

Mothers' Experiences with their Own Caregivers and Child's Behaviors Attachment¹

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Abstract: Early experiences of mothers with their own caregivers tend to influence later relationships, particularly with future children. Thus, the objective of this study was to investigate the mothers' experiences with their own caregivers and the relation with the child's current attachment behaviors. Participants were 48 mothers and their children ($M = 28.1m$; $SD = 4.3$). The mothers' experience with their own caregivers was investigated through their perceptions of the care received from their caregivers (Parental Bonding Instrument), and by the representations of attachment (Attachment Script Assessment). The attachment behaviors of the child were investigated by Attachment Q-Sort. Analyses revealed a reasonable consistency between the mothers' perceptions about received care, their representations of attachment, and the attachment behaviors of their children. The results support the literature on the relation between mother' experiences with their own caregivers and the attachment behaviors of the child and bring contributions when presenting evidences in a Brazilian sample.

Keywords: attachment behavior, representation, psychic transmission between generations

Experiências Maternas com os Próprios Cuidadores e os Comportamentos de Apego do Filho

Resumo: As experiências iniciais maternas com os próprios cuidadores tendem a influenciar as relações posteriores, particularmente com os futuros filhos. Dessa forma, o objetivo deste estudo foi investigar as experiências das mães com os próprios cuidadores e a relação com os comportamentos atuais de apego do filho. Participaram 48 mães e seus filhos/as ($M = 28,1m$; $DP = 4,3$). A experiência das mães com os próprios cuidadores foi investigada através das suas percepções sobre os cuidados recebidos de seus cuidadores (*Parental Bonding Instrument*), e pelas representações de apego (*Attachment Script Assessment*). Os comportamentos de apego da criança foram investigados pelo *Attachment Q-Sort*. Análises revelaram consistência razoável entre as percepções das mães sobre os cuidados recebidos, as suas representações de apego e os comportamentos de apego dos filhos. Os resultados apoiam a literatura sobre a relação entre experiências maternas com os próprios cuidadores e os comportamentos de apego do filho e traz contribuições ao apresentar evidências em uma amostra brasileira.

Palavras-chave: comportamento de apego, representação, transmissão psíquica entre gerações

Experiencias Maternas con los propios Cuidadores y los Comportamientos de Apego del Hijo

Resumen: Las experiencias iniciales maternas con sus propios cuidadores tienden a influir en las relaciones posteriores, particularmente con los futuros hijos. De esta forma, el objetivo de este estudio fue investigar las experiencias de las madres con los propios cuidadores y la relación con los comportamientos actuales de apego del hijo. Participaron 48 madres y sus hijos ($M = 28,1m$, $DP = 4,3$). La experiencia de las madres con los propios cuidadores fue investigada por medio de sus percepciones sobre los cuidados recibidos de sus cuidadores (*Parental Bonding Instrument*), y por las representaciones de apego (*Attachment Script Assessment*). Los comportamientos de apego del niño fueron investigados por el *Attachment Q-Sort*. Los análisis revelaron consistencia razonable entre las percepciones de las madres sobre los cuidados recibidos, sus representaciones de apego y los comportamientos de apego de los hijos. Los resultados apoyan la literatura sobre la relación entre experiencias maternas con sus propios cuidadores y los comportamientos de apego del hijo y aportan contribuciones al presentar evidencias en una muestra brasileña.

Palabras clave: comportamiento de apego, representación, transmisión psíquica entre generaciones

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Several theories, including the Attachment Theory (Bowlby, 1969/1990), attribute a central importance to early experiences with caregivers and their influence on later relationships throughout development, such as with future children. Attachment refers to the affective bond that is constituted through the emotional and cognitive development

of the child, as well as by the consistency of care received by the primary caregivers (Bowlby, 1979/1997). In the relationship with the caregiver, the security and comfort experienced by the child in his/her presence would allow him/her to be used as a secure base, that is, a figure that would allow a balance between attachment and exploitation in the relation of the dyad (Ainsworth, 1989).

Based on these concepts, Ainsworth, Blehar, Waters and Wall (1978) defined three types of attachment: *secure attachment*, in which the child knows that his/her caregiver will be available to offer help in adverse situations and feels confident to explore the environment; the *insecure avoidant attachment* in which the child tends not to have confidence that when he/she looks for care he/she will have it and thus expects at some level to be rejected, tending to become emotionally sufficient, to interact little with his/her caregivers and showing little inhibited in interaction with strangers; and, the *insecure ambivalent attachment* in which the child tends to show uncertainty about the availability and possibility of receiving help from the caregiver, being able to present immature behaviors and little interest in the exploration, turning his attention to caregivers in a worried way. Subsequently, it was proposed a type called disorganized attachment (Main, 1991), characterized by children with apparently disconnected behaviors. Such associations were corroborated in empirical studies, including Hsiao, Koren-Karie, Bailey and Moran (2015), which emphasized the emotional dialogue of the dyads.

In addition to the caregiver-child relationships resulting in distinct attachment patterns, Bowlby (1969/1990) suggested that these initial relationships were also related to the development of an internal psychological organization, involving representative models of *self* and attachment figures, called a *model of internal functioning*, which would tend to be stable throughout development and would also influence future romantic and parental relationships. For Waters, Rodrigues and Ridgeway (1998), this internal psychological organization would refer to the mental representations of attachment, in which attachment and the secure base phenomenon would be represented in the memory as a *script*. *Scripts* would be general representations of events experienced throughout development with primary attachment figures, which would tend to generalize, reach different levels of abstraction, and influence later relationships throughout development (Waters & Rodrigues-Doolabh, 2001).

Based on these theoretical assumptions and clinical practice, Bowlby (1979/1997) and the followers of the Attachment Theory began to emphasize the stability of attachment patterns throughout child development and the existence of intergenerational transmission of attachment between parents and children. About the stability of attachment patterns, Ainsworth (1989) pointed out that children with insecure attachment had the potential to eventually present safe standards from the experiences and changes in the relationships with their caregivers. At the same time, she pointed out that some children who had

secure attachment had a risk of having insecure patterns later depending on their future experiences. In the same direction, for Main (2000), attachment security would not be fully defined in childhood, since all children would be susceptible to experiencing a variety of favorable and unfavorable experiences that could alter the mental states of attachment. Thus, although the existence of a certain stability of the attachment pattern throughout development is accepted, it could be modified either by subsequent events, positive or negative, or by re-elaborations of the initial experiences. Thus, empirical studies suggest a certain continuous effect of the initial attachment experiences (Grohet et al., 2014), while new environmental circumstances continue to play an important role (Booth-LaForce et al., 2014).

In addition to the question of stability, several studies have investigated the possibility of intergenerational transmission of attachment patterns (Schoenmaker et al., 2015; Tambelli, Odorisio, & Simonini, 2013; Zaccagnino, Cussino, Borgi, Vianzone, & Carassaa, 2016). According to attachment theory, the intergenerational transmission of attachment would be interpreted quite specifically; that is, the roots of current attachment relationships in the parents' minds were initially developed in the families of origin and would influence parental behavior and the development of their own child's attachment patterns (Goodnow & Collins, 1990). Corroborating this view, the van IJzendoorne Bakermans-Kranenburg (1997) meta-analysis evidenced strong associations between the parents' attachment representations and the children's sense of security, especially detached parents and children with insecure avoidant attachment ($r = 0.45$); autonomous parents and children with secure attachment ($r = 0.47$); worried parents and children with insecure ambivalent attachment ($r = 0.42$). A review of the most current literature corroborated intergenerational transmission, and when reviewing 95 studies ($n = 4.819$) analyses showed greater effects for transmission of secure attachment ($r = 0.31$) than for insecure attachment ($r = 0.21$), although with effects sizes significantly lower than two previous decades (Verhage et al., 2016). Similar results were also found in the study by Fonagy, Steele, and Steele (1991), who prospectively investigated the relation between maternal attachment and baby attachment, so that 75% of the children had attachment patterns like those of their mothers. Thus, the literature identifies an association between parental attachment representations, parental care, and child attachment patterns (Behrens, Haltigan, & Bahm, 2016; Schoenmaker et al., 2015).

One of the possible explanations for the association of mother-child attachment patterns would be that mothers with securely-based attachment representation would tend to have a responsive history of their children's signals as well as children who would use them as a secure base both in common and emergency environments. Likewise, mothers with representations of attachment without secure base content would tend to be less sensitive to their children's

signals, and they would not have their caregiver as a secure base (Pederson, Bailey, Tarabulsky, Bento, & Moran, 2014; Quezada & Santelices, 2010). In this sense, the study by Kochanska and Kim (2013) showed that parents with insecure attachment patterns are considered as risk factors for the child's attachment pattern. It is worth mentioning, as evidenced by Miljkovitch, Moss, Bernier, Pascuzzo and Sander (2015), that both parents contribute to the individual's emotional development.

In addition to attachment representations, Verhage et al. (2016) pointed out that risk factors such as psychopathology in mothers, adolescent mothers, premature children, socioeconomic difficulties and domestic violence could hinder mothers' sensitivity to their children, since they are absorbed by other issues in their lives that influence the relationship with the child. In this sense, the study by Kelly (2016) showed that mothers less attentive to the signs of their children in the context of conversations presented a conversational style that did not meet the child's need and the child presented more possibility of developing an insecure attachment pattern. In this context, the study by Posada et al. (2016) revealed that in all cultures maternal sensitivity and maternal care were determinant for the development of a certain pattern of attachment of the child.

On the possibility of stability or change in patterns of attachment and intergenerational transmission of these patterns, van IJzendoorn and Bakermans-Kranenburg (1997) pointed out that past attachment experiences could be reworked by current relationships, influencing parental care and building new attachment relationships. The authors also pointed out that the current attachment representation would be formed based on the initial attachment experiences and on the current relationships. In this sense, a good friend, spouse or therapist could provide a "secure base" for re-elaborating adverse childhood experiences. Furthermore, for the authors, parental care would be influenced by the social context, since the social support network could moderate the effects of unfavorable circumstances; and that some characteristics of children could hinder more sensitive care of their parents due to severe physical disabilities or highly irritable temperament.

Although some studies have confirmed the relation between the mother's initial experiences with their own caregivers and the child's attachment behaviors (Kochanska & Kim, 2013; Miljkovitch et al., 2015; Pederson et al., 2014; Quezada & Santelices, 2010) no publications with this focus were found with the Brazilian population, nor based on the *Scripts* of the parents and the evaluation of the child's attachment behaviors. Considering the above, the objective of this study was to investigate the mothers' experiences with their own caregivers and the relation with the child's current attachment behaviors. Based on the literature, it was hypothesized that the perception of the care received by the mother would be related to their representations of attachment, and that these would be related to the current behaviors of attachment of the child.

Method

Participants

Participating in this study were 48 mothers (33.3 years, $SD = 4.5$) and their children ($M = 28.1$ months, $SD = 4.3$, boys: 50.4%, girls: 49.6% with the majority attending daycare centers (63.1%). Most mothers had completed higher education (86.5%; 56.1% with postgraduate studies), married (91.5%, $M = 6.7$ years, $SD = 3.4$), worked outside the home (78.3%) and had only one child (74%). The family income was on average 10 minimum wages ($SD = 6.7$), characterizing the sample as having a high socioeconomic level.

Instruments

Family demographic data form (NUDIF/CRESCEI, 2011), aims to obtain current demographic information from the family.

Parental Bonding Instrument (Parker, Tupling, & Brown, 1979), adapted to the Portuguese by Hauck et al. (2006), evaluates the respondents' perception of care received from their parents. The instrument contemplates 25 items using a Likert scale. The analysis of the items allows to investigate affectivity (affection, warmth, availability, care, sensitivity *versus* coldness and rejection), and control or protection (control, intrusion *versus* encouragement of autonomy). Parents are classified into four categories: optimal care (affection scores high and protection scores low); affective control (affection and protection score high); control without affection (protection scores high and affection scores low); and negligent care (affection and protection score low).

Attachment Script Assessment (Waters & Rodrigues-Doolabh, 2001), evaluates whether the person has a *script*, or representation of secure base attachment. For application five sheets of paper are used, each containing a title and a list of words distributed in three columns and the person is asked to elaborate a narrative. Two of the stories are related to adult-child situations (*Baby's morning* and *Doctor's office*), two others are related to adult-adult stories (*Joana and Pedro's camp* and *Suzana's accident*) and a fifth, involves a situation considered neutral since it does not enter the analysis (*The morning of purchases*). Each narrative elaborated in relation to these situations receives a score of 1 (script with no apparent basic content) to 7 (script with secure content base with substantial elaboration) and the final score is the average of the four narratives. For the present study the codification of the narratives was carried out by the first author and by two other graduates of psychology trained in theory and practice by a specialist in the use of this instrument. The reliability among the narrative coders was: *Baby's morning* (95.2%), *Doctor's office* (93.7%), *Joana and Pedro's camp* (88.9%) and *Suzana's accident* (85.7%). The version of the instrument used in this study was translated into Portuguese by Semensato (2009)

and presented good reliability and validity indexes (Bakermans-Kranenburg, 2006; T.E. Waters, Merrick, Treboux, Crowell, & Albersheim, 2015).

Attachment Q-Sort (E. Waters, 1987), assesses the child's secure-based attachment behaviors toward the mother / caregiver. It consists of 90 items that characterize children's behaviors and are distributed by the mother in stacks ranging from 9 (totally like) to 1 (totally different). The correlation between the scored results and the safe child prototype (criterion value established by specialists in the area) allows a child profile to be obtained in a continuum that can vary between -1 and +1 (perfectly negative or positive correlation with the safe child ideal) as detailed by E. Waters (1987). For the present study the version translated into Portuguese by Barbian (1993) was used. The AQS presents adequate indicators of validity and reliability (van IJzendoorn, Vereijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004).

Procedure

Data collection. All participants were enrolled in a larger study entitle *Impact of daycare on socioemotional and cognitive development in children: longitudinal study of the sixth month of life of the baby at the end of the preschool years* (CRESCI, 2010). This project aimed to analyze the impact of daycare on the socio-emotional and cognitive development of children from their sixth month until the end of the preschool years. More specifically, it sought to compare during this period the development of children who attended or not the daycare and relate it to the quality of institutional and family environments. The project started in 2011 with 77 families, among them 29 of the babies attending the daycare (Daycare Group) and 48 of the babies who were cared for by the mother or other caregivers, such as nanny (Non-Daycare Group). Families whose babies entered the daycare were recruited at two federal public daycare and the other families through media or referrals. Besides the families, the study also counted on the participation of 18 educators of the two daycares. The project involved six phases of data collection: 6th, 12th, 18th, 24th, 36th and 48th months of the child's life. For the purposes of the present study, data collected and instruments were considered only when the children were around 28 months old or had completed the 24 months of age. Further information is detailed in Piccinini et al. (2012).

Following the procedures and data collection steps of CRESCI Project around the 28 months of the child, the families were contacted via telephone and / or e-mail, and two individual meetings with the mother were scheduled for approximately one hour and thirty minutes each, at the university or other location of her choice. All instruments were applied by staff members, including doctoral and master students.

Data analysis. To investigate the mother's experience with her own caregivers and the relationship with the child's attachment behaviors, a correlational design involving the variables was used: the mother's experience with her caregivers (that is, the mother's perception about the care received from the caregivers and the representations of attachment of the mother) and the attachment behavior of the child. Descriptive analyses, central distribution, data dispersion and correlations among all variables were performed. Subsequently, analysis of hierarchical grouping and clusters was performed (Field, 2009).

Ethical Considerations

The project was approved by the Research Ethics Committee (process no. 2010070) and by the Research Ethics Committee of the Institute of Psychology (process no. 100553).

Results

The hierarchical cluster analysis sought to identify the groups of mothers based on scores of variables: *parenting styles of the mothers' caregivers* (if not lived with a caregiver the value of another caregiver was repeated) *mother's attachment representation* (with and without secure base in mother/baby narratives, adult/adult and total score); and *attachment behaviors* of the child (security and dependence). For this analysis, all variables were transformed into Z scores. The result of the analysis (dendrogram) suggested two groups. Table 1 presents the distribution of the mothers in each group, based on the analysis of hierarchical groupings and scores of care styles, on attachment representations and attachment behaviors. To statistically test the differences in attachment behaviors, a *Variance Analysis* (ANOVA *One-way*) was performed. *Post hoc* analyzes (*Bonferroni*) indicated that the average of the security behaviors was higher in Group III than in group II ($p < 0.001$) and I ($p < 0.001$). Likewise, Group II had a higher average in these behaviors than Group I ($p < 0.001$).

Table 1

Distribution of mothers by group, based on analysis of groupings and scores of care styles, attachment representations and attachment behaviors (N = 48)

Group	N°	Care styles		Attachment representations			Attachment behaviors	
		Mother	Father	Mother/ baby	Adult- adult	Total	Security	Dependence
I (Less secure) (n = 27)	1	Negligent	Negligent	With	Sem	With	Low	High
	2	Negligent	Negligent	Sem	Sem	Sem	Low	Medium
	3	Negligent	Negligent	Sem	Sem	Sem	Low	High
	4	Negligent	Control without affection	Sem	With	With	Low	High
	5	Negligent	Control without affection	Sem	With	With	High	Low
	6	Negligent	Negligent	Sem	With	Sem	High	Low
	7	Negligent	Negligent	Sem	With	Sem	Low	Medium
	8	Negligent	Control without affection	Sem	With	With	Medium	Low
	9	Negligent	Control without affection	Sem	With	With	Medium	Low
	10	Negligent	Control without affection	Sem	Sem	Sem	Medium	High
	11	Control without affection	Control without affection	Sem	Sem	Sem	Low	High
	12	Control without affection	Control with affection	Sem	Sem	Sem	Medium	Medium
	13	Control without affection	Control without affection	Sem	With	Sem	Low	High
	14	Control without affection	Optimal care	Sem	Sem	Sem	Low	High
	15	Control without affection	Control without affection	Sem	With	Sem	Medium	Medium
	16	Control without affection	Optimal care	Sem	Sem	Sem	Medium	Medium
	17	Control without affection	Control without affection	Sem	With	Sem	High	Medium
	18	Control without affection	Optimal care	Sem	With	With	High	Low
	19	Control without affection	Control without affection	Sem	Sem	Sem	Low	High
	20	Control without affection	Control without affection	With	Sem	Without	Low	High
	21	Control without affection	Negligent	Without	Without	Without	Medium	High
	22	Control without affection	Control with affection	Without	With	Without	High	High
	23	Control with affection	Control with affection	Without	Without	Without	Low	High
	24	Control with affection	Control without affection	Without	Without	Without	Medium	High
	25	Control with affection	Control with affection	Without	With	Without	Medium	Low
	26	Control with affection	Control without affection	Without	Without	Without	Low	Medium
II (More secure) (n = 21)	27	Optimal care	Negligent	Without	With	With	Medium	Medium
	28	Optimal care	Control with affection	Without	With	With	High	Low
	29	Optimal care	Optimal care	With	With	With	High	Low
	30	Optimal care	Optimal care	With	With	With	Medium	High
	31	Optimal care	Negligent	With	With	With	Medium	Low
	32	Optimal care	Control with affection	Without	With	With	Medium	High
	33	Optimal care	Control without affection	With	With	With	High	Medium
	34	Optimal care	Control without affection	With	With	With	Medium	High
	35	Control with affection	Control with affection	Without	With	With	Medium	High
	36	Control with affection	Control with affection	With	With	With	Medium	Medium
	37	Control with affection	Control with affection	With	With	With	Medium	Medium
	38	Control with affection	Negligent	Without	With	With	Low	Low
	39	Control with affection	Optimal care	With	With	With	High	Low
	40	Control without affection	Control without affection	With	Without	With	High	Medium
	41	Control without affection	Optimal care	With	With	With	Low	Medium
	42	Control without affection	Control with affection	With	Without	With	High	Low
	43	Control without affection	Control with affection	With	With	With	Medium	Low
	44	Control without affection	Control with affection	With	With	With	Low	High
	45	Negligent	Negligent	With	With	With	Medium	High
	46	Negligent	Negligent	With	With	With	High	Medium
	47	Negligent	Negligent	With	With	With	High	Low

Table 2 presents the percentages and frequencies of the mothers allocated to each group by cluster analysis, considering the same variables. As can be seen, in Group 1, there were an expressive number of mothers who had maternal care styles characterized by *negligence* (37.0% mothers) and *care without affection* (44.4% mothers), which together totaled almost 81.4 %. In this group 1 also appear the styles of paternal care most characterized by *control without affection* (48.1%) and *negligent* (25.9%), totaling

74%. Still, in this group, mothers had a greater presence of attachment representations without a secure base in relation to their caregivers (mother-baby) (92.6% mothers) and even representations of attachment without a secure base in relation to love relationships (adult-adult) (55.6%). Regarding the child's current attachment behaviors, many children with low (48.1%) and medium (33.3%) attachment behaviors in security can be observed (totaling 74 and high (44.4% %) and medium (33.3%) in dependence (totaling 77.7%).

Table 2

Percentages and frequencies of the mothers allocated to each group by cluster analysis, considering the scores of parental styles of the caregivers, the representation of attachment of the mothers and the behaviors of attachment of the children (n = 48)

Variables	Group I (Less secure) (n = 27)		Grupo II (More secure) (n = 21)	
		% (F)		% (F)
Parenting Styles of Caregivers				
Mother	Negligent	37.0% (10)	Negligent	14.3% (3)
	Control without aff.	44.4% (12)	Control without aff.	23.8% (5)
	Control with affection	14.8% (4)	Control with affect.	23.8% (5)
	Optimal care	3.7% (1)	Optimal care	38.1% (8)
Father	Negligent	25.9% (7)	Negligent	28.6% (6)
	Control without aff	48.1% (13)	Control without aff.	14.3% (3)
	Control with affection	14.8% (4)	Control without aff.	38.1% (8)
	Optimal care	11.1% (3)	Optimal care	19.0% (4)
Attachment representations				
Mother/baby	Without secure base	92.6% (25)	Without secure base	23.8% (5)
	With secure base	7.4% (2)	With secure base	76.2% (16)
Adult/adult	Without secure base	55.6% (15)	Without secure base	9.5% (2)
	With secure base	44.4% (12)	With secure base	90.5 % (19)
Total Score	Without secure base	77.8% (21)	Without secure base	–
	With secure base	22.2% (6)	With secure base	100% (21)
Attachment behaviors				
Security	<i>M</i> = 0.27 (<i>SD</i> = 0.17)		<i>M</i> = 0.39 (<i>SD</i> = 0.15)	
	Low	48.1% (13)	Low	14.3% (3)
	Medium	33.3% (9)	Medium	47.6% (10)
	High	18.5% (5)	High	38.1% (8)
Dependence	<i>M</i> = 0.07 (<i>SD</i> = 0.17)		<i>M</i> = 0.01 (<i>SD</i> = 0.16)	
	Low	22.2% (6)	Low	42.9% (9)
	Medium	33.3% (9)	Medium	33.3% (7)
	High	44.4% (12)	High	23.8% (5)

In Group 2, there was a rather different and opposite trend. The results revealed a greater number of mothers who had maternal parenting styles characterized by *optimal care* (38.1%) and *control with affection* (23.8%), totaling 61.9%. Parental parenting styles were also characterized by control with affection (38.1%) and optimal care (19.0%), totaling 57.1%. On the other hand, in this group 2 mothers had a greater presence of

secure-based representations of attachment in relation to caregivers (76.2%), as were representations of attachment in relation to secure-based love relationships (90.5 %). In relation to current attachment behaviors, we observed more children with attachment behaviors with medium (47.6%) and high (38.1%) scores in security (totaling 85.7%), and low (42.9%) and medium (33.3%) scores in dependence, totaling 76.2%.

Discussion

The objective of the present study was to investigate the mothers' experiences with their own caregivers and their current relationship with the child's attachment behaviors. Based on the literature, the hypothesis of the study predicted relations between the maternal perceptions of their own caregivers, the representations of the mothers' attachment, and the child's attachment behaviors. Such a hypothesis would portray the trend of intergenerational transmission of attachment patterns (Schoenmaker et al., 2015; Tambelli et al., 2013), that is, that the present representations of attachment relationships present in the parents' minds have been developed in the families of origin and would influence parents' behavior toward their child and the development of their own child's attachment patterns (Goodnow & Collins, 1990).

The results of the hierarchical clustering analysis revealed evidence supporting the association between maternal experiences with their caregivers and their child's attachment behaviors. The analysis suggested two groups, one of mothers with more negative perceptions about care received from their caregivers, as well as representations of attachment without a secure base, and children with current behaviors of less secure and more dependent attachment. And another group of mothers with more positive perceptions about the care received from their caregivers as well as representations of secure-based attachment and children with current behaviors of more secure and less dependent attachment. These analyses show that there is a trend of association between the studied variables, corroborating the hypothesis of the study that suggests an intergenerational transmission of patterns of attachment between generations.

Specifically on the relationship between care styles of both mothers' caregivers and mothers' attachment representations, the results revealed that an expressive number of mothers who had maternal and paternal caregivers characterized by neglect and care with *control and without affection*; also had representations of attachment without a secure base in relation to their caregivers and, later, even, representations of attachment without a secure base in relation to love relationships. In addition, a considerable number of mothers who had styles of maternal and paternal care characterized as *optimal* and with *control with affection* had representations of attachment with a secure base in relation to their caregivers and, later, in relation to love relationships. These results also support the hypothesis of intergenerational transmission of attachment patterns, in which the type of care received from caregivers would be related to the development of attachment representations (van IJzendoorn & Bakermans-Kranenburg, 1997).

However, the analyzes also allowed us to verify that the mothers' representations of attachment to their caregivers did not always correspond to representations of romantic relationships [that mothers had], which is also evaluated by the attachment instrument. Some studies have already shown that childhood attachment patterns are only moderately related to love life, and may even be modified

(Cowan & Cowan, 2001; Kochendorfer & Kerns, 2017). Thus, the results of the present study corroborate with other studies that important linkages in adulthood, such as loving, may allow the emergence of a new pattern of attachment of the mother, and therefore facilitate the development of a different attachment pattern in the child (van IJzendoorn & Bakermans-Kranenburg, 1997).

The results also showed that mothers with secure-based attachment representations had children with a higher score for secure attachment behaviors. These results corroborate with the literature, which suggests that mothers who present secure-based attachment content representation in the elaboration of their narratives tend to have a history of responsiveness sensitive to the signs of their children and have children who use them as a security in both common and emergency environments (Waters & Rodrigues-Doolabh, 2001).

One result that drew attention in the present study was the high number of mothers who revealed that the care they received from their caregivers was negligent and with control without affection. It is possible to think that 30 or 40 years ago, cultural and social issues may have contributed to a more rigid and controlling father-mother-children relationship (Moreira & Biasoli-Alves, 2008). This may have been particularly pronounced for girls, who have always suffered more from rigid cultural patterns. At any rate, it is striking how a *negligent* style of *control without affection* can have serious consequences in the child's own attachment representations without secure base, and later in the third-generation attachment behaviors. In this sense, the study by Zaccagnino et al. (2016) also showed a high number of mothers with insecure attachment representations in their nonclinical sample, emphasizing that previous relationships could be configured as risk factors for the mother-child relationship and the dyad well-being.

The results revealed that the variables investigated (*mother's perception of the care received, representation of attachment of the mothers, and behavior of attachment of the children*) presented relations among themselves, as predicted in the hypothesis. However, in order to extend the evidence reported in the present study, it is suggested that future investigations consider the limitations of the present study, especially using other instruments to access the initial experiences of the mothers with their caregivers, given the complexity of investigating such phenomena so remote, at the same time so significant [for each person]. It is also suggested to investigate in more detail the events in the life of the mothers throughout their development that can contribute to re-elaborate their initial experiences, as well as to explain possible inconsistencies between what happened and what would be expected to happen to representations of attachment, as highlighted in the studies presented. [For example, in the present study, in the hierarchical grouping analysis, some inconsistencies were verified, for example: mothers with *negligent caregiver perception, attachment representation without a secure base, but children with secure attachment behavior*]. These deserve to be carefully investigated by future studies, as it would allow the understanding of the possible existence of protective factors in the mothers' experiences,

as well as a deeper understanding of the phenomenon of intergenerational transmission of attachment patterns. Another limitation would be the lack of triangulation of data with the use of other sources of research, so future studies could use other tools to investigate the attachment pattern of parents, children and parents with their own caregivers. In addition, another limitation of the present study was the absence of paternal research in the development of the child's attachment patterns, thus, future studies suggest the inclusion of parents.

Investigating these inconsistencies, in other articles, the authors of the present study qualitatively investigated four dyads, two with a more secure attachment pattern (Bortolini & Piccinini, 2015) and two with a less secure attachment pattern (Bortolini & Piccinini, in press) who were chosen among the participants of the present study. The findings revealed that the current quality of the parent-child relationship is essential for the establishment of attachment patterns, although it tends to be permeated by the mothers' own representations of attachment related to their caregivers. Indeed, recent studies of this intergenerational transmission point out that some caregivers would be able to build attachment relationships with their children regardless of their representations of infant attachment, as some children might be more resistant to negative influences of caregivers and the environment (Verhage et al., 2016).

The present study revealed empirical findings about the importance of the initial experiences of the mothers to the behaviors of attachment of the child. These findings endorse an extensive literature that has emphasized that infant experiences are central to attachment behaviors and to the formation of attachment patterns of individuals. In this sense, it is very important that the professionals involved with children be attentive to possible situations where the initial relationships are not fully meeting the children's demands for affection and appropriate care. The absence of this tends to profoundly mark children and may extend through generations, as empirically revealed in the present study.

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