Babeş-Bolyai University, Cluj-Napoca
Psychology and Sciences of Education Faculty

PhD Thesis

Impact of the Attachment Relationship on the Development and Psychopathology in Early Childhood and Adulthood

– Abstract –

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Key words: attachment, ethology, attachment behavioral system, attachment style, psychopathology, risk, resilience, psychomotor development in early childhood, infant and toddler mental health, failure to thrive, mother – child interaction, adult intra- and interpersonal functioning, family of origin functioning.

Chapter 1 of the doctorate thesis focuses on the presentation of attachment theory, as a theoretical background that guides the design of the studies accomplished, as well as its applications for research, clinical and psychotherapeutic practice. After the review of several important concepts employed by the attachment theory, the first chapter approaches the attachment theory, as it was developed by Bowlby, based on several ideas derived from ethological studies.

According to attachment theory, the early interactions between the child and the primary caregiver are internalized and encoded as internal working models, which predict the interactions in close relationships and the trust in the relationship partners' responsivity and availability. The central attachment figure is initially the primary caregiver and, as the individual matures, the peer group and afterwards the romantic partner become central attachment figures, towards which the person directs the attachment behaviors during activating situations.

The research in the field of attachment theory flourished after the development and implementation of the Strange Situation procedure by Mary Ainsworth. At the same time, the attachment assessment methods and techniques, destined for different stages of childhood, adolescence and adulthood diversified.

Thus, the attachment theory contributed significantly to the field of clinical psychology, as it brought new explanations to the etiology and characteristics of several mental disorders, such as anxiety and depression, which often associate with attachment insecurity or the loss of attachment security, of several personality disorders, such as borderline personality disorder. On the other side, several psychotherapeutic orientations undertook Bowlby's principles on the change in therapy, the therapist's role and therapeutic relationship in the efficiency of therapy.

Several similarities exist between the attachment theory and other modern psychological theories (modern psychoanalytic theory, social cognition theories, positive psychology, meaning making theories, interdependence theory etc.). Several important differences exist, as well, that define its specificity, as a self-contained theory that cannot be assimilated to any other theory in the field.

Chapter 2 of the thesis includes the first study, which approaches the impact of loss and severe perturbations of the attachment relationship with the primary caregiver on

malnourished infant and toddler's development and mental health, during the first years of life.

The theoretical background of the chapter presents the concepts of risk and resilience, as these apply to the early childhood, several characteristics of normal and atypical somatic and psychomotor development in early childhood, as well as developmental assessment, aspects related to infant and toddler mental health, a new field that passes a rapid developmental process and covers the prevention, as well as the assessment and intervention, when required (either risk or disorder present).

In early childhood, disorders in eating behavior often represent signs of emotional and/ or relational perturbations and non-organic failure to thrive is a severe psycho-organic disorder, that often leaves important sequels on the child's development, at the physical, as well as psychosocial levels and that can threaten the child's life.

Study I followed several ***general objectives***:

(1) To analyze the influence of psychosocial factors on the psychomotor developmental difficulties of infants and toddlers at organic, somatic, environmental risk;

(2) To identify the factors associated with non-organic failure to thrive (FTT) and the impact of the disorder on hospitalized infants and toddlers' mental health;

(3) To analyze the impact of infants and toddlers' mental health and clinical disorders on the psychomotor development (the gross motor, fine motor, cognitive, language and social-emotional areas) and on the acquisition and progression of non-organic FTT;

(4) To establish the association between the severity of perturbations in the child – primary caregiver relationship, the child's social and emotional functioning and the severity of the psychomotor delay, within five developmental areas. Each of the general objectives was operationalized and the *specific objectives* are enumerated in the PhD thesis.

Some of the ***hypothesis*** that guide the design implemented in study 1 (formulated based on the study of the literature, on one side and on the practice, on the other side) are: (1) the severity of psychomotor delay is significantly different, based on the presence of somatic illness and the characteristics of the child's caregiving environment; (2) the frequency of occurrence (prevalence) of non-organic FTT is significantly different, based on the child's gender, the severity of malnutrition, the hospitalization period, the characteristics of the environment where the child originates; (3) the infant and toddler's mental health screening is significantly associated with the frequency of occurrence of non-organic FTT; (4) the mental

health screening and the fulfillment of criteria for a clinical disorder are significantly different for infants and toddlers, depending on gender, severity of malnutrition, the existence of a somatic comorbidity with malnutrition and the characteristics of the child's family of origin environment; (5) the quality of the child – caregiver relationship is significantly different, depending on the child's gender, severity of malnutrition, presence of non-organic FTT and the environment of origin characteristics; (6) the functioning of the child – caregiver relationship is significantly associated with the frequency of occurrence of the non-organic FTT and the severity of risk for the mental health (screening) of infants at risk; (7) the social and emotional functioning in early childhood is significantly different, based on the child's gender, age, environment of origin, severity of malnutrition, presence/ absence of non-organic FTT; (8) the social and emotional functioning in early childhood is significantly associated with the severity of risks for the mental health (screening); (9) the child's social and emotional functioning and the functioning of the relationship with the primary caregiver are significantly correlated, in general, and when the presence of non-organic FTT is controlled; (10) the social and emotional functioning disorders, the presence of non-organic FTT and the high severity of malnutrition account for the disorders in the functioning of the relationship between child and caregiver, as well as disorders of the child's social and emotional functioning; (11) the severity of psychomotor delay at admission and release form hospital is significantly different for children with and without non-organic FTT; (12) the psychomotor delay of children with non-organic FTT and resilient children is significantly lower at release from hospital, as compared with the delay at admission; (13) the psychomotor delay of children is significantly different, based on the severity of the risks for mental health; (14) the functioning of the relationship with the primary caregiver, the social and emotional functioning are significantly associated with the severity of the child's psychomotor delay; (15) the perturbation of the child – caregiver relationship functioning accounts for the presence and severity of the child's psychomotor delay, by mediation of the child's social and emotional functioning.

Aside from the hypothesis, we formulated several research *questions*, that required an exploratory and qualitative analysis: (1) Which of the somatic illnesses associate with the non-organic FTT and which of them with the resilience?; (2) Which of the psychosocial stressors, that the children were exposed to, are associated with the non-organic FTT and which of them with the resilience?; (3) Which of the temperamental, behavioral and emotional traits are associated with the non-organic FTT and which of them with the

resilience?; (4) Which of the clinical disorders of the infant and toddler are associated with the non-organic FTT and which of them with the resilience?; (5) How does the relationship with the primary caregiver and its perturbation influence the at-risk infant and toddler mental health and which of the clinical disorders are associated with the efficient functioning and with deficit, respectively?

The *sample of participants* to the first study consisted of a number of 68 infants and toddlers at different types of risks (feeding disorders, socially deprived environments, admitted in the hospital without their caregivers), selected from a larger sample of children admitted in the hospital for nutrition problems (different degrees of malnutrition/ growth difficulties) and associated medical illnesses. The participants' selection was accomplished by simple randomization (of the total number of children admitted in the hospital during 2004 and 2008, we randomly selected our sample).

All the children in our group presented protein caloric malnutrition of varying degrees (8.8% first degree, 2.9% degree I/II, 41.2% second degree, 16.2% degree II/III, 30.9% third degree), for the recovery of which they had been hospitalized for different periods of time without their primary caregivers. Most of the children from the sample originate from families (76.5% of the total number), a rate of 19.1% from another hospital and a relatively low 4.4% from foster homes. On evaluation, the children from the sample were aged between 2 and 27 months, with a mean age of 8.40 months. The sample is relatively homogeneous depending on gender, 44.1% of the participants were females and 55.9% males. Despite the similarities in the caregiving environment, 36 children, representing a rate of 52.94% of the total number included in the sample were resilient and did not develop non-organic failure to thrive, while 32 children (47.06%) developed this condition.

The *instruments* used consisted of: (a) observation grid for psychomotor development in five domains, designed by the author on the basis of existing instruments, supplemented by data from the literature and data gathered during practice[1], (2) assessment of infants and small children's mental health, following two steps: (a) screening, using the Mental Health Screening Tool for 0-5 years (California Institute for Mental Health, 2000) and (b) complex assessment, by employing the multiaxial model from the Diagnostic Classification of Mental Health and Development Disorders of Infancy and Early Childhood, the original and revised editions (Zero to Three, 1994, 2005) and the diagnostic classification of DSM-IV-TR (APA,

[1] Constructed in collaboration with psychotherapists Orbán Mária and Grigorovici Anca

2000). Thus, we established the psychomotor developmental level, the severity of mental health risk (screening), the possible occurrence of axis I disorders (the fulfillment of the criteria for various disorders was interpreted as risk, not as diagnosis), the presence of relational disorders and their severity, noted on axis II, the complex medical diagnosis (from medical records and the discussions with the children's pediatricians) on axis III, the presence of psychosocial and environmental stressors, on axis IV, the social and emotional functioning, on axis V. The presence of *non-organic failure to thrive* was established according to criteria specified by Iwaniec (2005), namely the low developmental level (that characterizes the entire sample) is maintained for a month, despite the implementation of the medical and psychological intervention, after the admission to the clinic.

Descriptive and inferential statistics, statistical software SPSS 13.0 and 15.0, AMOS 7 and LISREL 8.80 were used for the analysis of data for the present study.

The *results* obtained show that *the severity of psychomotor delay*, established by comparison between the chronological age and the developmental age, individually for each child, does not differ based on gender, presence or absence of a medical diagnosis besides the malnutrition, the child's environment of origin before the hospital admission (family, institutional care, other hospitals), poor (no income families) or appropriate (families who have minimal sources of income) material conditions, the cultural/ educational level of the family (illiteracy versus minimal education), family housing (inadequate, no housing, cart, many people in the same household versus acceptable, adequate housing, utilities: running water, gas, electricity). At the same time, the more severe the child's malnutrition, the more significant language delay [$H(3)=7.81$, $p=.05$] and socio-emotional delay [$H(3)=11.39$, $p=.01$] were established, but not significantly higher gross motor [$H(3)=6.96$, $p>.05$], fine motor [$H(3)=6.48$, $p>.05$] and cognitive [$H(3)=5.44$, $p>.05$] delays.

The association between *the severity of delay at discharge from the clinic and the hospitalization period* was statistically highly significant for all areas of psychomotor development ($p<.01$), the longer the hospitalization period, the more severe the delay at discharge, although the children benefited from intervention and stimulation at all stages of their hospitalization. Moreover, given the severity of the deficiencies in the environment of origin (particularly the family), the new caregiving environment of the clinic is protective environment for the children (Block and Krebs, 2005). However, even this protective environment becomes inadequate for the children if they spend too much time in it, either because the somatic illnesses that require lengthy admittance into hospital put their mark on

their development, or because this environment is an artificial one and no matter how much stimulation it can provide, it can never replace the type of stimulation that the child normally receives in an appropriate family environment. The language, cognitive and fine motor delays cannot be compensated within a protective environment and the child needs the stimulation provided by an environment closer to the family, natural environment.

The severity of malnutrition was one of the factors that explained the statistically significant differences (χ^2=9.31, p<.05) between the children with and those without non-organic FTT (Figure 1).

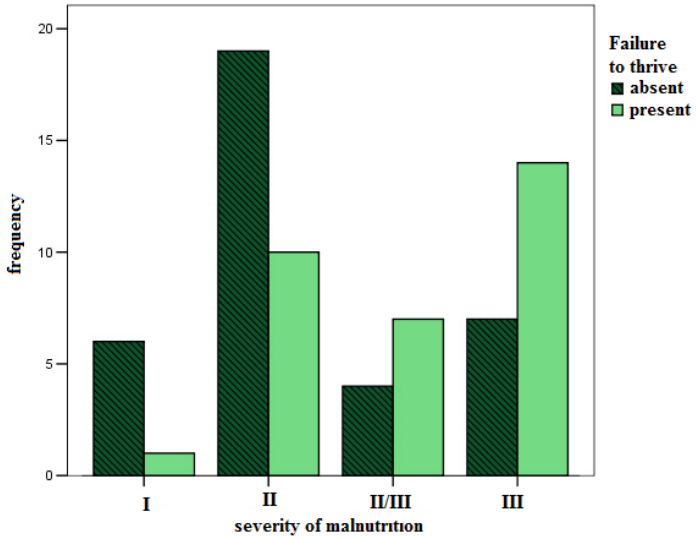

Figure 1. Frequency of non-organic FTT, depending on the severity of malnutrition

The presence of poverty, low cultural level, poor housing conditions were not significantly associated with the occurrence of non-organic FTT, as its incidence was similar in all types of social backgrounds found in our sample. The results show that the relationship between mother and child, independent of social class or family financial conditions, may have crucial role in the child development, the psychosocial stressors being present both in children with FTT and those resilient.

The mental health in the research group was significantly more problematic in children with non-organic FTT, as shown by their high scores for the mental health screening (V=.829, p<.001), meaning that failure to thrive is strongly associated with infant and toddler mental health (Figure 2).

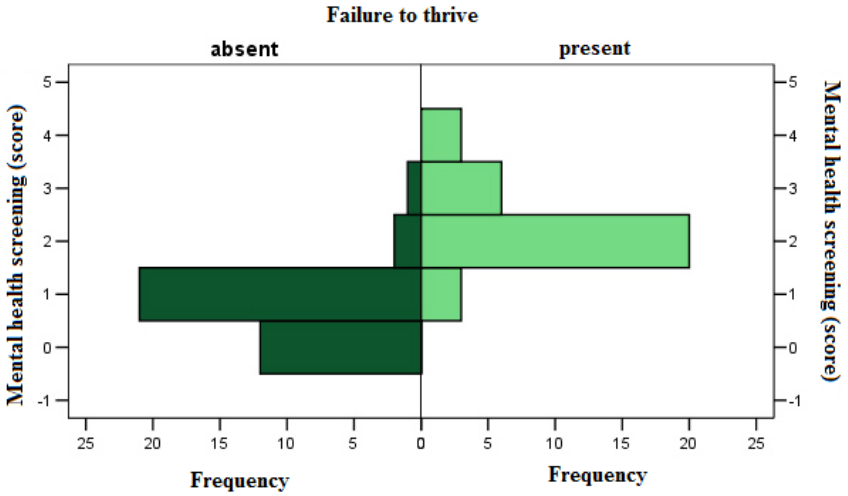

Figure 2. Distribution of scores for the mental health screening, depending on the presence or absence of non-organic FTT

The scores for the mental health screening tool were not associated with the participants' gender, with the severity of malnutrition, with the existence of a medical diagnosis associated to malnutrition, with factors related to the social environment: poor material conditions, existence of housing, but were associated with the cultural level of the family (V=.40, p<.05) and the child's environment of origin (V=.36, p<.05).

With regard to the existing *diagnostic classifications*, of the total group of participants 26.5% (14.7% resilient and 11.8% with FTT) manifested problematic features that could not be classified in any of the disorders listed in DSM-IV-TR, while 17.6% (all without FTT) showed no such behavioral and/or emotional problems. The remaining participants met the criteria for various disorders listed in the manual (disorders that were established either by the psychiatrist or by the collaboration between the author and the pediatrician treating the child): 25% (of which 2.9% resilient and 22.1% with FTT) for the Reactive attachment disorder of infancy or early childhood, inhibited type, 17.6% (of which 13.2% resilient and 4.4% with FTT) for the Reactive attachment disorder of infancy or early childhood, disinhibited type, 7.4% (all with FTT) for the Pervasive development disorder, autistic traits, 2.9% (all without FTT) for Rumination, 1.5% (without FTT) for the Stereotypic movement disorder, 1.5% (with FTT) for the Feeding disorder of infancy or early childhood.

As for the diagnosis on axis I from DC 0-3R, most of the participants met the criteria for the Deprivation/ maltreatment disorder (47.1%), of which type 1: pattern of emotional withdrawal, inhibition, a rate of 26.5%, type 2: non-discriminatory, disinhibited pattern, a rate

of 17.6% and type 3: mixed, a rate of 2.9%. Another clinical disorder well represented among the participants of this study was the Regulation disorder of sensory processing (23.5% of the participants), with two subtypes: hyposensitive/ underresponsive (14.7% of the participants) and hypersensitive, type A: fearful/ cautious (8.8%). A percentage of 7.4% of the participants presented Multisystem developmental disorder, a rate of 2.9% Disorder of affect, type Prolonged bereavement/ grief reaction and a rate of 1.5% Infantile anorexia. A total of 12 participants, representing 17.6% of the total number did not meet the criteria for any clinical disorder described in the diagnostic manual used. As our results show, the DC 0-3R is a useful tool for the assessment of infant and toddler mental health, as it operationalizes an important number of clinical disorders that are not described in DSM-IV-TR. An important aspect highlighted by our results is that while the child manifests behaviors classified as internalization, whether they are or not sporadically associated with behaviors classified as externalization, he/she seems more likely to be subjected to the acquisition of mental health disorders and non-organic FTT, as an effect of aversive/ atypical environmental factors, than the children who mainly manifest externalizing behaviors.

As for the relational disorders (quantified on axis II from DC 0-3R, as the PIR-GAS scores), most of the children included in the group (51.5%) obtained scores denoting a severe relational disorders (scores below 40), followed by the children for who difficulties in the relational areas were found (30.9%), difficulties that sometimes may consist of transient risk factors, and the children that had appropriate relationships with the primary caregivers before the hospitalization period (17.6%). The functioning of the relationship with the primary caregiver is significantly more impaired in the presence of non-organic FTT than under the condition of resilience ($U=201.5$, $p<.001$, Figure 3).

The participants' mental health screening was strongly associated with the nature of the child's relationship with the primary caregiver ($V=.766$, $p<.001$, positive high correlation), meaning that the higher the score to the screening tool, the more severe the perturbation in the relationships domain.

The regulation disorders of sensory processing may impede the functioning of the relationship between child and parent (Zero to Three, 2005). Another surprising aspect is that while the child benefits from an appropriate relationship with the primary caregiver in his family of origin, he/she does not meet the criteria of any impairment described in the DC 0-3R and the DSM-IV-TR, although he/she is subjected to several difficulties, starting with the

malnutrition and other associated somatic illnesses and continuing with several socio-cultural difficulties, that can ever become risk factors for the child's mental health.

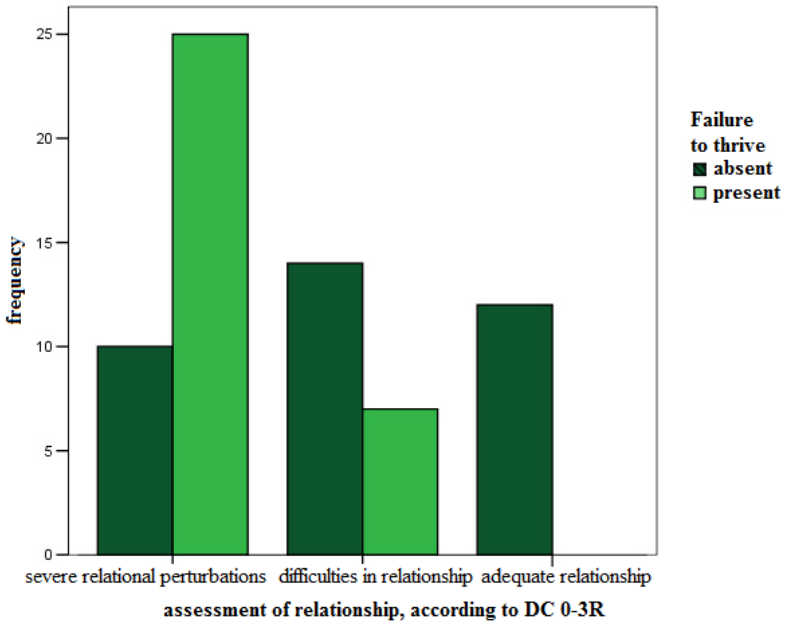

Figure 3. Functioning of the relationship with the primary caregiver, depending on the presence/ absence of FTTThe differences in the *emotional and social functioning*, depending on the severity of malnutrition, are statistically significant (H=16.58, p<.01). Figure 4 shows that the central tendency of the emotional and social functioning scores is increasingly high as the severity of malnutrition increases.

The children's emotional and social functioning was significantly different, depending on their results for the mental health screening (H=44.52, p<.001), as shown in Figure 5. As the score to the mental health screening increases, the central tendency of the emotional and social functioning is higher, denoting lower functioning.

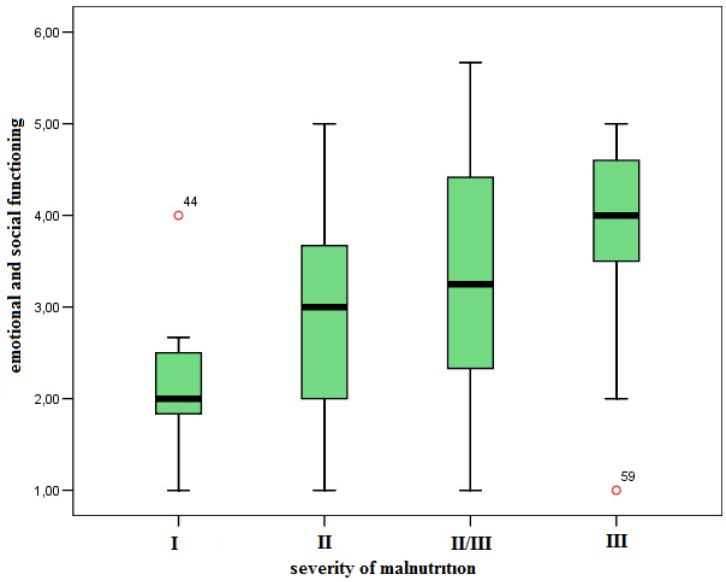

Figure 4. Distribution of the emotional and social functioning scores, depending on the severity of malnutrition

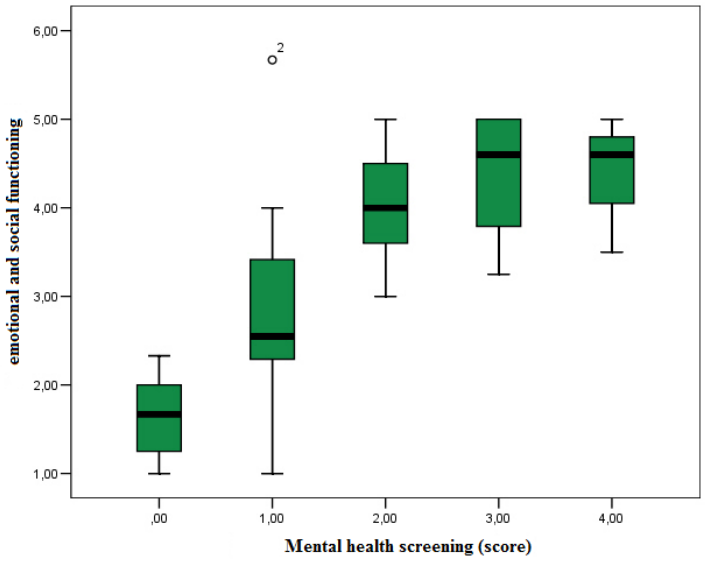

Figure 5. The emotional and social functioning, depending on the mental health screening

By using the multilinear hierarchical regression, we found that there is a direct relationship between the social and emotional functioning and the existence of non-organic FTT, showing that child's functioning is problematic in the presence of this non-organic condition. The relationship between the socio-emotional functioning and the relational functioning is reversed, meaning that as the relational functioning is more impaired, it causes the occurrence of more severe emotional disorders. As for the direction of the causality, the perturbations in the area of the relationship with the primary caregiver determine child's emotional problems and not vice versa. Another result with an important practical and

therapeutic relevance is that the occurrence of the non-organic FTT partly explains the existence of non-organic relational disorders (and to some extent the social and emotional difficulties).

The psychomotor development of children who developed FTT is more severely affected than that of resilient children, particularly the socio-emotional area, which proves to be an indicator for the possibility that a child with a nutritional disorder to become either resilient or, conversely, to acquire non-organic FTT even in the protective environment of the hospital. In light of the attachment theory, at an early age the infant develops in the context of the emotional communication with the primary caregiver and the perceived security of the attachment relationship supports the development of the child's motivation, desire to explore the environment and to learn from it. According to the self-determination theory (Ryan and Deci, 2004), relatedness is a basic need that, if fulfilled, stimulates the motivation and development, and if it is not fulfilled, the natural tendency for growth and development seems to be disturbed even in early childhood.

The association between the psychomotor delay and the functioning of the child – primary caregiver relationship was statistically highly significant in the case of all five developmental areas assessed; as the functioning of the relationship between child and caregiver is more impaired, the psychomotor delay is more severe. The results obtained are consistent with other studies mentioned in the literature (Zero to Three, 2005), according to which the adaptive flexibility and the developmental progress of both parent and child may remain unaffected in the case of difficulties in relationship between the two, the relationship difficulty does not necessarily generate symptoms, despite a certain level of discomfort and distress.

The severity of impairment in the social and emotional functioning (assessed globally, on axis V of DC 0-3R, depending on age) was positively moderately, statistically significant correlated with the psychomotor delay; as the social and emotional functioning is more deficient, the delay found within the five areas assessed tends to be more severe. The relational and emotional factors tend to have a more significant impact on development during early childhood, compared to the ecological factors, strictly related to the socio-cultural environment, such as the cultural and material level, the living conditions of the child's family of origin.

In *conclusion*, the malnourished children exposed to several psychosocial risk factors can be resilient in some circumstances, mainly related to the relational context, while the

acquisition of non-organic FTT is highly probable in children exposed to severely impaired environments, marked by the existence of extreme averse factors, such as domestic violence, abuse, severe trauma and neglect, child abandonment several months after birth, frequent hospitalization, for long periods of time without their families.

The socio-emotional, language and communication areas are most severely affected in children with non-organic FTT. Non-organic FTT is a disorder highly influenced by the relational environment of the child and these associations are very important to approach, in order to reduce the effects of the disorder on the child's physical and psychosocial development. Given that a number of clinical disorders are associated with social risks, as well as with relational and social-emotional disorders in children and even with non-organic FTT, it is important to consider the mental health assessment of infants and children at very early ages.

Block et al. (2007) consider hospitalized children with non-organic FTT as the the most complex and extreme cases with the condition, as in the case of less severe forms of the disorder children are treated in their family environment, when the family can be considered a partner during the intervention. This study was only focused on hospitalized children with FTT, so we recommend the inclusion of less severe cases in future research, as the identification of differences among the categories is important. Based on more detailed assessments and the use of larger groups of participants, the more accurate specification of the association between various factors that contribute to the acquisition of the disorder, as well as the particular mental health conditions that associate with it would be possible. We identify the small sample size as one of the main limitations of our first study.

Chapter 3 approaches the early relationship between child and mother and its association with the child's social development and several maternal characteristics (maternal separation anxiety, interpersonal guilt, mother's clinical symptoms).

The theoretical framework of the chapter includes the description of the child's attachment patterns and the adult's attachment styles, derived from the attachment theory applied on early childhood, as ways in which the person emotionally relates to close relationships with significant persons (attachment figures), as well as the latent dimensions (anxiety / avoidance) of the attachment in close relationships.

Another issue addressed in Chapter 3 is the role of early interactions between parent and child for the development of internal working models of self and others. Maternal sensitivity,

responsivity, availability, the mutual regulation of homeostatic states within the interaction and the child's role in the interaction (revealed by the use of the "still-face" procedure) are discussed extensively. Mother – child attachment relationship is influenced, besides the maternal attitude and characteristics, by the child's characteristics as an active participant in the interaction, as well as by characteristics of the caregiving environment, aspects addressed in the last part of the theoretical framework of the chapter.

Study 2.1. approaches the relationships between the child's attachment style, the mother – child interaction and the child's social development. The study implements a standard dyadic, multivariate, mixed design, in which nomothetic and ideographic data analysis were performed.

The ***sample*** selected for study 2.1. included 75 mother – child dyads, selected by stratified randomization and who participated on a voluntary basis, from different geographical areas and social backgrounds. Of the total number of dyads, 78% come from adequate social backgrounds (organized families, with a medium / high cultural level, appropriate living and material conditions) and 21.3% from inadequate backgrounds, at social risk (dysfunctional families, with poor material conditions, low cultural level). The author's meeting with the dyads took place in most of the cases at the nursery where the child is registered (61.33%), then in another environment, familiar to the dyad, usually the home of some friends of the child or mother (20%) and, respectively, at the dyad's domicile (in 18.67% of cases).

As for the type of childcare that the child is registered in, two types of state childcare institutions were included: regular nursery (68% of those enrolled in a nursery) and social nurseries (32%). Most of the dyads live in urban areas (88% of total) and a small part in rural areas (12%). The participant mothers' age ranged between 18 and 44 years, mean age being 30.24 years. Besides the child who participated in the study, 53.3% of mothers do not have another child, followed by those who have one other child (36% of total), those who have two more children (9.3%) and only one mother (representing 1.3% of total) with three more children.

The children who were part of the dyads along with the mothers are similarly distributed, based on gender: 52% boys and 48% girls. The children's ages range between 13 and 36 months, with a mean of 25.71 months.

The following ***general objectives*** were established for study 2.1.:

(1) To determine the influence of the characteristics related to the child, the mother, the child's caregiving environment and the socio-cultural background of mother and child on the child's social development;

(2) To establish the impact of the characteristics of the child, the mother, the caregiving environment, the socio-cultural background of the mother – child dyad on the interaction between mother and child;

(3) To analyze the associations between different dimensions of the parent - child interaction during a play activity;

(4) To determine the impact of individual and maternal factors, specific to the caregiving environment and the socio-cultural background of the child and mother on the child's attachment dimensions and style;

(5) To investigate the relationships, interdependencies and interactions between attachment, mother – child interaction and the child's social development. The *specific objectives* are detailed in the thesis content.

Among the *hypothesis* formulated, based on the literature in the domain and the practice, we mention: (a) the different dimensions of social development in early childhood, as assessed by the specialist and the mother, are significantly correlated; (2) the social development and its components are significantly different among female children and male ones, which are unique and those who have siblings (3) the social development of young children is significantly different, depending on the child's physical health and need for hospitalization due to poor health, (4) the social development in early childhood is significantly different in children born prematurely and those born at term, and depending on the time when the child was first held by the mother after birth, (5) the social development of infants and toddlers is significantly different, depending on the type of couple relationship of the mother, as well as on the fact that the father is present in everyday family life, (6) the social development of young children is significantly different, depending on the mother's cultural (education) level, mother's reintegration in work/ school, the environment of origin (adequate/ inadequate, urban/ rural) and the child's caregiving environment (entry to nursery, the type of nursery), (7) the intercorrelations between the behavioral/ attitudinal dimensions of the play interaction between mother and child are significant, (8) the correlations between maternal/ child age and the mother's attitudes / behaviors towards the child are statistically significant, (9) the mother – child interaction is significantly different statistically, depending on the child's gender, health status and the need for hospitalization of the child, the mother's

perception on the child's physical and psychomotor development, (10) the mother's behavior with the child during their interaction is significantly different if the mother had the child at the time she wanted, sooner or later than desired, if the birth occurred at term or prematurely, depending on the time interval elapsed until the mother first held the child in her arms after birth, and if the mother breastfed the child, (11) the mother's age and the way she relates to the child are significantly correlated, (12) the mothers who are involved in couple relationships with the child's father relate to the child in the play interaction significantly different from those involved in couple relationships with other partners or not involved in couple relationships, (13) the way that the mother interacts with the child is significantly different, depending on her education, her integration in work/ school (full time, part time or not at all), (14) the mother – child interaction is significantly different, depending on the mother's perception of her couple relationship, the existence of support for the mother in raising her child and its type, as well as depending on the caregiving environment of the child (the child's entry to nursery, the type of nursery) and the background characteristics (appropriate/ inappropriate), (15) the residual errors and the goodness of fit indexes of the bifactorial and multifactorial models of attachment in early childhood fall within the ranges that specify appropriate models, (16) the child's age and his/her observed/ latent attachment behaviors are significantly correlated statistically, (17) the child's attachment is significantly different, depending on the child's gender and the child's health, (18) the period when the mother got pregnant with the baby, the premature/ in time birth, the interval after birth when the child was first held by the mother in her arms, the way that the child was fed during the first period of life are factors that determine statistically significant differences in the children's attachment behavior/ style, (19) the type of attachment behaviors/ the child's attachment style are significantly different if the father is present or not in the family life, (20) the child's attachment is significantly different, depending on the existence of support for the mother in raising the child, the quality of the relationship between parents, child enrollment in childcare, the dyad's background (appropriate/ inappropriate), (21) the correlations between the child's attachment dimensions and mother - child interaction are statistically significant, (22) the children's attachment styles are significantly different, depending on the manner that the mothers interact with them, (23) the correlations between the child's attachment and his/her social development are significant, (24) the differences in the children's social development, depending on their attachment styles, are significant, (25) the correlations between the mother – child interaction and the child's social development are significant.

Some of the *questions* we formulated were: (1) What are the latent dimensions of the social development in early childhood? (2) What are the latent dimensions of the maternal attitude towards the child, within the mother – child interaction in a playful context? (3) What is the most appropriate structural model for the complex causal relationships between the mother – child interaction, the child's attachment and social development? (4) Is there a causal relationship between the mother – child interaction and the social development of the child and is the relationships a direct one or one mediated by the child's attachment? (5) What is the manner in which the dimensions of the mother – child interaction associate and interact with the dimensions of attachment and social development of children?

The *instruments* used in study 2.1. were:

1) the Assessment, Evaluation and Programming System, the social development scales (AEPS, Bricker, 1993), applied by the observer and the mother;

2) the assessment of the mother – child interaction (a play situation adapted to activate the child's attachment behaviors, without subjecting him/her to stress factors);

3) the assessment of child attachment (TAS-45, Andreassen and Fletcher, 2007).

Following the observation of the dyad during the play situation, were rated the child's social development (the tool permits a less detailed assessment), the mother – child interaction was assessed along six dimensions and the items of the attachment assessment tool were sorted (Q-sort procedure). Also, the mother received a self-administered questionnaire, in the pencil-paper form, which in Part I contained a number of items related to the child, to herself and to her relations with other family members, and the second part of the questionnaire included the assessment scales for the mother's characteristics. The establishment of the predominant attachment style was performed for each participant, based on the individual profiles obtained by the graphical representation of the eight behavioral dimensions of attachment, by comparing the theoretical profile of each attachment style with the profile of each participant (Andreassen, Fletcher, 2007). Based on the shortest Euclidean distance, the child's predominant profile was selected, taking also into account the low internal consistency of different scales (dimensions). Given the children's age, they do not bring the social desirability bias in the situation under observation, so a shorter period of time devoted to the observation (30-45 minutes) may be considered adequate.

The instruments showed acceptable internal consistency (AEPS, the instrument for the assessment of the interaction, TAS-45) and the factor structure was confirmed by confirmatory factor analysis (TAS-45). The correlations between the assessments

accomplished by the observer and the mothers for the child's social development show that for equivalent subscales the associations were strongly significant, the assessment of the observer and the assessment of the mothers were consistent, as confirmed by multidimensional scaling (the PROXSCAL procedure).

Regarding the factors the contribute to the children's social development, child gender contributed to the significant differences regarding the communication with other children ($U=522$, $p=.05$) and the overall social development ($U=516$, $p<.05$), female children are better developed in these areas than males. The length of the period when the child was breastfed was significantly negatively associated with interaction with peers ($\tau=-.23$, $p<.05$), as the child was breastfed for a longer period of time, his/her opening to the interaction with other children was lower. Statistically significant differences were found in the overall social development of children, depending on when the mother first held the child in her arms for the first time after birth ($H=7.97$, $p<.05$), the longer the interval between the child's birth and the moment when the mother first held him/her in her arms, the lower the child's social development.

Of the child's caregiving environment characteristics, the following had a significant influence on the child's social development: raising the child in urban/ rural areas, the children raised in urban areas were significantly better developed than those from rural areas in the domain of the interaction with familiar adults ($U=142.5$, $p<.05$), the communication with adults ($U=118$, $p<.01$), the interactions with peers ($U=174$, $p<.05$) and the overall social development ($U=116$, $p<.05$), while the type of background (disadvantaged/ adequate) was not relevant for the child's social development. With regards to the caregiving environment, the children who are enrolled in a nursery school demonstrated better levels of interaction with peers than children who do not attend a nursery school ($U=425.5$, $p<.05$), while for the interaction/ communication with adults, the recorded differences were not statistically significant. The differences are not significant depending on the type of nursery (regular/ social) in which the child was enrolled.

There were no statistically significant variations in the interaction between parent and child, according to the location of the author's meeting with the dyad, which certifies the accuracy of data collected. Regarding the association between different dimensions of the mother – child interaction, the more open the mother's attitude, marked by positive emotions and child stimulation, by focusing on its individual needs and interests, the more the range of negative affects, disengagement and intrusiveness is reduced. On the other hand, the more

intensive and frequent the negative affect, the less sensitive, more disengaged and more intrusive the mother is. The more sensitive and supportive the mother is with her child, offering him/her the chance to experience success and positive emotions during play, the less disengaged and the less characterized by flat affect she is.

By means of the factor analysis, we identified two latent dimensions of the mother – child interaction, that were named "involvement, positively affect" and "excessive control, negative affect". The first type of attitude towards the child detains a greater potential to stimulate his/her development, while the second rather inhibits the child's initiatives and his/her natural developmental trend. The two dimensions appear to be non-additive and opposite, the association between them is negative, weak, statistically significant ($r=-.23$, $p<.05$), the more positive the mother's attitude, the more involved and child-centered she is, the less controlling and less likely to manifest negative affect she tends to be.

Child's age was correlated negatively, significantly, with a low intensity with the "negative attention" ($\tau=-.19$, $p<.05$), and with the "excessive control" ($r=-.256$, $p<.05$), the correlations with the rest of the scales were not statistically significant. The older the child, the less the negative attention on his mother towards him and the weaker the maternal control over child tend to be. Mothers of female children tend to be more engaged with the activity with them, compared to mothers who have male children.

Regarding the factors related to pregnancy, childbirth and early child life analyzed in our study, they did not have an important contribution to the way that the mother interacts with her child, the only significant factor being "the moment when the mother first held the child, after birth".

Mothers who first held the child the day after birth tended to show less positive attention, sensitivity and engagement and to a larger extent disengagement (Figure 6) in interaction with their child.

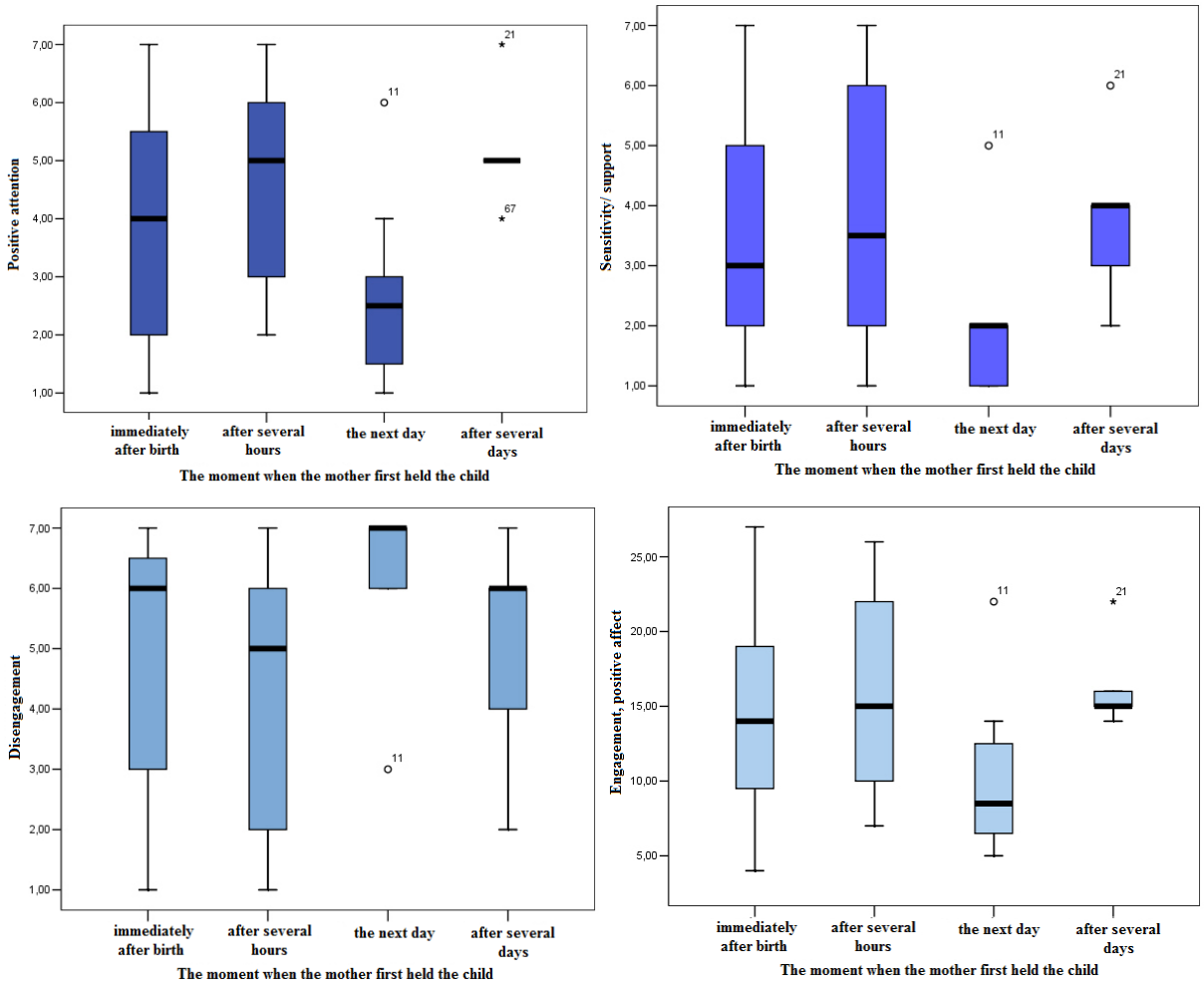

Figure 6. Significant differences in the mother – child interaction, depending on the moment the mother first held her child after birth

As for the maternal characteristics, maternal age was not significantly associated with the dimensions of the interaction, except the overall score of the latent dimension "excessive control, negative affect" ($r=-.26$, $p<.05$), the more advanced the maternal age, the less the level of control, marked by negative emotionality is. Mother's marital status (married/ divorced/ partnership) and the involvement of the father in the family life (the mother married or in a consensual relationship with the father/ the mother divorced or in relation with a person other than the child's father) did not contribute to the occurrence of significant differences in the mother's interaction with the child, for none of the dimensions observed.

As for the mother's education level, significant differences were found in the intrusiveness ($H=13.99$, $p<.01$) and the excessive control, marked by negative affects ($H=11.54$, $p<.05$). Mothers with an average level of education showed greater tendency to be

intrusive in interaction with their children and excessively controlling, as compared with mothers with college and postgraduate education.

Mothers that considered that they receive support for raising their child obtained lower scores for involvement and positive attention and higher scores for disengagement than those who affirmed they have no support for raising their child, especially large differences were found in the group of mothers that considered the nursery as main source of support. Mothers who identified the nursery as main source of support manifested the tendency to disengage to a larger extent, as compared to those who receive support from the children's grandparents, respectively to the least extent those that receive support from a baby-sitter. Mothers whose children are enrolled in social nurseries showed greater negative attention ($U=143.5$, $p<.01$) and excessive control ($U=137.5$, $p<.01$) than mothers whose children are enrolled in regular nurseries. Furthermore, mothers whose children are enrolled in regular nurseries showed greater positive attention to their children ($U=161.5$, $p<.05$).

The type of social background of the dyad (appropriate/ inappropriate) influenced the "positive attention" dimension of the mother - child interaction ($U=280.5$, $p<.05$), while the rest of the issues being analyzed were not significantly different between the two categories of children. The mothers that came from an inadequate background (disorganized family, low cultural, economic levels) showed to a lesser extent positive attention to their child, as compared with mothers who came from an appropriate background (in terms of the legal status of the family, the cultural and economic levels) and mothers from rural areas showed greater intrusion and control of the child's play than mothers from urban areas.

With respect to child attachment, using exploratory factor analysis, we identified the existence of two latent dimensions, which we named "the maintenance of proximity to the mother" and "the lack of trust in mother and other people".

The two latent dimensions are not opposite, although they are non-additive, reason why we represented them on two intersecting axes (Figure 7), similar to the model developed by Bartholomew and Horowitz for the adult attachment. Given the child's age, the central dimensions of attachment are directly related to mother, the trust in her availability/ responsivity and the wish to explore or maintain the proximity to mother, as primary caregiver and central attachment figure, as at this age the child has not yet fully formed internal working models of self and others, so we preferred not to name the two dimensions in terms of anxiety - avoidance, used for adults.

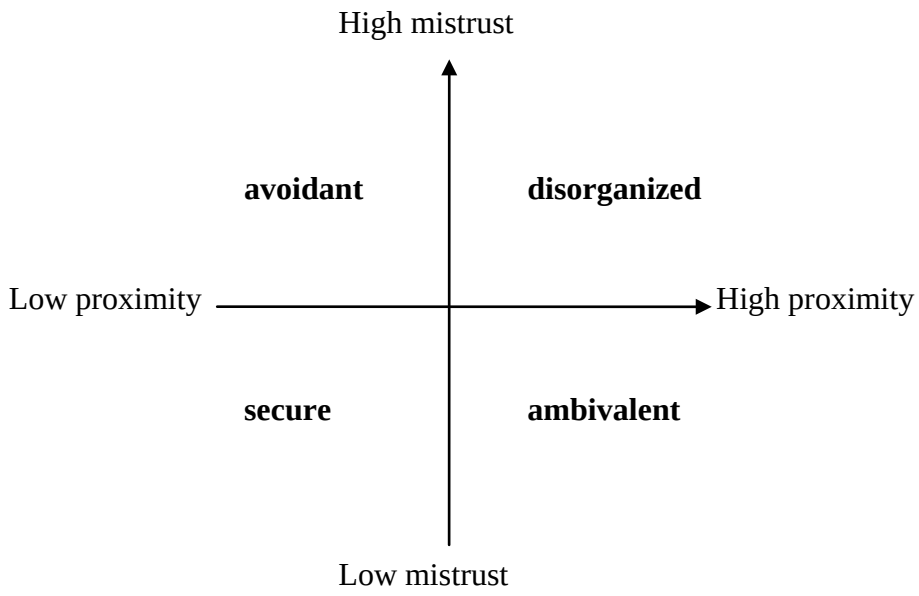

Figure 7. Representation of latent dimensions of attachment behaviors and the correspondent attachment styles

According to the quadrants resulted by the intersection of the axes, the secure style is characterized by trust in mother and others, the child is independent, sociable, without needing to excessively maintain proximity, but keeping the will and pleasure of being cuddled. The avoidant style is characterized by increased mistrust in mother and others, the child is independent, but not sociable, does not want to interact with the mother and other persons, prefers the objects and does not manifest the desire to approach the mother, avoids emotional intimacy with her. The ambivalent attachment style is characterized by low mistrust in mother and other people, but the child strongly needs the mother's proximity, is clingy and fearful, especially in her absence. The disorganized attachment style is characterized by increased need for proximity to mother, but coupled with mistrust in her and others, the child needs independence and seems autonomous, but also feels anxious when the mother leaves.

According to the two-dimensional model of attachment, the distribution of participants in the four quadrants is very close to the specifications of the model (Figure 8). Although, given that "pure" attachment styles do not exist, the existence of exceptions is reasonable, we believe that the proposed model requires further testing on other samples, as its theoretical and practical implications are very important. Our model partly confirms other models of child attachment, such as that proposed by Mary Ainsworth, including in addition the disorganized attachment style and being obtained by implementing a methodology profoundly different from the one used by the author cited.

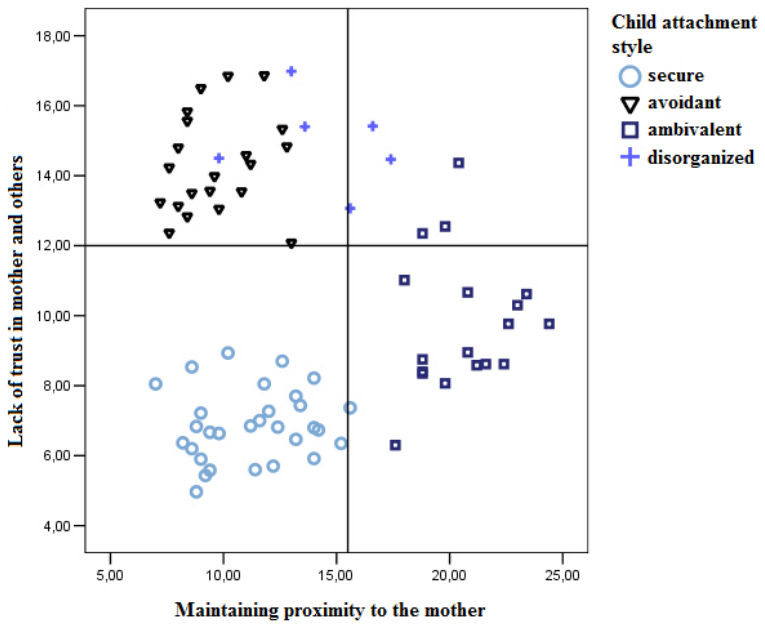

Figure 8. The participants' attachment styles distribution, based on the two latent dimensions of attachmentAmong the factors that impacted on attachment dimensions and main attachment styles, child gender contributed to obtaining significant differences in the dimensions "Cooperation", "Avoidance of others" and "Capricious, insecure, unusual". Compared with boys, the girls tended to be more cooperative with the mother in activity, to avoid to a lesser extent the company and interaction with others (the friendly adult, namely the author of the study), as well as to manifest to a lesser extent unusual, atypical behaviors, to demonstrate greater confidence in the mother and others. The frequencies of different attachment styles were significantly different depending on the child's gender (χ^2=13.26, p<.01), secure attachment was significantly more frequent in female children, compared with males, avoidant attachment less frequent in female children, ambivalent attachment slightly less frequent, whereas disorganized attachment was present only in male children.

The differences in attachment behavior, depending on the child's health were statistically significant. Children assessed as healthy by their mothers showed to a significantly higher extent warmth and comfort when cuddled than children with chronic illnesses, with low severity and those with mild illnesses (the latter to the smallest extent). Furthermore, healthy children were more cooperative with the mother than those with mild illnesses and children with chronic illnesses, with low severity (the latter to the smallest extent).

Of the characteristics and factors specific to the mother, her age was significantly associated with "attention seeking" (negative weak correlation, r=-.24, p<.05), "distress when

separated" (negative weak correlation, r=-.24, p<.05) and the latent dimension "maintaining proximity to the mother" (negative weak correlation, r=-.26, p<.05). The child's secure attachment style is mostly associated with a happy relationship between parents, while the couple relationships of mothers of children with disorganized attachment were mostly perceived as unhappy and somewhat happy (Figure 9).

The differences between the four attachment styles are statistically significant with regard to the positive attention (H=12.56, p<.01), the maternal sensitivity (H=28.24, p<.001), the disengagement (H=22.01, p<.001), the intrusiveness (H=16.30, p<.01), the latent dimensions "engagement, positive affects" (H=16.10, p<.001) and "excessive control, negative affect" (H=13.33, p <.001) and not significant in the case of "negative attention" (H=5.53, p>.05) and "flatness of affect" (H=.31, p>.05).

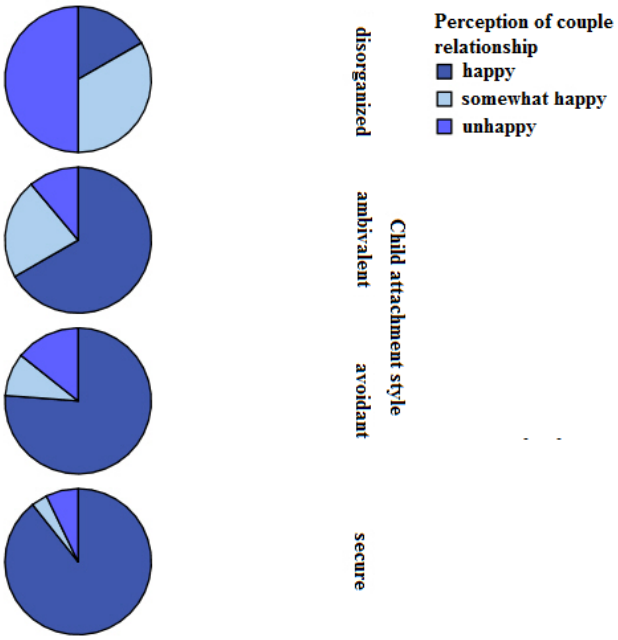

Figure 9. The child's attachment style, depending on the mother's perception on the quality of her couple relationship

The causal relations between parent – child interaction and child's attachment, as well as between the interaction with mother and child's social development and between the interaction with the mother and attachment behaviors are statistically significant. The attachment behaviors totally mediate the relationship between the mother – child interaction and the child's social development, the mistrust towards mother and others mediates the relationship between engagement, positive affect and the interaction with familiar adults.

The structural equation that models the complex interactions between the dimensions of maternal interaction with the child, the child's social development and the his/her attachment

behaviors (Figure 10) is fit for our sample, according to the goodness of fit indicators and the residual errors.

Of the endogenous variables, the highest explained by the exogenous variables included in the model is "the lack of trust in the parent and others" (a proportion of 29% of its variance, which is a very good rate), followed by the "interaction with adults", a rate of 19% and the "maintenance of proximity to the mother" a rate of 18%. Therefore, the way that the mother interacts with her child greatly affects his/her behavior and attachment, as well as, it appears, the way that the child relates to the adult, but to a lesser extent the interaction with peers. We believe that an interesting direction for future research would be to determine the relational and emotional factors that impact the children's interaction with peers. It would also be interesting to investigate whether the model is somehow different for children with different attachment styles (in this study, the number of participants is too low for this investigation).

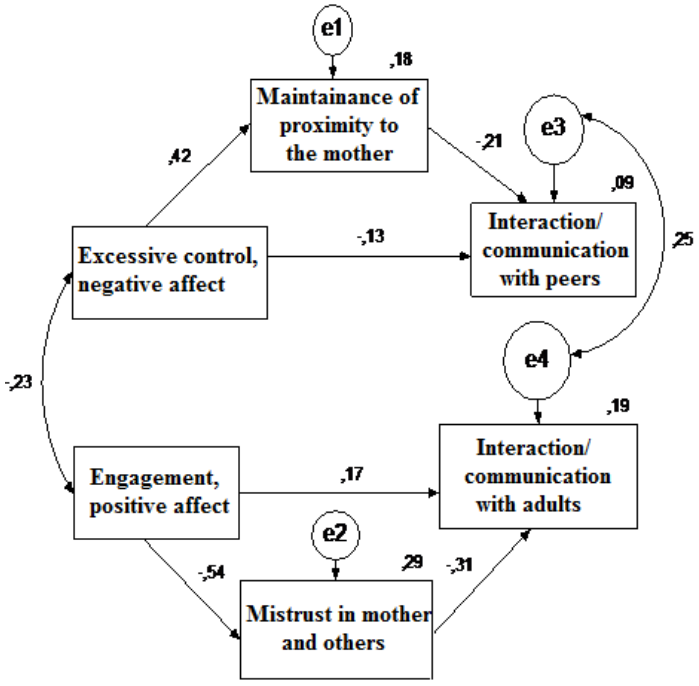

Figure 10. The structural model regarding the influence of the interaction between mother and child on the child's attachment and social development

The child's opening to the environment (towards interaction, communication with others, either adults, or peers) is influenced, in addition to attachment and the way that the mother relates to the child, by other factors, that appear to be significantly interrelated. Temperamental characteristics, factors related to child mental health, as well as environmental factors may be at the origin of these abilities or they may influence them. This study was focused only on the interaction with the mother and the child's attachment and the approach

of other variables involved remains an important future research direction. Also, by involving a larger number of participants, future studies may lead to conclusions with greater generality than those we have extracted from the data obtained in the present study. The main limit of the current study is the absence of a second observer to assess the child's social development, child attachment and the interaction of the dyad.

The ***general objectives*** of ***study 2.2.*** were: (1) To test the factor structure of the scales that operationalize the maternal separation anxiety and the vulnerability of adult attachment; (2) To investigate the associations between adult attachment and maternal separation anxiety, interpersonal guilt and clinical symptomatology of the mothers; (3) To analyze the influence of maternal, child and background of the dyad characteristics on maternal separation anxiety, maternal attachment and maternal affect; (4) To examine the complex associations between maternal attachment, maternal characteristics (separation anxiety, guilt, affect intensity, clinical symptoms), child attachment, mother - child interaction and the child's social development. The *specific objectives* are detailed in the thesis.

Some of the hypothesis tested in the study are:

(1) the goodness of fit indices of the factorial models for the maternal separation anxiety and attachment vulnerability scales match the critical values necessary for a suitable model;

(2) the maternal attachment style (secure/ preoccupied/ dismissing/ fearful) is significantly correlated with the severity of maternal separation anxiety, the level of attachment vulnerability, the intensity of positive/ negative affect of the mother;

(3) the maternal attachment style has a significant causal effect on the maternal separation anxiety, attachment vulnerability and intensity of positive/ negative affect of the mother;

(4) the intercorrelations between the maternal separation anxiety, vulnerability of adult attachment and intensity of positive/ negative affects are statistically significant;

(5) the increased attachment vulnerability causes the increase of maternal separation anxiety;

(6) the intercorrelations between the interpersonal guilt, the maternal separation anxiety and the attachment vulnerability are statistically significant;

(7) the attachment vulnerability mediates the causal relationship between interpersonal guilt and maternal separation anxiety;

(8) the maternal separation anxiety and attachment vulnerability are significantly associated with clinical symptoms (somatization, obsessive-compulsivity, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism);

(9) the maternal age is significantly correlated with separation anxiety;

(10) the maternal separation anxiety/ maternal attachment vulnerability are significantly different, depending on mother's level of education and her involvement in a couple relationship;

(11) the child's age and the age until the child was breastfed are significantly associated with maternal separation anxiety;

(12) the maternal separation anxiety/ maternal attachment vulnerability are significantly different, according to: (a) the child's gender, (b) the number of children, (c) mother's perception of the child's level of development, (d) the child's health and his/her need for hospitalization throughout life, (e) the term of birth (at term/ prematurely), (f) the moment when the mother first held the child after birth, (g) the existence of support for the mother in raising her child, (h) the child's enrollment to nursery, (i) the type of background (adequate/ inadequate, urban/ rural), (j) the death of the mother's parents, (k) the mother's central figure of attachment, (l) the stability of mother's parents couple (together/ separated), (m) the mother's perception on the quality of the relationship between her own parents, (n) mother's order among siblings;

(13) the maternal attachment styles are significantly different, depending on the mother's education level, type of background (inappropriate/ appropriate), mother's involvement in a couple relationship, mother's perception on the quality of the couple relationship in which she is involved, perceived quality of the relationship between parents, the mother's central figure of attachment, the death of mother's parents;

(14) the dimensions of child's social development are significantly correlated with the following maternal characteristics: (a) the maternal attachment, (b) the maternal separation anxiety, (c) the vulnerability of mother's attachment, (d) the intensity of positive/ negative affect, (e) the interpersonal guilt of the mother, (f) the severity of clinical symptoms (symptoms of somatization, obsessive-compulsivity, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism);

(15) the correlations between the characteristics of the interaction between mother and child and maternal attachment in close relationships, attachment vulnerability, intensity of positive/ negative affect, clinical symptoms of the mother are statistically significant;

(16) the correlations between child's attachment behavior/ attachment style and the following maternal characteristics: (a) mother's attachment in close relationships, (b) maternal separation anxiety, (c) maternal attachment vulnerability (d) intensity of maternal positive/ negative affect, (e) maternal interpersonal guilt, (f) mother's clinical symptoms are statistically significant;

(17) the association between mother's and child's attachment styles are statistically significant.

Some of the *questions* formulated for the study were: (1) What are the maternal characteristics that influence the child's social development, either stimulating or inhibiting it? (2) Which of the maternal characteristics have a causal effect on the way that the mother interacts with the child? (3) Which of the maternal characteristics have causal effects on the child's attachment behaviors? (4) How are the complex causal relationships between the child's attachment, maternal attachment, maternal characteristics, the child's social development and the mother – child interaction organized?

The *participants* in the study 2.2. were the mothers and children that participated in study 2.1. The assessment *tools* for the maternal characteristics were:

(1) Maternal Separation Anxiety Scale (MSAS, Hock, McBride and Gnezda, 1989);

(2) Positive and negative affect schedule (PANAS, Watson, Clark and Tellegen, 1988);

(3) Adult attachment questionnaire (AAQ, Hazan and Shaver, 1990);

(4) Relational styles questionnaire (RSQ, Griffin and Bartholomew, 1994);

(5) Vulnerable Attachment Style Questionnaire (VASQ, Bifulco et al., 2003);

(6) Brief symptom inventory, short version (BSI, Derogatis, 1975);

(7) Interpersonal Guilt Questionnaire (IGQ-67, O'Connor et al., 1997).

The confirmatory factor analysis revealed that MSAS model does not deviate severely from the theoretical goodness of fit index, while for VASQ model is inadequate, given also that the internal consistency of the MSAS was good and the VASQ very weak, particularly for the "Proximity seeking" subscale. Therefore, we determined the subscale latent dimensions, using the exploratory factor analysis, that led to a trifactorial solution: (1) "concern over separation", consisting of items 6, 11, 16 (α=.65), (2) "lack of autonomy in decision making", consisting of items 2, 7 and 15 (α=.72) and (3) "need for company", which

is composed of only two items and was not considered appropriate. The confirmatory factor analysis of the new scales, both residual errors and the goodness of fit indices argued for a very good model, all indices having optimum values.

The secure attachment style was not significantly associated with any of the maternal variables included in the present analysis. Preoccupied attachment style was significantly associated with the "perception of the effect of separation on the child" (negative weak correlation, $r=-.26$, $p<.05$), namely, as the preoccupied attachment style is more characteristic to the mother, the less she perceives the effects of separation on children as negative. The dismissing attachment pattern was not significantly associated with maternal separation anxiety, attachment vulnerability or positive/ negative affect. The fearful attachment style was significantly associated with attachment vulnerability, namely the insecurity (positive strong correlation, $r=.51$, $p<.001$), "fear of loss", concern for close persons when they are away (positive weak correlation, $r=.27$, $p<.05$) and the general attachment vulnerability (positive medium correlation, $r=.48$, $p<.001$), negative affect (positive medium correlation, $r=.31$, $p<.05$). Thus, the fearful attachment style is associated with a number of problems of the mother, without necessarily impacting the child, but rather related to her own self and the relationships with other adults, the insecurity in close relationships, negative affect, vulnerability.

The causal relationship between the fearful attachment style and the attachment insecurity/ vulnerability is strong, statistically significant, the fearful attachment style causes the insecurity/ vulnerability in relations with others, as well as fear of the possibility of losing the loved ones, manifested when they are not close to the person.

The association between the maternal separation anxiety and its subconstructs and the attachment vulnerability is significant, as the maternal separation anxiety is higher, the mother seems to manifest stronger dependency in decision making, to be more preoccupied with thoughts about losing significant persons, about separating from them, to manifest higher vulnerability in close relationships with others; the more the mother perceives the separation from her child as disadvantageous in terms of childcare, comfort and learning, the more she tends to manifest, generally, more intense negative affects (the relationships are, obviously, bidirectional), and as the mother presents greater attachment vulnerability, she tends to be more anxious when she needs to separate from the child because of employment.

By using the simple linear regression, we argued that the overall vulnerability of the mother's attachment generates overall maternal separation anxiety (concerns over self, child,

employment) and maternal anxiety about child care conditions when she is not nearby, but not the maternal separation anxiety, reported to herself (missing the child when he/she is not nearby, perception of increased maternal efficiency to childcare, compared with the staff from an institution etc.). Attachment vulnerability (fear of loss/ separation and lack of autonomy) underlies a part of the maternal separation anxiety, in general, and the mother's concern for the child when she is away at work.

Attachment vulnerability, namely the insecurity, was significantly associated with the intensity of positive and negative affect, the greater the attachment insecurity manifested by the mother, the more and stronger she tends to feel the negative affect and the less the positive affect.

Significant differences in the constructs analyzed, depending on the attachment style in romantic relationships (AAQ, Hazan and Shaver, 1990) were found for the negative affect ($H=10.34$, $p<.01$), positive affect ($H=19.87$, $p<.001$), namely the participants with secure attachment style reported significantly more intense positive affects than those with avoidant attachment and those with ambivalent attachment, while the latter reported significantly greater negative affects, compared with those with avoidant attachment and, in particular, those with secure attachment.

The assessment instruments for adult attachment in romantic relationships (AAQ) and close relations, in general (RSQ) are significantly associated, which is particularly evident for the secure and fearful attachment, as they are operationalized in RSQ. People with secure attachment style in romantic relationships present lower attachment vulnerability, both related to the insecurity and overall (Figure 11). Of the three styles described in AAQ, the most vulnerable style seems to be the ambivalent (anxious) one, compared even with avoidant style and, especially, the secure style.

The interpersonal guilt was significantly, with low intensity, associated with the maternal separation anxiety. The higher the level of separation guilt of the participating mother (referring to her individuation process, the autonomy that she can assume in dealing with close persons), the guilt related to the thought that her well being might cause harm to persons around, as well as the interpersonal guilt, in general, the more she feels separation anxiety from her child (relationship, obviously, bidirectional). In this context, the role of the interpersonal guilt as an important factor of maintenance of close relationships, in this case with the child, is confirmed.

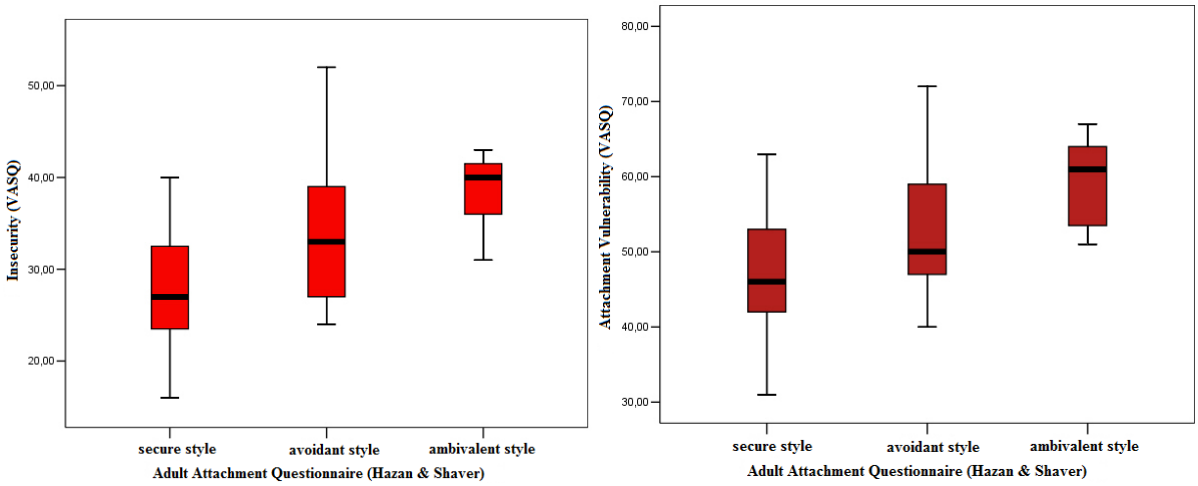

Figure 11. Differences in the attachment vulnerability, depending on the three attachment styles in romantic relationships

The relationship between maternal separation anxiety and separation guilt is totally mediated by the lack of autonomy in decision making (Figure 12), maternal separation anxiety causes the lack of autonomy, while the latter generates separation guilt, with a role to maintain the close relationships.

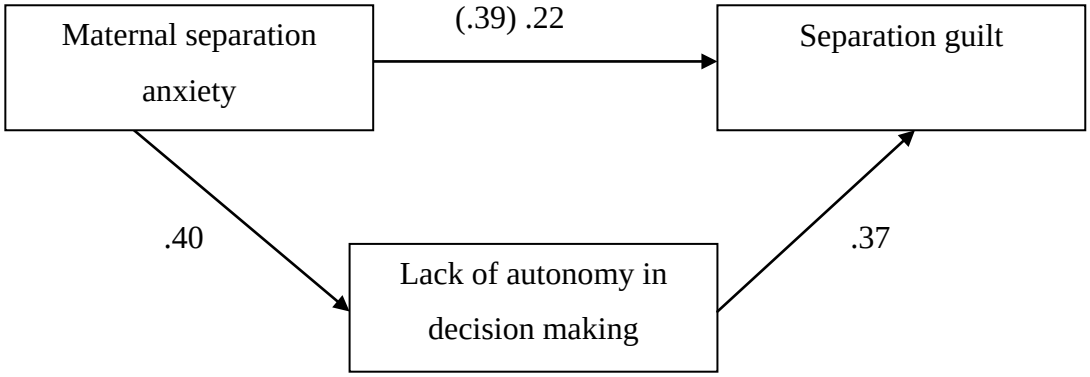

Figure 12. The mediation relationship model of the separation guilt and maternal separation anxiety

Similarly, the relationship between the maternal separation anxiety and survivor guilt is mediated by the lack of autonomy, maternal separation anxiety causes the mother's lack of autonomy, and the latter generates survivor guilt, a form of guilt that determines the reestablishment of proximity to the child as soon as possible. Both the maternal separation anxiety and the attachment vulnerability were significantly, positively, associated with a range of clinical symptoms: somatization, obsessive-compulsivity, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation and psychoticism (the relationship is bidirectional).

Maternal age was significantly associated with maternal separation anxiety (negative weak correlation, r=-.26, p<.05), the more advanced the maternal age, the lower the separation anxiety tends to be.

Depending on the level of education, mothers have obtained mean scores significantly different for different elements of the maternal separation anxiety (Figure 13).

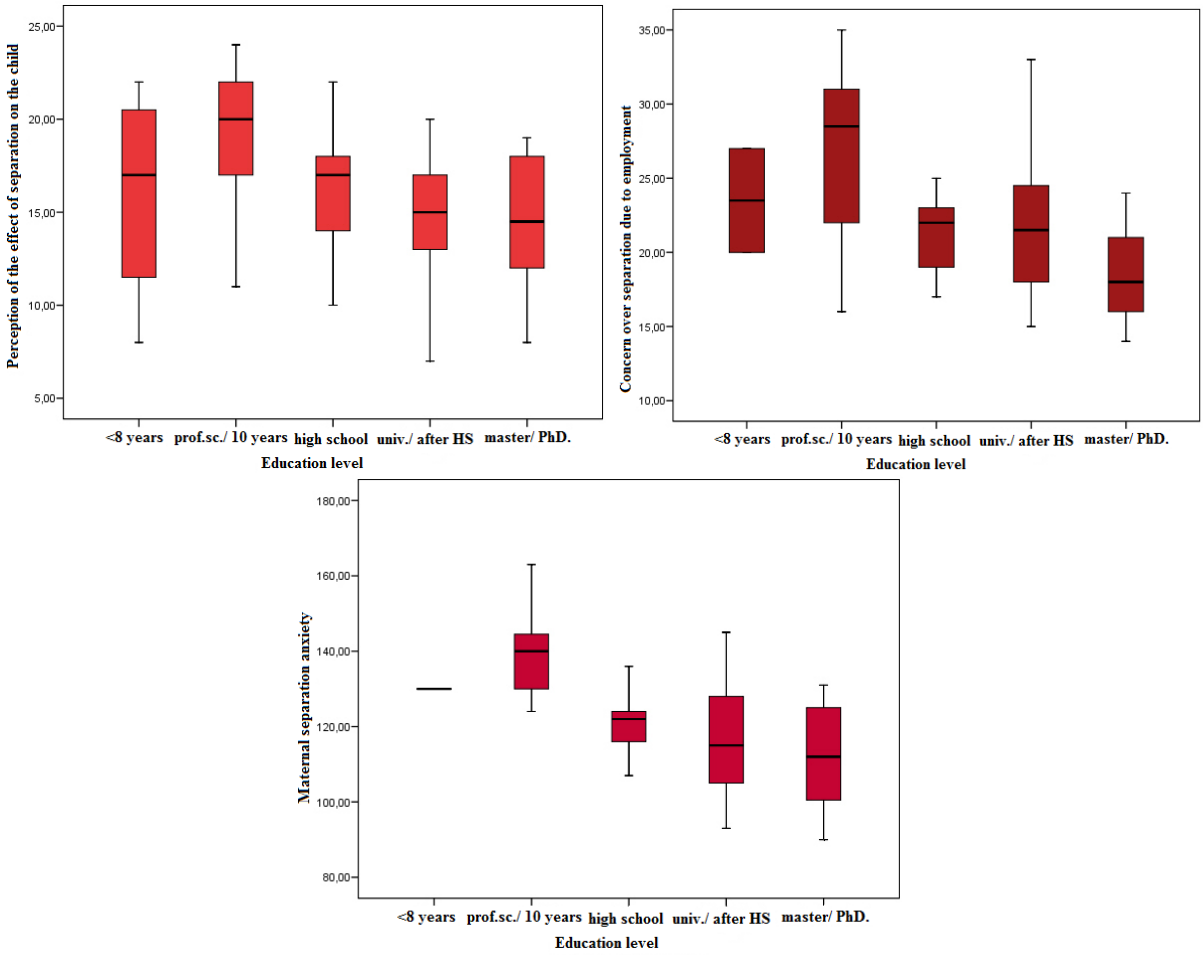

Figure 13. Differences in the maternal separation anxiety, depending on the education level

Similarly, the attachment insecurity and vulnerability seem to be diminishing as the mother's education level is higher. Of the features/ factors related to child, the age by which the child was breastfed was significantly associated with the concern over the separation due to employment, the longer the mother breastfed the child, the higher the concern over separation from child appears to be. Mothers whose children suffer from mild illnesses showed the utmost concern over separation from them, followed by mothers whose children suffer from chronic illnesses, of reduced severity and mothers whose children are healthy. Mothers who gave birth to the child prematurely tended to rate their fear of loss of the loved ones significantly higher, compared with mothers who gave birth to the child at term. Mothers

who first held their child a few hours after birth showed the lowest level of maternal separation anxiety, while mothers who first held their child several days after birth showed the highest level of anxiety.

Mothers that appreciated that they benefit from support for raising their child, irrespective of the type, rated a greater lack of autonomy in decision making ($t=2.18$, $p<.05$) than those who reported the lack of support. Moreover, mothers who reported that they do not have any support obtained significantly higher scores for the subscale "concern over the separation due to employment" ($U=236.5$, $p<.05$), compared with mothers who reported the existence of support for raising their child. The results show that the mother's support network for raising their child can contribute to the decrease of maternal separation anxiety, particularly the type that consists of concerns related to the need to separate in order to reintegrate in work. On the other hand, the existence of support for the mother is associated with the lack of autonomy in decision making, compared to mothers who need to care for their child by themselves.

Mothers who come from inadequate backgrounds presented a higher attachment vulnerability, compared with those coming from appropriate backgrounds ($t=-2.03$, $p<.05$). Also, mothers who came from inappropriate backgrounds presented an increased attachment insecurity, compared with those that came from appropriate backgrounds, in terms of social, material cultural levels ($t=-2.50$, $p<.05$).

Among the factors related to the family of origin, the participants whose mothers are deceased presented an average higher attachment insecurity, compared with those whose mothers are alive ($t=2.38$, $p<.05$). Compared with participants who identified the mother as the most significant person throughout their development (central attachment figure), participants who identified the father as the central figure of attachment presented a significantly higher maternal separation anxiety ($U=191$, $p=.05$), as well as significantly higher fear of loss, concern for loved ones when they are away, as a form of attachment vulnerability ($U=218$, $p<.01$). Participating mothers, whose parents are together/ married presented an average lower concern over separation due to work reintegration, compared with mothers whose parents are not together ($U=239.5$, $p<.05$).

In terms of the perceived quality of the relationship between parents, the higher the perceived quality of the relationship between parents, the less the mothers tended to present insecurity and general attachment vulnerability.

The association between mother's attachment style (AAQ) and relevant demographic variables was significant for the mother's background, most mothers who came from adequate backgrounds showed secure attachment, while the majority of those coming from inadequate backgrounds presented avoidant attachment (figure 14).

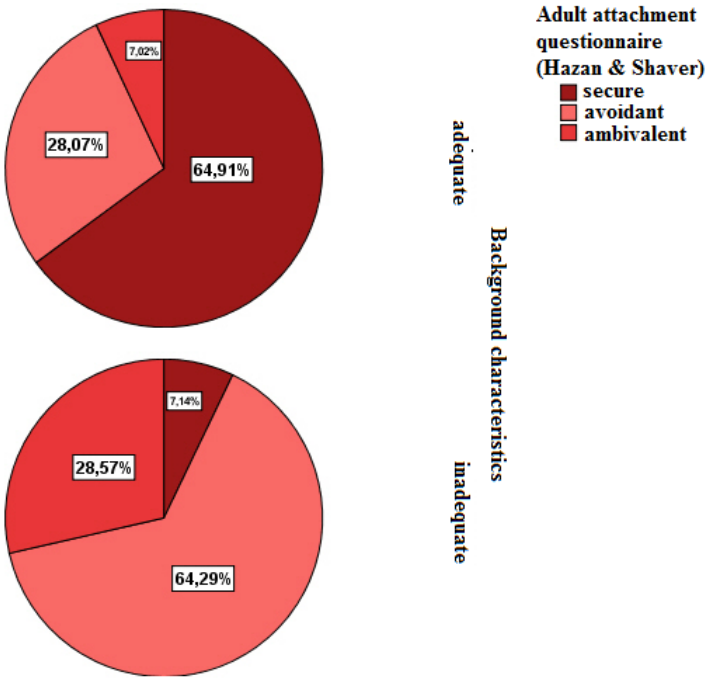

Figure 14. Attachment styles distribution, depending on the mother's background

The assessed quality of the couple relationship was significantly associated with mother's attachment style, mothers who rated their couple relationship as happy, presented mostly secure attachment, compared with mothers who rated their relationship as somewhat happy and unhappy, the latter presenting in a greater number than those with happy relationships avoidant attachment style and only a very limited number ambivalent attachment, compared with the rest of the mothers.

Mother's perception on the quality of the relationship between her parents was significantly associated with the attachment style, mothers who perceived the parents' relationship as very deficient presented mostly avoidant attachment in romantic relationships, in contrast with those who appreciated the couple relationship couple of their parents as very good and good, who presented mostly secure attachment.

Based on the associations and causal relationships between maternal constructs, social development of children, child attachment and mother – child interaction, we built a series of complex models that explain to a greater or lesser extent the variance of the researched constructs. Some of these are briefly illustrated below.

Figure 15 represents the way that the maternal attachment insecurity and vulnerability cause the intensity of maternal negative affect, which, in turn, determine the excessively controlling maternal attitude towards the child during the play interaction. The goodness of fit of the model is very good, according to the values of the residual error RMSEA and the goodness of fit and comparison indices GFI, CFI.

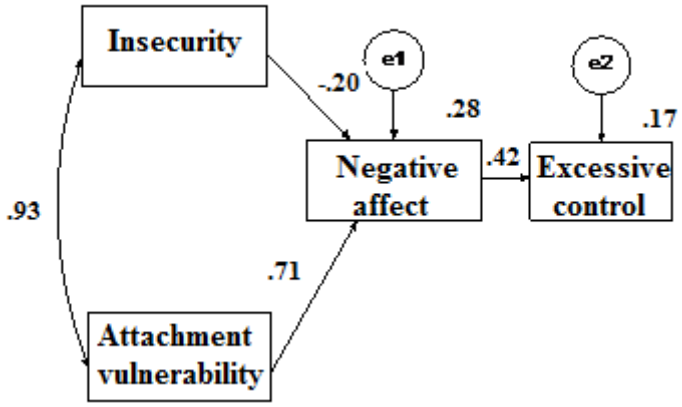

Figure 15. Causal relations between the maternal attachment vulnerability, negative affect and excessive maternal control

The complex causal model of mother and child characteristics assumes that somatization, as an exogenous variable, causes separation anxiety and negatively influences the child's interaction with the familiar adult. The maternal attachment vulnerability has an increasing effect on the maternal separation anxiety, the mother's tendency towards somatization having a decreasing effect on the child's desire to interact/ communicate with familiar adults (most probably, including the mother), which, in turn, increases the mother's separation guilt, the somatization also having a direct effect on the increase of guilt level.

Other path models were built, in order to partially explain the causal relations between maternal characteristics, child's characteristics and mother – child interaction, extensively presented in the thesis content. The results of the present study confirm the role of maternal attachment and intrapersonal functioning on the manner she interacts with her child, on the child's social development and attachment. The study is rich in novel information and ideas for the field and as a main limit we identify the manner in which some variables were operationalized.

Study 2.3. investigates the manner in which emotional proximity within the family, as perceived by mothers, modifies after the birth of a child, as well as the impact of maternal and

child attachment on these proximities. The study represents a connection between the analysis of the mother – child relation and the analysis, in the study 3, of individual and family variables that influence adult attachment. As shown by Mikulincer and Shaver (2007), when a child appears in the family, the couple transforms into a family system, family relations diversify, sometimes the relationships with the extended family are strengthened. According to literature, family functioning dimensions affected when one parent has an insecure attachment style are cohesion and adaptability, particularly in situations where major marital conflicts are revealed.

Some of the ***questions*** that the study aims to explore were: (1) What are the differences between the four children attachment styles from the point of view of the emotional distance perceived by mothers between the nuclear family and the family of origin?, (2) What are the differences between the three maternal attachment styles from the point of view of the perceived emotional distance between the nuclear family and the family of origin?

The ***sample*** consisted of mothers participating in the studies 2.1. and 2.2. In order to investigate the perceived proximity between various members of the nuclear family and the family of origin, we designed an ***instrument*** that required the rating of relationships between family members, from the point of view of the emotional closeness, regardless of the physical distance between them, on a Likert scale with seven levels.

In order to analyze the emotional distances between different members of the family of origin and nuclear family, as they were perceived by the mother before and after the baby was born, we calculated the means for each pair for the two moments of family life. Although several changes were noted, in order for the distances to be compared and analyzed, we needed their modeling through multidimensional scaling, for easier viewing. Multidimensional analysis model used was the metric, synthetic model for the overall analysis of perceived proximities and the analytical model, in order to determine the differences between groups in the sample, depending on the child's and mother's attachment style. The models are fully presented in the thesis.

Before the birth of the child, the clusters specific to the nuclear family and the two families of origin of the husband/ partner and wife/ partner were defined in the whole sample, while after the birth of the child several changes were noted: the center of the common space was occupied by the child, the family of origin got closer to the nuclear family, especially the maternal grandmother of the child and the distance between the couple members grew. If the child is the first born of the family, the parental couple occupies even before his/her birth the

central place in the common space, which emphasizes that the process of individuation from the family of origin is not completed, each partner being close to own family of origin. After the birth of the child, the proximity of the family of origin is obvious, the birth of the child does not facilitate the process of differentiation. The child takes the central place in the family center, the husband distances himself from his wife, the distance between the couple members becomes greater than the distance between the wife and her parents.

Typically, the birth of the child is associated with the distancing of the parental couple, except for the case of the families with an ambivalently attached child and the families in which the mother has avoidant attachment style. Also, after the birth of the child, the distance between the participating mother and her mother decreases, except for the case of the families with an ambivalently attached child and a child with disorganized attachment, as well as the mothers with an ambivalent attachment style. The distance between the husband and his mother increases after the birth of the child in the case of children with ambivalent attachment, those with disorganized attachment, the mothers with ambivalent attachment and decreases in the case of families in which the child is the first born, the case of children with secure and avoidant attachment, the mother with secure attachment and mothers with avoidant attachment. The distance between the participant mother and her father is usually high, except for the case of mothers with one child and those with ambivalent attachment. In all cases, the distance perceived by the mother from her child is lower than the distance from her partner.

Families of children with *secure* attachment style were characterized by the central position of the young couple in the center of the common space, but the distance between the members was perceived by the mother as less than the distance from the families of origin of each of them, and after the birth of the child the closeness of both partners' mothers to the nuclear family, still located in the center of the common space.

Families of children with *avoidant* attachment style were characterized by very large distances between members before the birth of the child, smaller relative distances from both partners' mothers and after the birth of the child the closeness of the two grandmothers and the distancing of the child's parental couple.

Families of children with *ambivalent* attachment style were characterized by a small distance between the wife and her mother, while her husband was perceived at a relatively equal distance from the two parents, the distance between husband and wife similar to the distance between the wife and her mother and after the birth of the child the diminishing of

the distance between wife and her mother, as well as the one perceived between the couple members.

Families of children with *disorganized* attachment style were characterized by very large distances between members, each partner of the couple was closer to the family of origin of the other than to their own families of origin, closeness that grew after the birth of the child.

Families in which the mother presented *secure* attachment were characterized by greater distance from the family of origin, compared to the distance from the nuclear family, the ones in which the mother presented *avoidant* attachment by greater distance from the husband, compared to the distance to own mother and after the birth of the child the closeness of the family members, particularly maternal and paternal grandmothers, while the ones with a mother that presented *ambivalent* attachment by very large distances and after childbirth more obvious closeness of the participant to her father, he being at a smaller distance than the husband and the child at a very great distance from all family members, except his mother and the maternal grandfather.

Thus, by using a relatively simple method we could obtain some information on the possible impact of the mother's and child's attachment style on the family system, but also of the family system on maternal and child attachment, that can constitute the basis for several hypothesis for future research. The first issue, particularly, will be widely addressed in the study that approaches the adult attachment, in association with certain family variables.

Chapter 4 approaches attachment in adulthood, in relation to intra- and interpersonal factors and familial factors. Specialized studies show that the attachment style, internal working models of self and others, formed in the context of early attachment relationships, have significant influence on individual functioning: (a) intrapersonal level: self-esteem as a mental representation of self and social barometer, that assess the degree of acceptance or rejection of the individual by others, emotional self-regulation, well-being, acquired by the fulfillment of the basic needs, including relatedness, mental health, and (b) interpersonal level: loneliness, particularly emotional loneliness and interpersonal problems. Family of origin functioning, parental attitudes, relational patterns, family experiences and atmosphere have an impact on adult attachment style, namely the attachment security.

Attachment relationships, appropriate relations and the sense of belonging, the existence of stable, satisfactory relations represent, according to various studies, resilience factors throughout life.

Study 3.1. deals with the with complex relationships between adult attachment and different components/ dimensions of the intra- and interpersonal functioning, an approach guided by the following ***general objectives***: (1) to validate the instruments used, by testing the goodness of fit of the factorial structure, (2) to analyze the impact of individual characteristics on various dimensions of the intrapersonal (self esteem, positive/ negative affect, clinical symptoms, interpersonal guilt, alexithymia, emotional intelligence, eudaimonic well being, empathy) and interpersonal functioning (social and emotional loneliness, interpersonal problems) in adulthood, (3) to analyze the impact of the attachment style on selected dimensions of intra- and interpersonal functioning, (4) to analyze the complex causal relationships and interactions between dimensions of individual intra- and interpersonal functioning.

The specific objectives are presented in the thesis and some of the ***hypothesis*** formulated, based on the literature and clinical practice are: (1) the goodness of fit indices and residual error for the factor models of the assessment scales fall within acceptable limits for adequate models, (2) according to the literature, the model developed by Simpson for adult attachment is most appropriate, compared with the rest of the models for the attachment in adulthood, (3) the associations between the person's chronological age and the intra- and interpersonal functioning are statistically significant, (4) the intra- and interpersonal functioning are significantly different for individuals coming from appropriate backgrounds, in terms of socio-economic and cultural levels, compared with those from inadequate backgrounds; for individuals who are involved in a couple relationship, compared to those who are not involved; for people who perceive the relationship as happy, compared to those who consider it unhappy, (5) the duration of the couple relationship is significantly associated with intra- and interpersonal functioning, (6) the correlation between the period of time that passed since the end of the most recent couple relationships and the person's intra- and interpersonal functioning is statistically significant, (7) the intra- and interpersonal functioning is significantly different, depending on the person's health status, her involvement in a counseling/ therapy process, her order among siblings, the perceived quality of the relationship between her parents, the person's central figure of attachment, the frequency of

her contacts with the family of origin and the co-habitation with members of the family (as indicators of the separation from the family of origin); (8) the self-liking/ self-competence self-esteem are significantly different, depending on the person's attachment style, (9) the emotional self-regulation ability is significantly different, among individuals with secure, avoidant (fearful, dismissing), anxious/ ambivalent attachment style, (10) the psychological well-being is significantly different, according to the person's attachment style, (11) the clinical symptoms are significantly different, depending on the person's attachment style, (12) the person's attachment style contributes to the occurrence of significant differences in the social and emotional loneliness, (13) the levels of anxiety and avoidance in close relationships are significantly different, depending on the person's attachment style, (14) the dimensions of affiliation/ control explain the circumplex model of interpersonal problems, applied in the Romanian population, (15) the intercorrelations between dimensions of intra- and interpersonal functioning are statistically significant.

In addition to the hypothesis, several ***questions*** were formulated: (a) What are complex causal relationships and interactions between avoidance in close relationships and the individual's intrapersonal functioning? (2) What are the complex causal relationships and interactions between the anxiety in close relationships and the individual's intrapersonal functioning? (3) What are the complex causal relationships and interactions between the avoidance in close relationships and the individual's interpersonal functioning? (4) What are the complex causal relationships and interactions between the anxiety in close relationships and the interpersonal functioning of the individual?

The study ***participants*** were, on the one hand, the mothers participating in studies 2.1., 2.2. and 2.3. and on the other hand, a group of students and young women, selected by stratified randomization on a voluntary basis. The questionnaire was applied in paper-pencil format through contacts who assisted the author in data collection, participants had no meeting with the author of the study. The initial sample comprised 153 students and young women, but after the missing values analysis, the group was reduced to 148 participants, aged between 18 and 26 years, with a mean age of 20.13 years.

In terms of *close relationships*, the study participants are mostly (56.8% of total) involved in couple relationships without being married, 4.7% are married, and 38.5% are not involved in a relationship with a partner. Of the participants involved in couple relationships, 74.7% evaluated their relationship as happy, 24.2% somewhat happy and 1.1% unhappy. Among the participants not involved in couple relationships, 30.19% have never been

involved in a romantic relationship, while 69.81% were involved in a romantic relationship in the past. Of all participants, 8.78% affirmed they are involved in a process of counseling or psychotherapy.

The ***instruments*** used consisted of a battery containing a questionnaire that investigated demographic variables (referring to the individual participant, the involvement in a couple relationship and the family of origin) and several scales for assessing the intra- and interpersonal functioning and the adult attachment:

1) Toronto Alexithymia Scale (TAS-20, Parker et al., 2003);
2) Self-liking, Self-competence Scale (Tafarodi, Swann, 1995, Skolka, 2009);
3) Schutte Emotional Intelligence Scale (Schutte et al., 1998);
4) Ryff Well-Being, 54 items form (RWB, Ryff, 1989);
5) Caruso Empathy Scale (CES, Caruso and Mayer, 1998);
6) Social and Emotional Loneliness Scale for Adults (SELSA, DiTommaso and Spinner, 1993, Skolka, 2009);
7) Inventory of Interpersonal Problems - Circumplex (Soldz et al., 1995);
8) Relationships Questionnaire (RQ, Bartholomew and Horowitz, 1991);
9) Brief Symptom Inventory (BSI, Derogatis, 1975);
10) Positive and Negative Affect Schedule (PANAS, Watson, Clark and Tellegen, 1988);
11) Attachment Styles Questionnaire (Griffin and Bartholomew, 1994);
12) Interpersonal Guilt Questionnaire (IGQ-67, O'Connor et al., 1997).

The type of design used was multivariate, non-experimental, but internal validity was increased by controlling as many confounding variables. The internal consistency of most scales was good and the factor structure appropriate, tested by confirmatory factor analysis.

Some of the individual characteristics surveyed had a significant impact on the intra- and interpersonal functioning, as shown in Table 1.

Sample	Characteristic	Type of association/ difference	Intra/ interpersonal functioning component
mothers	age	negative association with:	negative affect, self-hate guilt, clinical symptoms, anxiety in close relationships
		positive association with:	positive affect, self esteem (self-liking, self-competence)
	background	inadequate – to a greater extent:	clinical symptoms, anxiety in close relationships, negative affect
		adequate – to a greater extent:	self esteem, positive affect
	marital status	married with the child's father – to a greater extent:	self-competence, positive affect
		divorced – to a greater extent:	somatization, psychoticism
		non-official relationship – to a greater extent:	negative affect, anxiety in close relationships, paranoid ideation
	quality of own couple relationship	happy – to a greater extent:	self-competence, positive affect
		somewhat happy – to a greater extent:	somatization, obsessive-compulsivity, phobic anxiety, paranoid ideation
		unhappy – to a greater extent:	interpersonal sensitivity, depression, anxiety, hostility, psychoticism, anxiety in close relationships, guilt, negative affect
	quality of parental couple relationship	functional (very good/ good)	high self-esteem
		dysfunctional (very bad/ bad)	high anxiety in close relationships, low negative affect
students	involvement in couple relationship, at present	yes – to a greater extent:	self-liking, emotional intelligence, psychological well-being, dismissing style, positive model about self
		no – to a greater extent:	alexithymia, guilt, social, romantic, emotional loneliness, interpersonal problems, anxiety in close relationships
	involvement in couple relationship, ever	yes	positive model about self
		no	high somatization, obsessive-compulsivity, phobic anxiety
	duration of couple relationship	positive association with:	social loneliness, interpersonal problems (social avoidance)
		negative association with:	phobic anxiety, fearful style
	end of latest couple relationship (period)	positive association with:	survivor guilt
		negative association with:	positive affect, dismissing style, anxiety/ avoidance in close relationships

	quality of couple relationship	happy	high self-liking, self-acceptance, positive affect
		unhappy	high negative affect, anxiety/ avoidance in close relationships, interpersonal problems (cold, dominant), romantic and emotional loneliness
	health status	clinically healthy	high interpersonal problems (cold), anxiety in close relationships
	involvement in a counseling/ psychotherapy process	yes – to a greater extent:	clinical symptoms (anxiety, depression, psychoticism), negative affect, interpersonal problems (cold, dominant)
		no – to a greater extent:	psychological well-being, positive relations with others, positive affect
	parents' relationship	together/ married	high self-competence, clinical symptoms, omnipotence guilt
		separated	high interpersonal friendliness
	quality of parents' couple relationship	functional	high separation and omnipotence guilt
		dysfunctional	high familial loneliness
	central attachment figure	mother	high social loneliness
		father	high empathy, well-being, anxiety, positive affect
	connection with parents	frequently	high self-competence, emotional intelligence, well-being

Table 1. Individual characteristics with a significant effect on the adult intra- and interpersonal functioning

According to the specialized literature, the individual's intra- and interpersonal functioning differs, depending on his/her attachment style. At the intrapersonal functioning level, significant differences were found for:

- self-esteem (self-liking, self-competence) - participants with secure attachment style presented the highest self-esteem, followed by those with dismissing attachment, those with preoccupied attachment and those with fearful attachment;
- alexithymia - participants with a positive model of self had a greater ability to identify and interpret emotions of self and others, compared with people who those with a negative model of self;
- emotional intelligence - participants with secure attachment presented the highest level of emotional intelligence, followed by those with dismissing attachment, those with preoccupied attachment and those with fearful attachment;
- intensity of positive affect – participants with dismissing attachment rated the highest levels of positive affect, at approximately the same level of intensity with participants with secure attachment, followed by those with preoccupied attachment and to the lowest level by those with fearful attachment;

- self-hate guilt - young women with secure attachment style presented the lowest level, followed by those with dismissing and preoccupied attachment and those with fearful attachment style, with the highest levels of guilt;
- psychological well being - participants with secure attachment style presented the highest level of eudaimonic well-being, overall, followed by those with dismissing attachment style, those with preoccupied attachment style and those with fearful attachment style. Persons with secure attachment style tend to obtain their well-being through relating with others and self-acceptance, while those with dismissing attachment style seem rather focused on activities involving exploration, learning, goal-pursuit, as sources of well-being;
- clinical symptoms - participants with secure attachment present to the lowest extent interpersonal sensitivity and paranoid ideation, folowed to a similar extent by those with dismissing, preoccupied and fearful attachment.

At the interpersonal functioning level, significant differences between attachment styles were found for:

- social and emotional loneliness - participants with secure attachment style are to the lowest extent lonely, while those with fearful attachment style to the utmost. Individuals with preoccupied attachment style present a lower emotional loneliness, while those with dismissing attachment very elevated levels of this type of loneliness, and with regard to familial loneliness, individuals with dismissing attachment are to the lowest extent lonely, followed by those with preoccupied attachment.
- interpersonal problems - except for intrusiveness, in the case of which the individuals with dismissing attachment presented the lowest level, those with secure attachment generally show the lowest overall levels of interpersonal problems, compared with those with insecure attachment style, regardless of its type.

Using PROXSCAL procedure, by transforming raw data into proximities, we obtained a common space model that proves that the circumplex is not perfectly fit for our data, the differences reveal the necessity of further testing of the model in future studies, by including a larger number of participants and a more diverse sample. Instead, the latent dimensions (anxiety/ avoidance) of attachment and the characteristics for each of the four styles of attachment were confirmed for most of the participants.

By an exploratory approach, combined with a confirmatory one, using the intercorrelations between constructs and attachment dimensions, as well as data from

specialized literature, we developed a series of path models, which explain the complex interaction between constructs, with important implications for the clinical and therapeutic practice.

According to the eight models constructed, with regard to the *intrapersonal* functioning, both anxiety and avoidance in close relationships (both significantly and negatively associated with self-liking type of self-esteem) significantly contribute to reducing the eudaimonic well-being, anxiety especially by limiting the positive relations with others, while avoidance especially by reducing the ability to fulfill a purpose in life, as components of the well-being. Both determine the amplification of depressive clinical symptoms (anxiety indirectly, by increasing the intensity of negative affects), as well as interpersonal sensitivity and contribute to the increase of interpersonal guilt (which seems to become a mechanism for emotional distance regulation in close relationships).

In terms of *interpersonal* functioning, both anxiety and avoidance in close relationships contribute to the increase of emotional loneliness and interpersonal problems, such as submissive and exploitable.

Study 3.2. addresses familial factors related to adult attachment and intra- and interpersonal functioning and approaches the following ***general objectives***: (1) to validate the scales used, by testing their factor structures, (2) to examine the differences in the parental bonding and family of origin functioning, depending on individual and family characteristics, (3) to examine the specificity of parental bonding and family of origin functioning, in the case of different adult attachment styles, (4) to analyze the complex causal relationships and interactions between anxiety/ avoidance in close relationships, inter-/ intrapersonal and family of origin functioning.

Some of the hypotheses formulated for study 3.2. are: (1) according to the values of the goodness of fit indices and residual errors, the bifactorial models of maternal/ paternal care/ overprotection will be adequate, (2) according to the values of the goodness of fit indices and residual errors, the bifactorial and multifactorial models of family functioning will be appropriate, (3) the parental bonds and family functioning are significantly different, depending on the individual's background (urban / rural, appropriate/ inappropriate), (4) the parental bonds and family of origin functioning are significantly different between persons who are involved in couple relationships (with their children's father) and those not involved (at present/ ever) in romantic relationships, (5) the quality of parental bonds (care/ overprotection) and family functioning are significantly correlated with the duration of the

couple relationship, as well as the perceived quality of the couple relationships, (6) the parental bonds and family functioning are statistically significantly different, depending on the individual's health status and order among siblings, (7) the parental bonding and family of origin functioning are statistically significantly different among individuals, depending on the type of relationship of own parents (together/ separated, divorced) and the perceived quality of the relationship between parents, (8) the parental bonding and family of origin functioning are statistically significantly different among those who identified the mother as the central figure of attachment and those who identified the father, (9) the parental bonding and family of origin functioning are statistically significantly different between individuals who are and those who are not involved in a process of counseling/ psychotherapy, (10) the parental bonding and family of origin functioning are statistically significantly different, depending on the person's attachment style, (11) the intercorrelations between the anxiety/ avoidance in close relationships, intra-/ interpersonal functioning and maternal and paternal bonding and family of origin functioning are statistically significant.

The ***question*** formulated for study 3.2. is: What are the causal relationships and complex interactions between the person's anxiety/ avoidance in close relationships, intra- and interpersonal functioning, parental bonding and family of origin functioning?

The study ***participants*** were the students and mothers who also participated in the study 3.2. and the ***instruments*** used, besides those mentioned for the assessment of intra- and interpersonal functioning were: (1) the Parental Bonding Instrument (PBI, Parker et al. 1979), (2) the Family of Origin Scale (FOS, Hovestadt et al., 1985). The scales had acceptable internal consistency and acceptable factor structure, for the group we tested them on, as a representative of the population from which it was extracted.

Family of origin functioning was different, according to the following individual and environmental characteristics:

- background: participants from rural areas felt that the family of origin atmosphere was warmer, the conflicts were solved more easily, family intimacy was deeper, compared with urban participants. Participants who came from inadequate backgrounds, compared with those from appropriate backgrounds, perceived maternal / paternal care as lower and overprotection as higher, as well as the family of origin functioning as more deficient, both in terms of autonomy and intimacy.
- the couple relationship and the individual's perception on it: the participating mothers, married to their child's father considered that they had the most care from the mother

and their father, followed by participants divorced/ separated for maternal care and those involved in relationships (without being married) with the child's father for paternal care. With regard to the dimensions of the family functioning, married participants appreciated their own family as functioning best, followed by divorced participants and those involved relationships with the child's father, without being married. Participants (both mothers and young women) that assessed the couple relationship as happy enjoyed the most maternal/ paternal care and least overprotection, followed by participants that assessed their couple relationship as somewhat happy and those who rated it as unhappy. With regard to the family of origin functioning, participants who rated their couple relationship as a happy came from families with best functioning, followed by participants who rated the relationship as somewhat happy and those that assessed the couple relationship as unhappy.

- perception of parents and family of origin: participants whose parents are together/ married received more care from their own mother and father and their family of origin had better functioning, compared with participants whose parents are separated. As participants evaluated their parents' couple relationship as being more functional, they also perceived the maternal/ paternal care as more intense and their family of origin functioning better, in terms of autonomy and privacy. The results were similar for the groups of mothers and young women. The major difference between the two categories of participants is that in the case of young women the quality of the relationship between parents played a more important role in explaining the differences in the functioning and attachment than the fact that parents are married or separated.
- engagement in a counseling/ psychotherapy process: the participants who reported that they are engaged in a process of psychological support (counseling/ psychotherapy) obtained lower scores for the dimensions of the family of origin functioning.

Parental bonding and family of origin functioning were significantly different, depending on the attachment style. The secure attachment style was characterized by increased paternal care and low overprotection, preoccupied attachment style by low paternal care and high overprotection, fearful attachment style by low care and overprotection. Maternal bonding was not significantly different for young women with different attachment styles.

The family of origin functioning is similar for the young women with different attachment styles, participants with secure attachment style appreciated their family of origin with the highest level of autonomy (and its subdimensions) and intimacy (and its subdimensions) compared with the rest of the participants, with other attachment styles, followed by participants with dismissing and fearful attachment style and with the lowest level by those with preoccupied attachment style. Secure attachment style, for both the mothers and young women, was mainly associated with high levels of autonomy and intimacy in the family of origin. Ambivalent (mothers) and fearful (young women) attachment styles are often associated with low levels of both autonomy and intimacy of the family of origin, while avoidant style with all the types and levels of functioning of the family of origin, without the possibility to detect a pattern.

Family of origin functioning was significantly associated with the avoidance in close relationships, and according to the correlations found, through a process of exploration, doubled by a confirmatory approach (the testing of data from specialized literature), we designed two path models, which explain the causal action of the family of origin functioning on avoidance in close relationships.

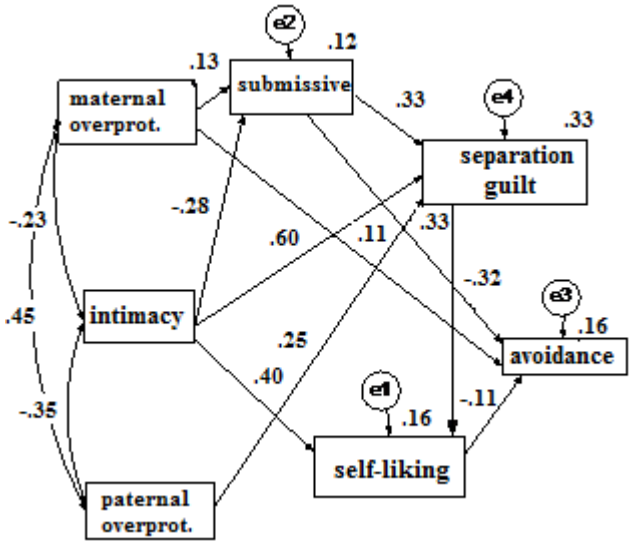

Figure 16. Associations and complex interactions between intra- and interpersonal characteristics and factors related to the family of origin

Thus, maternal overprotection, significantly negatively associated with the intimacy within the family of origin and positively with paternal overprotection, increases the person's tendency towards being submissive in close relations and the avoidance in attachment relationships. Paternal overprotection, on the other hand, has a decreasing effect on the self-

liking type of self-esteem and low self esteem increases the avoidance in close relationships. Intimacy in the family of origin has a negative causal effect on submissiveness and a positive effect on self-liking as component of the self-esteem. Submissiveness has an increasing effect on avoidance in close relationships (and, as noted, the relationship is bidirectional).

By adding the interpersonal guilt (Figure 16), the effect of intimacy in the family of origin on self-liking, as component of the self-esteem, increases. The individual benefiting from high intimacy in the family of origin tends to feel increased separation guilt and to maintain the bonds with the family of origin.

In **conclusion**, our studies present multiple theoretical and practical implications, while being at the same time, as far as we know, new for the Romanian population. By implementing complex, multivariate analysis, we consider that the studies we conducted have several contributions to the progress of the field we investigated, including the fact that they generate questions and dilemmas, as suggestions for future research.

Limits of the studies consist mainly in the limited number of participants, but also the specific limits of cross-sectional design. Also, we estimate that within the studies conducted with students as participants, their motivation to participate was relatively low, given that the participants were not rewarded for filling in the battery. Also, the constructs approached are difficult to operationalize and, as shown by the limits in the psychometric properties, it is possible for the scales and procedures used to capture only part of the complex reality and not to constitute the optimum modalities to assess the constructs surveyed. Therefore, we suggest for future research to validate the factor models of the scales, as well as the path models designed and their adjustment where necessary, replication of our studies with larger groups of participants. We also suggest the practical application of the results and the identification of their specificity for individual cases, both for children and adults.

The studies conducted in the present thesis are in accordance with the *ethical* principles of research, regarding the confidentiality of the data collected, the anonymity of the participants and the institutions where the author came into contact with them. The criteria for inclusion/ exclusion of the malnourished infants did not apply to the intervention designed for them, but exclusively to the statistical analysis of results, with the purpose of obtaining a homogeneous group. The interpretation of results was performed so that it does not constitute a basis for stigmatization and discrimination. The instruments used and the research design are non-invasive and, although some have been tiring, they do not place the participants in stressful or frustrating situations.

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