health and education, undermines the social promotion and empowerment of his family, which due to the presence of poverty, fails to provide the adequate care that is necessary for a socio emotional development appropriate. Therefore, this political commitment demands the establishment of pacts and commitments of governments to promote early childhood development through educational, social and health policies.<sup>3,8</sup>

Health care is directed to subjects and communities, being carried out by professionals in their singularity. Thus, the last two categories demonstrate elements of a contextual and political nature that are far removed from the nursing team's resolving capacity.<sup>8,11</sup> Thus, nurses must articulate their actions in the perspective of intersectionality and multidisciplinary,<sup>122</sup> that allows a shared care with other social equipment of care to the children and families that can strengthen the care and the promotion of the social-emotional development.<sup>7</sup>

Thus, the exposure factors synthesized and their relationships with the socioemotional development of the infant can be observed in Figure 1, which shows the influence on the proximal process in the Microsystem, Mesosystem, Exosystem and Macrosystem contexts:



**Figure 1** - Categories of the exposure factors synthesized and their influence on the proximal process and socioemotional development, according to the contexts of the Bioecological Model of Human Development. Graphical representation based on the theoretical model presented. São Paulo, SP, 2017.<sup>1-2</sup>

## CONCLUSION

The present study showed that the dysfunctions in the socioemotional development of infants are conditioned by the contexts of care, strongly expressed in the proximal processes, particularly related to the limitations in the care, in the situations of caregivers' illness, and by the adversities in family relations and social support that influence in interactions with the young child. Caregivers are influenced by social vulnerabilities and the weaknesses of public policies, which determine the material and social conditions in the provision of care.

The exposure factors listed in this review allowed a synthesis of the adverse situations for early childhood in the world, as it included studies developed in diverse cultural, social and political contexts. The synthesis of evidence on the exposure factors allows the design of care models based on the child's real health needs and operationalized by care technologies that can resolve the strength of the exposure factors, reduce the vulnerability of infants and prevent developmental dysfunctions

social-emotional. Among these technologies, it is proposed the construction of scales to measure the contextual elements related to the social-emotional development of young children. Beyond the milestones present or not in the evaluation of a child, these technologies can be predictive, with great potential of anticipation of the factors of exposure and prevention of developmental dysfunctions.

From a bioecological perspective for child development in the context of the Macrosystem, the study points to the urgency of social and political responses that prioritize early childhood and the development of young children as a primary right. Nonetheless, it warns of humanitarian obstacles arising from contemporary macro-structural changes, setbacks in social relations, economic instability, resistance and intolerance to cultural diversity, and suppression of rights, which determine the increase in family and child vulnerability. Given this framework, the challenges are imminent for the promotion of human development, particularly the socio emotional development of young children.

Thereafter, the theoretical contribution of the Bioecological Model of Human Development offers a conceptual framework relevant to the understanding of social relations and adversities of contexts. Thus, it is an expressive theoretical reference for the field of health and nursing, with an approach which contributes to broadening the understanding needs of children, families and communities. -

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## NOTES

### ORIGIN OF THE ARTICLE

Article extracted from the dissertation - "Construction and validation of vulnerability markers of infants for dysfunctions in their socio emotional development", presented to *Programa de Pós-graduação em Enfermagem, Escola de Enfermagem, Universidade de São Paulo*, in 2017.

### CONTRIBUTION OF AUTHORITY

Study design: Silva DI, Veríssimo MLÓR.

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Data analysis and interpretation: Silva DI, Veríssimo MLÓR.

Discussion of the results: Silva DI, Veríssimo MLÓR.

Writing and / or critical review of content: Silva DI, Veríssimo MLÓR, Mello DF, Mazza VA, Toriyama ATM.

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### CONFLICT OF INTEREST

No any conflict of interest.

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