

An Approach to the Evaluation of Attachment in Children Aged 9 to 12 Years from the Joint Categorical and Dimensional Perspectives

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Abstract

The objective of the present study is to analyze the correspondence between a categorical attachment questionnaire and a dimensional one in the assessment of children attachment. The Attachment Style Classification Questionnaire for Latency Age Children (ASCQ) and the Kern's Security Scale were administered to 450 children, from middle-class backgrounds, aged 9 (n = 106), 10 (n = 111), 11 (n = 113), and 12 (n = 120), (224 boys and 226 girls) from four primary schools, residing in the city of Buenos Aires. When studying the differences in attachment, according to the gender and age of the children, it is found that, except in the case of anxious/ambivalent attachment, which is greater in females, there are no significant differences regardless of the type of evaluation. The correlation between the Kern's Security Scale, dimensional questionnaire, and the ASCQ, categorical questionnaire, indicated that children with secure attachment (ASCQ) showed significant values with both confidence towards parents and parents availability. On the other hand, children with avoidant attachment presented a negative and significant correlation with parent's availability and a negative, although no significant, correlation with confidence towards parents. Finally, the anxious attached children presented a negative and significant correlation with confidence towards parents and a negative, although no significant, correlation with parental availability.

Keywords: Attachment Style Classification Questionnaire for Latency Age Children (ASCQ); Kern's Security Scale

Introduction

Attachment has been defined as an innate biological system that promotes the search for proximity between an infant and a specific attachment figure, in order to increase the probability of survival into adulthood [1-4]. Attachment status is the product of a genetically encoded psychobiological predisposition along with the experience of care and these attachment mechanisms are expressed throughout life [5].

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In recent years, multiple evaluation techniques have been developed that have enriched attachment theory [1] allowing both theoretical and empirical advances [6]. In the methodological approach to attachment, it is essential to take into account the developmental moment in which the study is carried out, because, among other things, cognitive maturation causes more indirect forms of expression of bonding needs, than those manifested in the behavioral method. When children grow up, attachment assessment based on the observation of behaviors, is replaced by methodologies centered on the representational.

In children, from the age of four, there are developmental advances through which the internal models of attachment become important. These are the mental representations about oneself, about others and about interpersonal relationships, built on the experiences of bonding and on the emotions associated with those experiences, which are internalized at the cognitive level generating a series of expectations and beliefs. In addition, progressive cognitive maturation also affects the organization of attachment, which ceases to be so closely tied to specific people to acquire a more general dimension [7].

One of the methods used from 6 years of age are questionnaires, and a question raised in this regard is whether the approach to the organization of attachment should be done from a categorical model or from a dimensional model [8-13]. While some procedures propose taxonomies for classifying boys and girls into different categories based on individual differences derived from the attachment assessment (for example, secure, ambivalent, avoidant or disorganized attachment style), others propose scales one-dimensional (for example, a continuous score for security) or multiple dimensions, such as in confidence, availability or communication [14,15].

Objective of the Study

In view of this background, the objective of the present study is to analyze the correspondence between a categorical attachment questionnaire and a dimensional one in the assessment of children attachment. In the first place, we will analyze whether there are differences in attachment according to the gender of the children, in both questionnaires. Secondly, we will analyze if there are differences according to the age of the children in both questionnaires. Thirdly, we will study the correlation between the values obtained in the children in both questionnaires.

Methods

Participants

The two type of questionnaires were administered to 450 children, from middle-class backgrounds, aged 9 (n = 106), 10 (n = 111), 11 (n = 113), and 12 (n = 120), (224 boys and 226 girls) from four primary schools, residing in the city of Buenos Aires.

Instruments

Attachment style classification questionnaire for latency age children (ASCQ) [16,17].

It is a categorical questionnaire that contains 15 items, divided into three factors: secure, anxious, and avoidant, and follows Ainsworth's three attachment patterns [18].

Items example: I make friends easily, I'm sometimes afraid that no one really loves me, and It's hard for me to trust others completely.

The original scale was adapted to Argentina, eliminating items 6, 13, and 15 because cultural reasons. The remaining 12 items were analyzed through a CFA that indicated the three factors model suggested by the author, fitted the data very well [17]. McDonald's omega of the dimensions was .73 for secure attachment, .87 for anxious attachment, and .71 for avoidant attachment.

Kern's Security Scale [14,19].

It is a self-report questionnaire that contains 15 items that assess children's belief that a parent is responsive and available, open to communication and a reliable source of help and comfort when needed. The measure yields scores on a single, continuous dimension of security, but Lieberman, Doyle, and Markiewicz [20] suggested an alternative scoring to derive two attachment dimensions-availability and confidence.

Example items: Some children are sure that their mom loves them, some children think that their mom spends a lot of time with them.

In the scale-study with the Argentine sample, only 10 items were kept (5 connected to confidence, 5 connected to availability) out of 15 items in the original scale. EFA showed two factors in both mother and father: (a) one related to confidence ($\alpha = .70$ for mothers, $\alpha = .69$ for fathers) and (b) one related to availability ($\alpha = .71$ for mothers, $\alpha = .70$ for fathers).

Statistical procedure

MANOVAs were used to analyze the effect of sex and age on attachment evaluated as attachment categories (secure, anxious and avoidant), and as dimensions (confidence and availability). To study the effect of children's age, it was recategorized in age1 (children of 9-10 years) and age 2 (children of 11 and 12 years).

To study the correspondence between these two different ways to study attachment, Pearson correlations were performed between the ASCQ categories and the dimensions of the Kern's Security Scale.

Ethical procedures

We asked for an interview with the heads of the schools to discuss our work with the children. We explained the characteristics of the research and left a note asking for their collaboration and a copy of the research project. After that, a letter was sent to the father and mother of each child explaining the aims of our project and the work to be done with the children. They were expressly told that participation was voluntary and anonymous. We committed ourselves to give no individual information whatsoever to the school staff, unless both parents expressly asked us to do so. We received a written permission from each father and mother before launching the field work. Finally, we told the children that we needed to know their opinion on their parents' relationship with them and they were told yet again that they were free not to answer. There were no objections.

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Results

When comparing the values obtained by males and females in the attachment evaluated as categories, we found that in general they are significantly different ($F_{Hotelling}(3, 319) = 5.16, p = .002$). Univariate analyses indicated that this difference occurs with respect to anxious attachment (Table 1). When males and females are compared in the attachment evaluated through dimensions, no significant differences were found ($F_{Hotelling}(4, 283) = .48, p = .75$) (Table 2).

Attachment categories	Gender				F(1,321)	p
	M _m	SD _m	M _f	SD _f		
Secure	3.78	.75	3.86	.72	.99	.32
Anxious	2.58	1.09	3.00	1.04	10.98	.001
Avoidant	2.37	.84	2.28	.86	.92	.34

Table 1: Means, standard deviation, F and p corresponding to the categories of attachment in males and females.

F Hotelling (3, 319) = 5.16, p = .002.

m: Males; f: Females.

Attachment dimensions	Gender			
	M _m	SD _m	M _f	SD _f
Mother Confidence	2.70	.34	2.74	.33
Father Confidence	2.64	.38	2.67	.36
Mother Availability	2.08	.45	2.06	.48
Father Availability	1.98	.48	1.98	.48

Table 2: Means, standard deviation corresponding to the dimensions of attachment in males and females.

F Hotelling (4, 283) = .48, p = .75.

m: Males; f: Females.

Regarding age, no significant differences are observed in attachment, neither from the evaluation through categories (F Hotelling (3, 302) = 2.45, p = .06), nor through dimensions (F Hotelling (4, 269) = .013, p = .49) (Table 3 and 4).

Attachment categories	Age			
	M ₁	SD ₁	M ₂	SD ₂
Secure	3.80	.74	3.84	.74
Anxious	2.91	1.13	2.67	1.02
Avoidant	2.43	.80	2.21	.87

Table 3: Means, standard deviation, corresponding to the categories of attachment in children of 9 - 10 and 11 - 12 years.

F Hotelling (3, 302) = 2.45, p = .06.

1: age 9 - 10; 2: 11 - 12.

Attachment dimensions	Age			
	M ₁	SD ₁	M ₂	SD ₂
Mother Confidence	2.73	.32	2.72	.34
Father Confidence	2.65	.35	2.67	.39
Mother Availability	2.04	.44	2.10	.48
Father Availability	1.93	.46	2.02	.47

Table 4: Means, standard deviation, corresponding to the dimensions of attachment in children of 9 - 10 and 11 - 12 years.

F Hotelling (4, 269) = .013, p = .49.

1: age 9 - 10; 2: 11 - 12.

In table 5 the correlations between different classification of attachment: secure, anxious, and avoidant, and attachment dimensions: confidence in parent’s love and children perception of parent’s availability, are presented.

	Parents confidence	Parents availability
Secure attachment	.39***	.23*
Anxious attachment	-.30**	-.13
Avoidant attachment	-.20	-.36***

Table 5: Correlations between ASCQ and Kerns’ confidence and availability.

*** $p < .001$ ** $p < .01$ * $p < .05$.

Discussion

One of the fundamental aspects of the methodological assessment of attachment is the developmental moment in which it is evaluated. According to Bowlby [1], when the child grows develops an attachment behavioral system that is organized by experience-based “internal working models” of self and environment, including especially the caregiving environment. In children over six years of age, it is advisable to abandon the behavioral methodology and replace it with others based on mental representations about the quality of relationships with significant others, especially parents. One of the most used methodologies with children over six years of age are questionnaires. With respect to them, researchers have been divided between those who prefer categorical questionnaires, that is, those who assign children according to Ainsworth classification in secure and insecure attachment, anxious or avoidant, and those who prefer dimensional questionnaires that allow greater understanding of the different processes that operate behind each category.

In the present work, we have hypothesized that beyond the different methodological positions between categorical and dimensional questionnaires, both converge in richer results for the interpretation of attachment in children.

When studying the differences in attachment, according to the gender and age of the children, it is found that, except in the case of anxious/ambivalent attachment, which is greater in females, there are no significant differences regardless of the type of evaluation.

The correlation between the Kern’s Security Scale, dimensional questionnaire, and the ASCQ, categorical questionnaire, indicated that children with secure attachment (ASCQ) showed high confidence in the love of their parents and feel that they are available when they need them (Kerns’ Security Scale). These results confirm Dwyer [20] assertion that the securely attached child would have an internal mental model of the caregiver as responsive and available. On the other hand, children with avoidant attachment presented a negative and significant correlation with parent’s availability and a negative, although no significant, correlation with confidence towards parents. These results indicate that the avoidant-attached child would have a mental model of caregiver that does not take into account the child’s indications of need for protection and therefore does not allow the child to develop the feeling of confidence that he/she needs. This child may feel insecure towards others and expect due to past experiences of abandonment, to be displaced [21]. Finally, the anxious attached children presented a negative and significant correlation with confidence towards parents and a negative, although no significant, correlation with parental availability, indicating that these children would have a mental model of the caregiver who responds inconsistently to their emotional abilities and therefore would not develop confident expectations regarding caregiver access and response [20].

Conclusion

As we hypothesized, the evaluation of attachment in children through questionnaires is enriched when we adopt the two categorical and dimensional perspectives together.

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