Predictive value of clinical risk indicators in child development: final results of a study based on psychoanalytic theory*

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We present the final results of a study using the IRDI (Clinical Risk Indicators in Child Development). Based on a psychoanalytic approach, 31 risk signs for child development were constructed and applied to 726 children between the ages of 0 and 18 months. One sub-sample was evaluated at the age of three. The results showed a predictive capacity of IRDI to indicate developmental problems; 15 indicators for the IRDI were also highlighted that predict psychic risk for the constitution of the subject.

Key words: Risk signals, child development, psychoanalysis, developmental problems

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Figures related to epidemiological incidence and prevalence of development disorders and mental impairment in childhood are inaccurate in most developing countries (Fleitlich and Goodman, 2000). Various studies show considerable variations, equally upsetting: from 10 to 20% of this specific population seem to suffer from one of more mental impairments, according to a report issued by the World Health Organization (WHO, 2001).

The World Health Organization report (WHO, 2001) also states that mental disorders are common during childhood and adolescence, but the attention provided to this population segment is rather insufficient, both regarding diagnosis and treatment.

In England, a recent study found a 10% rate of psychiatric disturbances prevalence in childhood, surveying 10,500 families (Meltzer et al., 2000).

According to Williams et al (2004), around 15% of the children cared for at pediatric services show behavioral disorders, where the most common are attention deficit/hyperactivity, and, often times, anxiety and depression.

There are already sufficient evidences that there is a significant morbidity caused by the so called “emotional, behavioral, development delay, psychosis, mental retardation and epilepsy problems in this population” (Nikapota, 1991, p. 743).

Both the WHO report and the above mentioned studies disclose that mental disorders in childhood are not irrelevant, but they receive little attention from public policies, thus leaving a high number of children without proper services.

The creation of instruments with indicators that are able to detect, at an early stage of childhood, mental disturbances, must be carried forward, considering the above reasons.
The use of clinical risk indicators may find a significant application in the field of mental health, especially as a useful tool in detecting development problems in children.

The multiple centric research of children development clinical risk indicators – hereinafter called CDRI research – presented here, strived to develop and validate two instruments, in order to implement the first steps in this direction.

The CDRI research was conducted in the period from 2000 to 2008 by GNP (see note 2) that developed, based on S. Freud and on the psychoanalytical schools of W. Winnicott and J. Lacan, a tool composed of 31 clinical psychic risk or development problems indicators in children, noticeable in the first 18 months of the child’s life: CDRI.

Considering the many theoretical viewpoints regarding children’s development and its psychopathology, we will list below the notions of development and its problems adopted in this research.

Human development is conceived as the product of a double incidence: on the one hand, are the maturity problems of neurological and genetic order, and, on the other hand, the processes of constitution of the psychic subject. Researches on development tend to privilege the neurological-genetic dimension (Dargassies, 1974; Kandel et al., 1995; Rutther, 2006). In the CDRI research, we privileged, without disconsidering the realm of maturity, the articulation between the development and the psychic subject.

The subject is a notion that does not coincide with the notions of I or of the personality, but an unconscious psychic instance. From the inception of the child’s life, it is build, based on a preexisting social field, the history of a people, a family, of the parents’ wishes – but also based on encounters, interchanges and hazards that take place in the specific trajectory of the child. From the culture and language field will come the keys of significance out of which the child should build for itself a unique place. Out of this process, the psychic subject will arise, as an organizing element of the child’s development in all of its dimensions – physical, psychomotor, cognitive and psychic Jerusalinsky, 1989; Bernardino, 2007; Kupfer, 2009).

Maturity, growth, and mainly the development depend on the processes of psychic life formation and are extremely sensitive to them. These formation processes operate under the rule of others that surround the child and are responsible for its care and evolution.

Although unique, the place (locus) of a subject depends on general actions that every caregiver is expected to perform in the early childhood, without which this place runs the risk of not being created.

Regarding the “development problems”, the CDRI research considered that they may be divided into two types: In the first type, development problems point out to the presence of subjective difficulties that affect or are incident on the child’s development, but do not challenge the installation of the psychic subject. Examples of these clinical situations may be: hyperactivity, issues with laws and rules, enuresis. The second type, also called “problems in subjective constitution”, covers development difficulties that point out to hurdles in the subjective constitution process itself. They indicate more structural problems, pointing out to evolution risks more geared to serious psychopathologies in childhood, such as global development disorders, whose psychiatric definition is found in DSM-IV-TR (American Psychiatric Association – APA, 2002).

The main goals of the CDRI research were to check the power of indicators for an early detection of development problems in early childhood, and to select psychic development indicators to be included in the follow-up file of the Development of Children aged from zero to five, proposed by the Department of Health.

**Methodology**

*Research design, studied area, sampling and procedures*

The study used first, a transverse section and then a longitudinal section. The sample consisted of 727 children in the age brackets from 0 to 4 months, still to be complete, 4 to 8 incomplete months, 8 to 12 incomplete months, and 12 to 18 months, selected randomly among those who sought routine pediatric consultations at 11 health care services in nine Brazilian cities (Belém do Pará, Brasília, Curitiba, Fortaleza, Porto Alegre, Recife, Rio de Janeiro, Salvador and São Paulo with three healthcare centers). The pediatricians that applied the CDRI protocol were trained for the purpose.

The present, absent and not-checked clinical indicators (CDRI) were registered during the study. In this survey it is the absence of indicators that suggests a risk for the child’s development. Thus, the CDRIs, when present, are indicators of development, and when absent, they point out to risk for the development.

At the end of 18 months, 287 children showed 2 or more absent indicators (considered cases), and 440 showed 1 or 0 absent indicator (control child).
Among the cases, 183 children were chosen by lot (64%); out of them, 158 completed the study (13.7% loss). Among control children, 132 (30%) were chosen by lot; out of them, 122 (7.5% loss) completed the study.

When the children of this sub-sample reached the age of 3, they were submitted to a psychiatric and psychoanalytical diagnosis, using two protocols created for the purpose: the Psychoanalytical Evaluation script AP3 – and the Psychiatric Evaluation script. This article will approach only the results achieved by means of the psychoanalytical evaluation, while the psychiatric assessment results will be used in a future article.

Based on the psychoanalytical evaluation, a table of clinical symptoms was set up. Then we defined the clinical outcome for the research: a) presence or absence of development problems for the child, or b) presence or absence of risk for the constitution of the subject.

Considering that they are new tools, we will list below the theoretical Fundamentals that justify the choice of the indicators, the axes and clinical outcomes used in the CDRI research.

The construction of the CDRI Instrument
(Child Development Risk Indicators)

The CDRI 31 indicators were developed based on the following theoretical axes and are considered their expression of the phenomena. Assumption of subject, establishment of demand, alternate presence/absence and paternal function. The outline of these axes was based on the works Three Contributions to the Theory of Sexuality (Freud, 1905), Beyond the Pleasure Principle (Freud, 1920) and The dissolution of the Oedipus complex (Freud, 1924) and on the 4 and 5 seminars by J. Lacan (Lacan, 1995, 1999).

This study assumes that the maternal work is gradually woven around these four axes, and its outcome is the installation of a psychic subject, based on which a child’s development is organized.

The axis “subject assumption” (SA) characterizes an anticipation, by the mother or caregiver, of the presence of a psychic subject in the child, that, however, has not yet been constituted. This constitution depends exactly on the fact that this subject is initially assumed or anticipated by the mother (or caregiver). This anticipation gives the child a great pleasure, since it is
accompanied by an expression of joy from the mother – words loaded with a pleasurable musicality, called motherese (Ferreira, 1997; Laznik, 2000), and this will make the child “strive” to correspond to what was anticipated about it. In this attempt, the child will bring back the pleasure experienced at the time of the mother’s anticipation – the frown, translated by the mother as a smile, will really become a smile. Thus, the subjectivity that had not yet been installed may be effectively built.

In the “demand establishment” axis, (DE), the first involuntary responses that the child presents at birth are collected, such as crying, which will be recognized by the mother as a request made by the child to her. This recognition will allow for the construction of a demand, – for psychoanalysis, always a demand for love – from this subject to all those he/she will relate to. This demand will be at the basis of all future activities of language and relationships with others.

The “alternate presence/absence” (PA) axis characterizes the mother actions that make her alternately present and absent. The mother’s absence will mark all human absence as an existential occurrence, noteworthy, compelling the child to develop a subjective mechanism to symbolize it. The mother’s presence will be not only physical, but mainly symbolic. Between the child’s demand and the experience of satisfaction provided by the mother, we expect an interval, where the child’s response may appear, a basis for future responses or demands. Finally, in the “paternal function” (PF) axis, we seek to follow-up the effects of this function on the child, that determines the weight of the mother’s actions. We understand that the paternal function occupies, for the mother-child couple, the place of a third instance, oriented by the social dimension. A mother that is submitted to the paternal function takes into account, in her relationship with the child, the parameters proposed by culture to guide this relation, since the paternal function is in charge of transmitting these parameters. The exercise of the paternal function on the mother-child couple may have the effect of a symbolic separation between them, and will prevent the mother from considering her child as an “object” focused solely on her satisfaction. Therefore, the singularity of the child and his/her differentiation regarding the mother’s body and words depend on this function.

Table 1 shows the indicators with the annotations SA, DA, PA and PF, that indicate the axes to which they refer.
### Table 1
Child Development Clinical Risk Indicators and respective theoretical axes

<table>
<thead>
<tr>
<th>Age in months:</th>
<th>Indicators:</th>
<th>Axes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 4 months incomplete:</td>
<td>1. When the child cries or screams, the mother knows what the child wanes.</td>
<td>SA/DA</td>
</tr>
<tr>
<td></td>
<td>2. The mother talks to the child in a style that is particularly addressed to the child (motherese).</td>
<td>SA</td>
</tr>
<tr>
<td></td>
<td>3. The child responds to motherese.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>4. The mother proposes something to the child and waits for the response.</td>
<td>AP</td>
</tr>
<tr>
<td></td>
<td>5. Mother and child exchange eye-contact.</td>
<td>SA/AP</td>
</tr>
<tr>
<td>4 to 8 months incomplete:</td>
<td>6. The child starts to differentiate day from night.</td>
<td>DA/AP</td>
</tr>
<tr>
<td></td>
<td>7. The child uses different signs to express different needs.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>8. The child demands the mother and gives some time to wait for her response.</td>
<td>DA/AP</td>
</tr>
<tr>
<td></td>
<td>9. The mother talks to the child addressing short sentences to him/her.</td>
<td>SA/AP</td>
</tr>
<tr>
<td></td>
<td>10. The child responds (sound, vocals) when the mother or somebody else addresses him/her.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>11. The child actively seeks contact with the mother’s eyes.</td>
<td>DA/AP</td>
</tr>
<tr>
<td></td>
<td>12. The mother supports the child’s initiatives without stopping his/her efforts.</td>
<td>SA/AP</td>
</tr>
<tr>
<td></td>
<td>13. The child asks for help from somebody else without remaining passive.</td>
<td>DA/PF</td>
</tr>
<tr>
<td>8 to 12 months incomplete:</td>
<td>14. The mother understands that some demands from the child may be a way to call her attention.</td>
<td>DA/SA</td>
</tr>
<tr>
<td></td>
<td>15. During body care, the child searches actively to play loving games with the mother.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>16. The child shows that it likes or dislikes something.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>17. Mother and child share a private language.</td>
<td>SA/AP</td>
</tr>
<tr>
<td></td>
<td>18. The child feels ill at ease with unknown people.</td>
<td>PF</td>
</tr>
<tr>
<td></td>
<td>19. The child has favorite objects.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>20. The child shows cute behavior.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>21. The child looks for the adult’s approval look.</td>
<td>DA</td>
</tr>
<tr>
<td></td>
<td>22. The child accepts semi-solid and varied foods.</td>
<td>DA</td>
</tr>
<tr>
<td>From 12 to 18 months</td>
<td>23. The mother alternates moments of dedication to the child with other interests.</td>
<td>DA/PF</td>
</tr>
<tr>
<td></td>
<td>24. The child endures well the mother’s brief absences and reacts to longer absences.</td>
<td>DA/PF</td>
</tr>
<tr>
<td></td>
<td>25. The mother offers toys as alternatives to the child’s interests in the mother’s body.</td>
<td>DA/PF</td>
</tr>
<tr>
<td></td>
<td>26. The child no longer feels compelled to meet all demands from the child.</td>
<td>PF</td>
</tr>
</tbody>
</table>

27. The child looks curiously to things that interest the mother.
28. The child likes to play with objects used by the mother and by the father.
29. The mother starts to ask the child to speak out what he/she wants, not being satisfied with gestures only.
30. Parents establish small behavior rules for the child.
31. The child differentiates between objects belonging to the mother, father and him/herself.

Validation instrument: Psychoanalytical evaluation at the age of 3. (PE3)

Psychoanalytical Evaluation at the age of 3 – PA3 – was also developed by the same group of researchers responsible for developing CDRI. It consists of a script, to be used by psychoanalysts, containing forty-three questions that will guide the interview. This interview is conducted with parents and the child during approximately one hour and thirty minutes. After the interview, the psychoanalyst will write a qualitative report and also indicate the possible presence of clinical symptoms.

AP3 was developed based on the four axes used to build CDRI (SA, DA, AP and PF), but it was also based on four new categories, to cover what one expects to find in the psychic functioning of a three-year old child. The research was focused on establishing the relationship between the already applied indicators, in what they evidenced about the first operations that formed subjectivity, and the effects that these operations brought about. The chosen categories include exactly these effects, via their expression in clinical symptoms.

The new landmarks of this construct are expressed in the following categories: Playing and fantasy (PF); The body and its image (BI); Expression before rules and position regarding the law (PL); Speech and position in Language (SL).


1. Playing and Fantasy: Playing is a way to express, in a free associative manner, the unconscious fantasy of the child. In the case of a complete absence of an imaginary production, the child’s game appears glued to the mechanics of objects and it does not unfold, in its constructs, a narrative. Playing can also
appear without any reference to make-believe, to the limits and interdictions. Significations may be random, fragmented, but the child shows an intense relationship with the other, opposite to what happens in cases of lack of imaginary productions. Finally, the drawings and games of a child may be understood as significations at the service of a story, of a narrative or of a piece of information, and then, the limits, the prohibitions and the figurative feature of the characters arise. In this case, playing may be a form of symbolizing his/her difficulties, conflicts, failures and concerns.

2. The body and its image: the body image is a construct that arises as a result of the mother’s actions on the child’s body, changing it into a signification system. This system allows that child to learn about him/herself in a psychic image, unified, base on which the child will be able to recognize him/herself. The body image also contains the traces of sexual differentiation. Discrepancies in activity, movement, aesthetic-sexual differentiation, self-recognition expressions and the presence of inhibitions show the presence of clinical symptoms.

3. Expression vis-a-vis rules and position regarding the law (PL): Compliance with limits, restriction of one’s own impulses in accordance with the situation, permeability of the subject as to schedule of times and activities, respond, in general, to the interiorization of paternal interdiction, that different forms of the lay may adopt. Therefore, also speaking generally, we can mention that the lack or intermittence of such behaviors usually point out to the presence of clinical symptoms.

4. Speech and position with regard to language: A child’s speech indicates that he/she entered a field that goes beyond speaking: the field of language. This field covers other expressions, but is not restricted to them. The child’s entrance in the field of language is not measured only by his/her vocabulary, by the mastering of syntax and grammar, or by mastering other language expressions, such as gestures, for instance. This entrance is measured mainly by the place from which the subject represents him/herself in the language’s system, disclosing his/her possibility of positioning him/herself regarding the significations of the world, his/her possibility of supporting relationships with others, of recognizing in the language the demand and desire of others, and of producing, on his/her turn, new significations.

The proposed psychoanalytical evaluation was neither an exhaustive nor a limitative investigation. It viewed only at ensuring a certain homogeneity of the interviews, as well as to collect sufficient material to establish an assumption
about the process of psychic constitution in the evaluated children. What we intended, ultimately, was to register if this psychic constitution is in progress or at risk.

The instrument’s development followed the post-hoc construction methodology, permitting a gradual adaptation of the findings to the evaluation tables. Thus, at the completion of 208 evaluations, we achieved a table where the 55 clinical symptoms detected in the evaluations are present.¹

Two types of clinical outcome of the research were defined, based on the results of the psychoanalytical evaluation: a) presence of absence of development problems proper for the child, or b) presence of absence of development problems with psychic risk for the constitution of the subject.

The two clinical outcomes received abridged names: a) presence or absence of development problems, and b) presence or absence of psychic risk.

The first type of clinical outcome – presence of development problems for the child – points out, generally, to the existence of psychic difficulties and vicissitudes that are interfering in the child’s development, without meaning, however, that the psychic structure is impaired. A child with enuresis, for instance, shows, by means of the disorganization of the excreting function that something is not well in his/her relation with the world or with him/herself, although there is nothing wrong with his/her physiology.

For the establishment of the second type of clinical outcome – presence or absence of risk for the subject constitution – a previous study was conducted by Jerusalinsky and Infante,² based on current literature on children psychopathology (DSM-IV-TR, Marcelli & Cohen, 2009). Starting from this study, among the clinical symptoms that were found, they located the symptoms that could point out to the presence of a psychic risk for the constitution of the subject. These symptoms were called psychic risk indicators or symptoms.

Clinical symptoms or psychic risk indicators indicate arrests or absence of what should be in progress. The absence of make-believe, for instance, shows an interruption or lack of the fantasy device as an instrument for the elaboration of the difficulties that every child has to face during growing, and indicates a

¹. For the clinical symptoms, see Lerner, R. e Kupfer, M.C.M. (Orgs.). Psicanálise com crianças: clínica e pesquisa.
². Non-published study.

significant arrest in the subject constitution. In order to be included in the group of children that presented psychic risk for the subjective constitution – hereinafter called only psychic risk – the child should present at least one of these symptoms or psychic risk indicators.

**Statistical analysis**

Based on the results achieved in PA3, we proceeded with the analysis for the validation of CDRI for the forecast of psychic risk and development problems, establishing the respective relative risks with the computation of intervals of confidence at 95%. This validation analysis was conducted in two ways: considering the instrument as a whole and taking each of the 31 indicators individually.

Sets of indicators (Factors) were extracted in each period by means of an Analysis of Main Components (AMC), and later on, studied according to their capacity to foresee psychic risks and development problems. In order to be considered case, the child needed to have at least one absent indicator, among those that made up the factor.

The analysis of main components (AMC) studied the interdependence of the investigated variables.

Correlation matrixes containing the answers to the questions of each assessment period were used for the AMC. For the determination of the number of factors in the AMC, the criteria used was to maintain the factors corresponding to the matrix “eigenvalues” higher than the unit. After the factorial loads matrix was found, the Varimax rotation method was used. The factorial loads matrix run was used for the interpretation of factors and only those with values over 0.40 were considered.

**Results**

Statistical analysis pointed out that CDRI as a whole has a greater capacity to predict development problems than to predict psychic risk.

Additionally, it pointed out some indicators, either individually or in groups, with the capacity of predicting psychic risk or development problems, as shown in table 3.

Table 3
Predictive analysis of cases identified in CDRI (absence of two or more indicators until the age of 18 months) presented psychic risk or development issues at the age of 3.

<table>
<thead>
<tr>
<th>Ratio of positives</th>
<th>IDRI</th>
<th>cut 1/2</th>
<th>Total current indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychoanalytical clinical evaluation</td>
<td>Cases</td>
<td>Controls</td>
<td></td>
</tr>
<tr>
<td>Psychic Risk</td>
<td>19.6%</td>
<td>11.5%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Development problems*</td>
<td>70.3%</td>
<td>57.4%</td>
<td>64.6%</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
<td>122</td>
<td>280</td>
</tr>
</tbody>
</table>

Note: *statistically significant result.

Table 4 shows the four indicators that were capable of predicting statistically significant psychic risk, and two indicators that were capable of predicting development problems.

Table 4
Individual indicators that were capable of predicting psychic risk and development problems

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Relative Risk</th>
<th>Interval of confidence 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychic risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The child uses different signs to express different needs</td>
<td>3.46</td>
<td>1.19 – 10.07</td>
</tr>
<tr>
<td>18. The child feels uncomfortable with unknown people.</td>
<td>2.93</td>
<td>1.49 – 5.73</td>
</tr>
<tr>
<td>22. The child accepts semi-solid, solid and varied foods.</td>
<td>3.75</td>
<td>1.37 – 10.28</td>
</tr>
<tr>
<td>30. Parents establish small behavior rules for the child.</td>
<td>4.19</td>
<td>1.74 – 10.06</td>
</tr>
</tbody>
</table>

### Development problems

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>RR</th>
<th>CI95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>The child is able to accept well brief absences of the mother and reacts against longer periods of absence.</td>
<td>2.83</td>
<td>1.26 – 6.35</td>
</tr>
<tr>
<td>26.</td>
<td>The mother no longer feels she is obliged to do everything the child requests.</td>
<td>3.01</td>
<td>1.11 – 8.14</td>
</tr>
</tbody>
</table>

The following sets indicators, after factorial statistic analysis, had a significant correlation in predicting psychic risk:

- in the 0 to 4 months range: all five indicators make up one single factor that is significant to predict psychic risk (RR=3.51; CI95% 1.10-11.17).
- in the 4 to 8 months range there is a factor made up of indicators 6, 7, 8, 9 which is significant to predict psychic risk (RR=2.50; CI95% 1.01-6.59).
- in the 8 to 12 months range there is a factor made up by indicators 16 and 22 which is significant to predict psychic risk (RR=5.01; CI95% 1.97-13.15).
- in the 12 to 18 months range there is a factor made up by indicators 23, 24, 26 and 30 which is significant to predict psychic risk (RR=1.99; CI95% 1.03-3.85) as well as to predict development problems (RR=2.82; CI95% 1.45-5.45).

A new CDRI was developed based on these results, where we find the 15 indicators able to predict psychic risk: 1, 2, 3, 4, 5; 6, 7, 8, 9; 16, 22; 23, 24, 26 and 30.

### Discussion

The Multicentric Research of Risk Indicators for Children Development validated CDRI as an instrument with the capability to forecast development problems in 3-year old children.

The instrument as a whole may indicate that a child shows development problems, but it does not indicate a trend, at the age of three, towards serious disorders.

From the viewpoint of the development notion used in this research, the value of the CDRI instrument lies in providing the timely location of problems, that,
once detected, and properly treated, will give the child a richer and more creative development process, with much less suffering.

The research has also found some indicators, signalized either individually or in factorial matrixes that showed a high capability of forecasting psychic risk in general and with no specification of pathology. The pathology specification was not, really, the intent of this study, at least at the first stage. It is well known that to find more serious pathologies, such as children’s autism, with a small incidence in the general children’s population, (considering the typical circumstances), it would require a much larger sample, but this sample was not developed, since this was not the purpose. Therefore, new researches should be proposed, where cases will be followed-up until the age of 5, in order to confirm the risk trend appointed by this survey. A broader sample should also be collected, for the location of cases of autism.

Four individual indicators, and three groups of indicators showed this sensitivity of indicating a trend towards the risk of hurdles in the process of subject constitution, and, therefore, indications of psychic risk. Thus, this set of 15 indicators may also permit the early location of risks of serious pathologies, thus putting the research at the service of a very current trend in international research, the search for instruments for the detection and prompt intervention at a time of development when a reversion of the situation may still be possible. Mazet and Houzel (1996) draw attention to the difficulty or reverting disorders once they are installed, in the case of children’s psychosis, cases of deficiency or psychopathologies. In their opinion, it is of essence to avoid to the maximum the installation of these traits. “Experience has shown that frequently, the reversibility of disorders was a result of how early they are identified and treated” (p. 547).

The choice of the beginning of the fourth year of life as the time for assessing the children in the research was also due to the logics of prevention that permeates the entire work of the group. This has to do with proposing detection strategies that will allow for a timely intervention, that is, at a time when the highest levels of the psychic apparatus are still under construction, before the psychopathological processes get installed. As Laznik (2004) states, “the clinical practice teaches us how the institutions of the psychic apparatus are done early, and this leads us to regret not having found the children at an earlier stage, when the game was not yet decided” (p. 22). For this author, it is important to consider the “sensitive period” for the various acquisitions of childhood. She states: “even
if the plasticity of the psychic apparatus permits the additions that may be done, the age when we intervene is a crucial piece of information” (2004, p. 31).

The same logics also permeate the concept of 0-3 Diagnostic Classification (1997), that highlights the “importance of prevention and early treatment in the creation and restoration of favorable conditions for mental development and health of small children” (p. 9), to the extent where, according to the scale’s authors, the early detection permits intervening before the first deviations are consolidated into functioning patterns that are little adaptive.

The validation of indicators also confirms the value of their bases – the axes – a consistent theoretical foundation that guides the interpretation of the subjectivity constitution. These axes are already being used in papers on children development (J. Jerusalinsky, 2002; Teperman, 2005; Bernardino, 2006), since they have come to fill a gap existing in most books on this subject, that usually approach in detail the evolutionary aspects – related to body functions and instrumental skills of children – without having a consistent theoretical basis for the structural aspects of early childhood. These aspects are the organizers of both body and instrumental functions. The axes “subject assumption”, “establishment of demand”, “alternance between presence and absence”, and “paternal function” allow us to drill down – in the plan of interactions between children and parents – the two essential functions for the advent of subjectivity: the maternal function and the paternal function (Lacan, 1995; 1999).

At the same time, the results show that the indicators with the stronger predictive power are those related to the last surveyed development bracket (12 to 18 months), whose prevailing theoretical axis is the paternal function. This finding evidences the psychoanalytical assumption that the paternal instance is introduced at the early times of subjectivity in a veiled way, and its effects start to be noticed as of the second year of life (Lacan, 1966).

In the direction, that is underscoring a function as necessary and present since the primordial time of childhood, one may consider that the presence of the 15-indicators set has the value of resilience. This, CDRI may be used as a set of indicators valid for the configuration of the child’s psychic health.

In the CDRI research, it is the absence of indicators that indicates disturbances in the unfolding of the mother-child dialogue, and therefore, a risk for the child’s development. Therefore, when the CDRIs, are present, they are indicators of development, and when absent, they indicate risk for the development.

This distorsion was introduced on purpose. Once included in a regular examination protocol, the indicators, conceived in a positive manner, may operate in the direction of creating a pediatric view that sees psychic health and not psychic disease in the child. When absent, they will lead the pediatrician to suspect that something is not going well, without leading him/her to make a final diagnosis. In the field of subjectivity, a diagnosis closed in the early childhood may the disastrous and iatrogenic, to the extent it closes a fate still subject to changes arising from the plasticity and the intercurrences that contribute, as already mentioned, to the singular construction of a subject locus (Winnicott, 1966).

At the first stage of the research, the dialogue was with the pediatrics field, in the general environment of health and prevention. However, at the second stage, dialogue was with the field of psychopathology, in the realm of childhood disorders. In this direction, there was a change in paradigms, since the target became the detection of development problems. Thus, the clinical symptoms searched by the Psychoanalytical Evaluation are indicators whose presence points out to development problems or even psychic risk. The logic that governed the construction of indicators was once again reversed, since we are now in the realm of psychopathology and treatment, and no longer in the realm of pediatrics.

The attempt to articulate the statistical and clinical methods is rarely found in scientific literature. However, this scenario is changing: authors such as Hanns (2000), Pereira (2001), Mezan (2002), consider that it is possible to make psychoanalysis dialogue with Modern Science, having the care of not eliminating the differences.

One of the main goals of this research was to include psychic indicators in the Department of Health Growth and Development Follow-up File, and they are now available for this purpose. Thus, psychoanalysis, more than dialoguing with the Modern Science, has opened a door for its participation in the Public Health actions in Brazil.

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References


**Abstracts**

(Valor preditivo de indicadores clínicos de risco para o desenvolvimento infantil: um estudo a partir da teoria psicanalítica)

*No presente artigo, apresentam-se os resultados finais da Pesquisa IRDI. A partir da psicanálise, 31 indicadores clínicos de risco para o desenvolvimento infantil (IRDI) foram construídos e aplicados em 726 crianças entre 0 e 18 meses. Uma sub-amostra foi avaliada com a idade de 3 anos. Os resultados apontaram a capacidade dos IRDI para prever problemas de desenvolvimento e destacaram ainda 15 indicadores do IRDI com capacidade para prever risco psíquico para a constituição subjetiva.*

**Palavras-chave:** Indicadores de risco, desenvolvimento infantil, psicanálise, problemas de desenvolvimento

(Valor predictivo de indicadores clínicos de riesgo para el desarrollo infantil: un estudio a partir de la teoría psicoanalítica)

*El presente artículo presenta los resultados finales de la pesquisa IRDI. Desde el psicoanálisis, 31 signos de riesgo para el desarrollo infantil (IRDI) se han construido y aplicado a 726 niños entre 0 y 18 meses. Se evaluó una sub muestra a los 3 años de edad. Los resultados muestran que los IRDI poseen una capacidad de predecir problemas de desarrollo. 15 signos muestran una capacidad de predicción de riesgo psíquico para la constitución subjetiva.*

**Palabras clave:** Signos de riesgo, desarrollo infantil, psicoanálisis, problemas de desarrollo
Cet article présente les résultats de la recherche IRDI. A partir de la psychanalyse, 31 signes cliniques de risque pour le développement de l’enfant (IRDI) ont été développés et appliqués à 726 enfants à l’âge entre 0 et 18 mois. Un sous-échantillon a été évalué à l’âge de trois ans. Les résultats ont montré que les IRDI ont la capacité de prédire des problèmes de développement. Un groupe de 15 signes prévoit d’ailleurs le risque psychique de la constitution subjective.

Mots clés: Signes cliniques de risque, développement de l’enfant, psychanalyse, problèmes de développement


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