Controlling mothers, insecure daughters: parental style and adult attachment

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ABSTRACT

There is a proven relationship between adult attachment and parental style, yet the use of Life History Theory, in a "majority of the world" country, with advanced statistical analysis, can bring new results. In view of this, the objective of this study was to identify and relate the perceived parental style of 150 Brazilian women aged 18-45 years. The Relationship Style Scale and the Parental Bonding Instrument were used. Attachment security ranged from 48.0% to 67.9%, which exposes the impact of the type of statistical analysis. Analyses of structural equation models revealed that the maternal control dimension was more important to the attachment style of women, while paternal care and control were both relevant. Life History Theory can explain this result through the influence of maternal control on changes in female development, which are due to different parental investment, which influences sexual strategy.

Keywords: Parental Style; Attachment Style; Theory of Life History.

Mães controladoras, filhas inseguras: estilo parental e apego adulto

RESUMO

Há comprovada relação entre apego adulto e estilo parental, todavia o uso da Teoria de História de Vida, em um país da "maioria do mundo", com avançadas análises estatísticas, pode trazer novos resultados. Diante disto, o objetivo deste estudo foi identificar e relacionar o estilo parental percebido de 150 mulheres brasileiras com idade entre 18-45 anos. Utilizou-se a Escala de Estilo de Relacionamento e o Parental Bonding Instrument. A segurança do apego variou entre 48,0% e 67,9%, o que expõe o impacto do tipo de análise estatística. Análises de modelos de equação estrutural revelaram que controle materno foi mais importante para o estilo de apego das mulheres, enquanto cuidado e controle paterno foram ambos importantes. A Teoria de História de Vida pode explicar esse resultado através da influência do controle

materno em mudanças no desenvolvimento feminino, que são decorrentes de diferente investimento parental, e que influi na estratégia sexual.

Palavras-chave: Estilo Parental; Estilo de Apego; Teoria de História de Vida.

Madres controladoras, hijas inseguras: estilo de crianza y apego adulto

RESUMEN

Existe una relación comprobada entre el apego adulto y el estilo parental, sin embargo, el uso de la Teoría de la Historia de Vida, en un país de la "mayoría del mundo", con análisis estadístico avanzado, puede traer nuevos resultados. Por lo tanto, el objetivo de este estudio fue identificar y relacionar el estilo parental percibido de 150 mujeres brasileñas de 18 a 45 años. Se utilizaron la Escala de Estilo de Relación y el Instrumento de Vinculación Parental. La seguridad de los archivos adjuntos osciló entre el 48,0% y el 67,9%, lo que expone el impacto del tipo de análisis estadístico. El análisis de los modelos de ecuaciones estructurales reveló que el control materno era más importante para el estilo de apego de las mujeres, mientras que el control y el cuidado paterno eran importantes. La Teoría de la Historia de Vida puede explicar este resultado a través de la influencia del control materno sobre los cambios en el desarrollo femenino, que se deben a diferentes inversiones de los padres y que influyen en la estrategia sexual.

Palabras clave: Estilo Parental; Estilo de Apego; Teoría de Historia de Vida.

Introdução

What is the relationship between parental style and adult attachment style? Developmental psychology has studied this theme since virtually its beginning. However, the use of life history theory to address this issue is relatively new in the literature (Del Giudice, 2016; Simons, Sutton, Simons, Gibbons & Murry, 2015; Hurst & Kavanagh, 2017), and this old question has much to gain from it (Figueiredo, Patch & Ceballos, 2015).

Life history theory studies the allocation of finite energy in life and involves exchanges and decisions about how to invest energy to maximize fitness or suitability. This affects development, growth, reproduction, and aging throughout the life cycle (Del Giudice, Gangestad & Kaplan, 2015). When facing a particular developmental context, an individual makes an unconscious decision about how to mate and parent, for example.

The adaptive function of the variation of reproductive strategies is to optimize the current and the future tradeoff (Del Giudice et al., 2015). The adult has a consistent life history strategy composed of health, romantic and sexual relationships, and the amount of education and professional effort. This strategy is due to the direct or indirect environmental experience, in childhood, adolescence and young adulthood.

There are two main strategies: fast (R) and slow (K). In environments with few and unstable resources, organisms tend to develop faster, and to have menarche

and children early. An insecure attachment style is associated with this strategy, as well as less parental investment, shorter-term relationships and more marital conflict. An environment with few resources triggers a chain reaction: a lower maternal nutrition is associated with a smaller fetus, "expect" birth fewer resources, and has a faster metabolism. This is found across all life, from plants to mammals (Salguero-Gómez et al., 2016). While there are resources associated with care and feeding, called protective factors, a slower strategy is developed. It is characterized by greater predictability, greater family harmony, secure attachment style, older age at menarche and first son, fewer children, more long-term relationships, and greater parental investment (Belsky, Steinberg & Draper, 1991).

Parental styles are complex patterns that involve control/demand and affection/care dimensions (Wilhelm, Gillis & Parker, 2016). An optimal parental style would protect the child against other stressors, such as marital distress, poverty, and loss of relatives (Overbeek, ten Have, Vollebergh, & de Graaf, 2007). Care is associated with acceptance, warmth, nurturance, and acceptance, in contrast to coldness, indifference, neglect, and rejection. Control is associated with overprotection and manipulative or punitive parenting and contrasts with psychological autonomy due to appropriate management (Wilhelm, Gillis & Parker, 2016).

The style "affectionless control" (authoritarian) would be more harmful than the others (Belsky et al., 2007). The lack of affection in the presence of excessive control is associated with depression, anxiety, suicide, and personality disorder, among other psychopathologies. It is also associated with the prevalence and incidence of mental disorders in adulthood, although the influence is nonspecific. Parental bond is related to addictions, depression, and anxiety. A high level of control and intrusive parenting can prevent usual discovery in childhood and learning coping strategies, thus influencing metacognitions about life experiences (Timpano, Carbonella, Keough, Abramovitz & Schmidt, 2015; Spada et al., 2011).

Development is differentially affected by parents. Maternal, but not paternal, overprotection and lack of care is associated with a higher risk of mental disorders (Ong et al., 2018). Belsky et al. (2007) also confirmed a "chain of causation" (p. 121) between maternal harshness and developmental traits, such as early menarche and then sexual risk taking.

Sensitivity and readiness to respond to children's requests impact attachment. Attachment is a trend that directs children toward primary caregivers when facing stress, (Sroufe & Waters, 2017). This primary caregiver is usually the mother, but children have different styles of attachment to fathers and mothers. To predict and respond to others' behavior, an internal working model is forged in. According to John Bowlby, a universal behavioral system is responsible for responses when facing stress, but individual differences attributable to temperament and life history are possible. As adults, people are supposed to develop a flexible set of skills to deal with diverse situations (e.g., mating). The adult attachment style would reflect the childhood internal working model and be modified by experiences with romantic relationships (Ainsworth, Blehar, Waters & Wall, 2015).

Reports of the prevalence of secure attachment have varied, ranging from half (Bjorklund & Pellegrini, 2002; Van IJzendoorn & Bakermans-Kranenburg, 2010) to two-thirds (Bjorklund & Pellegrini, 2002; Schmitt et al., 2004), depending on methodology and age. This happens because attachment is an adaptive response to earlier relationships, reflected by conditional adaptations that assess and respond to the environment in an appropriate manner within a particular context (Bjorklund & Blasi, 2005). People with a secure attachment style perceive themselves as worthy of affection and the world as welcoming, establishing stable relationships. Insecure

people tend to perceive the world and themselves negatively, have difficulty leaving their parents' house, and tend to live with friends or alone (Mayseless, Danieli, & Sharabany, 1996).

Individuals who are high in insecure attachment have difficulty forming close relationships with others, romantic or not. They also experience the suppression of affection or hypersensitivity to cues of abandonment and rejection, depending of the attachment style (Bourne, Berry, & Jones, 2014). Collins and Read (1990) found three styles: Secure, Insecure and Anxious, high anxiety and fear of losing loved ones; and Insecure and Avoidant, that refrain from intimate relationships and the feelings associated with them.

Dinero, Conger, Shaver, Widaman and Larsen-Rife (2008) reported that people with insecure attachment reported parental rejection, low parental support, high control, less family harmony and affection, and more adverse events during childhood. People with secure attachment reported more responsive and sensitive parents, whereas parents of adults with insecure attachment were critical rejecters and less affectionate (insecure ambivalent style) or absent and non-responsive (insecure avoidant style) (Lopez, Melendez, & Rice, 2000; Hinnen, Sanderman & Sprangers, 2008; Kokkinos, 2013).

Paternal and maternal parenting styles also differentially impact attachment (Zaman & Fivush, 2013). Bourne et al. (2014) found that adult attachment avoidance was significantly negatively correlated with perceived paternal care, and adult anxious attachment was significantly positively correlated with paternal overprotection, but no relationships were found between maternal subscales and adult attachment. Low care and high controlling childhood is usually associated with discomfort with being close and intimate, thus preventing relationships in adulthood (Manassis, Owens, Adam, West, & Sheldon-Keller, 1999; McDermott & Barik, 2014).

The relationship between parenting characteristics and attachment is not new (Dinero et al., 2008; Hinnen et al., 2008; Bourne et al., 2014; McDermott & Barik, 2014). Notwithstanding, 95% of the research in behavioral science is not made in what it's called "the Majority World" (Kagitcibasi, 2012). Brazil, in the other hand, is part of "the Majority World", and its particular characteristics, such as socialization for autonomy and relatedness at the same time, can influence the results of research done in the country (Seidl-de-Moura, Carvalho & Vieira, 2013).

Lordelo et al. (2011) also suggest that Brazil is an important country to study life history strategies, due to its social diversity. They have found the first evidences of a relationship between psychological antecedences and some of the reprodutives marks in Brazil, but they insist that more research must be done, specifying context and stressors.

Outsiders might think that research within an evolutionary perspective should only consider "universals", but researchers agree that to make a more realist psychology we need to test the "current psychological knowledge" in other cultures (Segall, Lonner & Berry, 1998, p. 1101-2). The nature-culture dichotomy should not be retaken (Pagnotta & Resende, 2013), but it should be considered cultural similarities and differences that exists between humans.

To understand the relationship between parental and attachment style as a whole, correlations could be enough. However, to better understand such important constructs, we used the factors, care and control, from parental style, and anxiety, distrust and resistance to proximity, from attachment style. Thereby, to do a concurrent and powerful analysis, it was necessary to do a Structural Equation Model (SEM). Consistent with previous work, we hypothesized that there

would be an association between low care and high control with attachment insecurity in our sample, and it is possible to do a model in which those variables are related.

Methods

Participants and Procedure
We conducted this survey with 150 Brazilian women (mean age = 28.64 years; SD = 5.65 years). All of them had completed high school, which was an inclusion criterion because the instruments were self-applied. We had a special interest in women, given the relevance of this population in child rearing and creating and maintaining social ties (Oliva, Vieira, Mendes & Martins, 2017).

Participants were informed by and signed a Consent Form of research objectives, public disclosure of data, willingness and generosity of their participation and the possibility of withdrawal of the same without any sanction or penalty. The survey was conducted after they project was approved by a Research Ethics Committee.

The sample had a high level of schooling (mean= 14.61 years; SD = 3.34 years). Only 26.2% were married, 74.0% had a religion, 43.3% declared that they have a "parda" skin color (a word that covers different shades of brown), 26.0% said they were white, 23.3% said they were black, and 7.5% said they were indigenous. With regard to parental schooling, their mothers had a mean of 10.8 years (SD = 4.4 years), and their fathers had a mean of 11.2 years (SD = 4.5 years). Nonetheless, 12.8% of the mothers and 10.1% of the fathers were functionally illiterate.

The sample was recruited mainly in the Brazilian city of Salvador (state of Bahia), and a smaller portion was recruited in Belém (state of Pará), approximately 17 (11.3%). The populations of these two states have few sociodemographic differences (Instituto Brasileiro de Geografia e Estatística [IBGE], 2001; 2009), thereby the data were treated together. The participants were interviewed individually in their homes or work places by the first author.

Measures
Reports about attachment style were assessed using the Adult Attachment Scale, which is a Brazilian Portuguese translation by Bussab and Otta (in press) of the Collins and Read Adult Scale (Collins & Read, 1990). It is composed of 18 items that assess the type of attachment the individual establishes with other partners in adulthood.

The instrument consists of three subscales, which are treated as dependent variables: Resistance to proximity (which assesses comfort with closeness and intimacy), Distrust (which assesses how the person evaluates on the availability of others), and Anxiety (which evaluates anxiety in relationships, such as fear of being abandoned or unloved (Frias, Shaver & Mikulincer, 2015). As an example, here is an item from each variable:

a) Resistance to proximity: "I am comfortable developing close relationships with others."

b) Distrust: "I find it difficult to trust others completely."

c) Anxiety: "I often wonder whether romantic partners really care about me."

The Adult Attachment Scale was validated after this research (submited), and in this process there were only small changes. Considering that this version was used in several studies in the area of attachment that used an evolutionist approach (Silva, 2008; Ferreira, 2009; Lordelo, 2009), and that the present is an exploratory study, the scale could be used for research purposes [KMO = 0.829; Bartlett's sphericity test: χ^2 (153, N = 451) = 2740.455; p < 0.001].

Memories about the subjects' parents until the age of 16 were assessed using the Parental Bonding Instrument (Parker, in press), one of the most widely used and robust instrument for assessing the parental style dimensions of care and control (Xu, Morin, Marsh, Richards & Jones, 2016). It measures maternal and paternal styles separately, and as an example, here is an item from each variable:

a) Care: "Enjoyed talking things over with me"

b) Control: "Let me go out as often as I wanted"

It was translated by Hauck et al. (2006) to Brazilian Portuguese, but it was not validated until this moment. The authors performed functional equivalence analyses, adapting it to aspects of conceptual, item, and semantic equivalencies. Terra, Hauck, Fillipon, Sanchez, Hirakata, Schestatsky, and Ceitlin (2009) performed a confirmatory analysis in Brazil using this scale, stating that it is a reliable measure for assessing parental style. The instrument is applied to both genetic parents and other parental figures.

Those two instruments measured parental and attachment style. The result obtained by them will be discussed considering Life History Theory.

Statistical analyses
To assess attachment styles, we used Cluster Analysis and Compute Variables in SPSS18 software. Cluster analysis is an exploratory analysis, using the distance to the cluster center, to group the participants (K-Means Cluster). In this research, the attachment scores were used to do a cluster analysis. A Compute Variable analysis is also an exploratory data mining analysis, that also uses the attachment score, but this analysis involves creating new variables and sometimes changing the values of an existing one (Sarstedt & Mooi, 2014). Collins and Read (1990) created an equation to find the styles using Compute Variables, which was used here.

To verify how paternal and maternal style influence attachment, we used SEMs (non-recursive type). This is a combination of factorial analysis and regression analysis, which enables the testing of multiple relationships between latent variables at the same time (Pilati & Laros, 2007).

To determine if a hypothesized theoretical model is consistent with the data collected we used AMOS19 software (Lei & Wu, 2007). Among the metrics for assessing goodness of fit, we considered the root mean square error of approximation (RMSEA) and NFI, RFI, GFI, and AGFI values. A good fit for those metrics is between 0.9 and 0.95. Also, as reported by Melhado (2004) and Pilati and Laros (2007), RMSEA values < .05 indicate a good fit. RMSEA values between .08 and .1 indicate a reasonable adjustment. The dependent variable was attachment, and the independent variable was parental style. The final model is plausible (i.e., the sample co-variants can reproduce the population data) if the residuals are reduced (Pilati & Laros, 2007).

Results and Discussion

Attachment
To evaluate attachment in the participants, we first used a Cluster Analysis. This analysis separated the attachment in 3 groups, depending on the cluster center distance and using the mean scores of Resistance to Proximity, Distrust, and Anxiety (Table 1).

Almost halt of the sample (48%, n = 72) had a Secure Style, characterized by low Resistance to Proximity, Distrust, and Anxiety; 25.3% had an Anxious Style (n = 38), characterized by high Anxiety and medium levels of Resistance to Proximity and Distrust; and 26.7% had an Avoidant Style (n = 40), characterized by low levels of Anxiety and high levels of Resistance to Proximity and Distrust (Collins & Read, 1990).

Table 1. Final attachment clusters, with the means of each factor assigned to each cluster

	Cluster		
	Avoidant	**Anxious**	**Secure**
Resistance to Proximity	2.59	2.26	1.80
Distrust	3.15	3.15	1.97
Anxiety	1.87	3.53	1.51
n	40	38	72

Using a new form of analysis to assess attachment style (Compute Variable; Collins & Read, 1998), we found four styles, secure (n = 89, 67.9%), preoccupied (n = 13, 9.9%), dismissive (n = 18, 13.7%), and fearful (n = 11, 8.4%). Nineteen participants could not be categorized.

Both results are according the literature, half of the sample, but a more specific analysis (Compute Variable) might be more sensitive to diferences in the avoidant style, dismissive would have a low anxiety and high avoidance, while fearful would have high anxiety and high avoidance (Collins & Read, 1990).

Maternal style

Using SEMs we delineated a hypothesized model, which is shown on the left side of Figure 1. In the figures of the model, the unidirectional arrows represent the regression analysis, and the bended arrows indicate a correlation. This model was grounded in attachment theory and life history theory, which expect a relationship between attachment and maternal style. The items of the instruments were also expected to be related to their respective constructs (i.e., latent traits) and that the constructs of parental style could be related to each other.
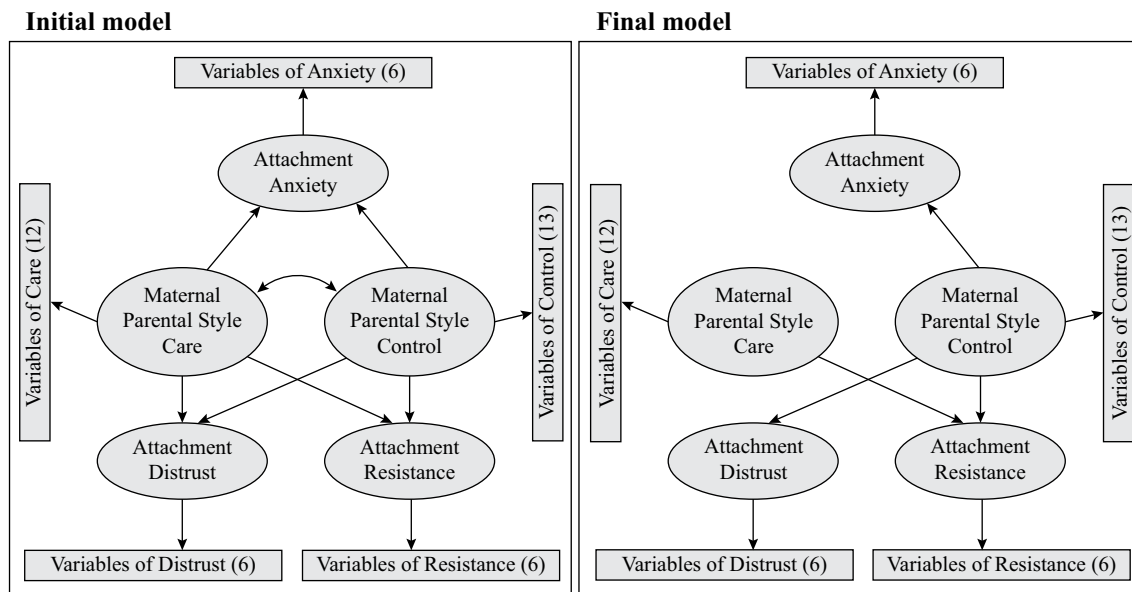
Figure 1. Conceptual and final model of the relationship between attachment and maternal style

In the conceptual model, latent control was significant at a 5% level of significance in explaining anxiety, distrust, and resistance to proximity. However, care was significant at a level of 5% only in explaining resistance. Table 2 shows the significance of the parameters of the conceptual model.

Table 2. Significance of the parameters of interest of the Conceptual and Final model of maternal style
(Figure 1)

Conceptual Model			Estimate	SE	CR	*P*
Anxiety	←	Control	1.080	.333	3.242	.001
Distrust	←	Control	1.028	,298	3.450	***
Resistance	←	Control	.479	,209	2.292	.022
Distrust	←	Care	.098	,131	.747	.455
Resistance	←	Care	-.299	,123	-2.439	.015
Final Model			**Estimate**	**SE**	**CR**	***P***
Anxiety	←	Control	1.114	.342	3.256	.001
Distrust	←	Control	1.032	.303	3.402	***
Resistance	←	Control	.496	.213	2.329	.020
Resistance	←	Care	-.312	.121	-2.581	.010

Also in Table 2, we see the significance of the parameters of the Final model. The Control dimension was more important to attachment than the Care dimension. This is an importante result, as maternal care is more often related to attachment instead of control.

The standardized regression weights between the dependent and independent variables were as followed: Anxiety ← Control: .424; Distrust ← Control: .497; Resistance ← Control: .298; and Resistance ← Care: -.295. The RMSEA was low (.082), and RFI (.495), GFI (.638), AGFI (.599), and NFI (.522) were > .5.

The right side of Figure 1 depicts the final model with significant relationships, designed using the theoretical approach, to obtain a plausible model. Control positively influenced the three latent variables of attachment, whereas the influence on Anxiety and Distrust was similar (standardized regression weights of .424 and .497). The effect was somewhat less for Resistance to Proximity (weight .298). Thus, the higher the control score, the greater the anxiety, distrust, and resistance to proximity scores. Care negatively affected Resistance to Proximity (-.295 weight), so greater Care was associated with lower Resistance.

Paternal style

Using SEMs, we could delineate a hypothesized model for the relationship between the participants' attachment and perceived paternal style, which is shown on the left side of Figure 2. On the left side is the conceptual model, in which latent Control was significant at a 5% level of significance in explaining Anxiety, Distrust, and Resistance to Proximity. However, Care was significant at a level of 5% only for Resistance.
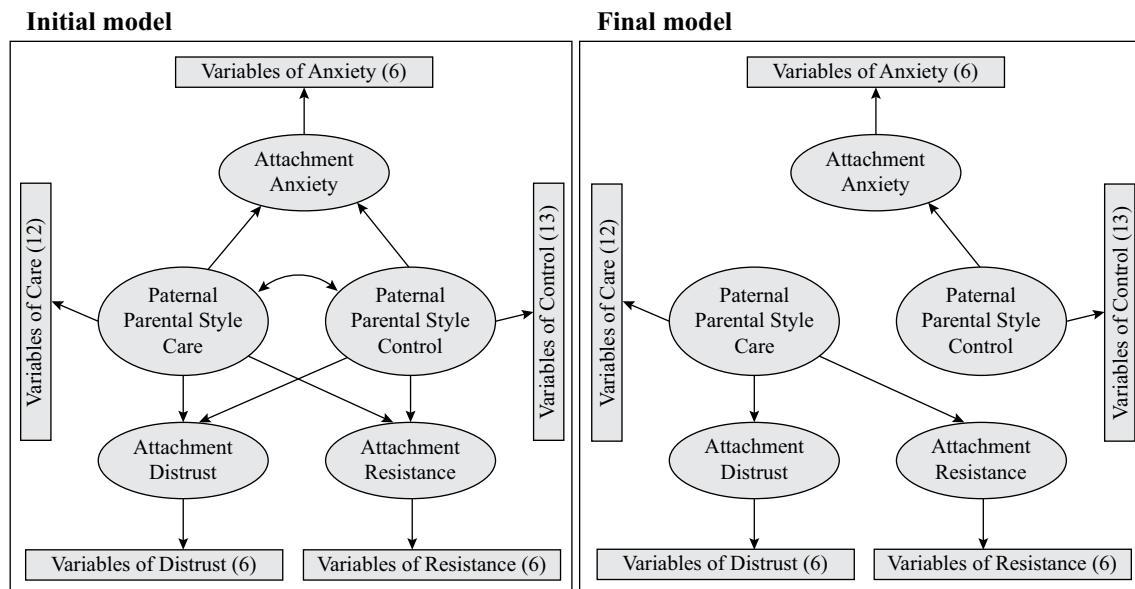

Figure 2. Conceptual and final model of the relationship between attachment and paternal style

Table 3 shows the significance of the parameters of interest of the Conceptual and Final model. The right side of the Figure 2 shows the final model with significant relationships, performed after changes were made based on the theoretical approach to find a plausible model. Control positively influenced Anxiety (regression weight of .238), so higher control was associated with increased anxiety. Care and Distrust negatively affected Resistance (-.305 and -.33 weights, respectively), so greater care was associated with lower Distrust and Resistance.

Table 3. Significance of the parameters of interest of the Conceptual and Final model of paternal style (Figure 2)

Conceptual model			Estimate	SE	CR	*P*
Distrust	←	Care	-.308	.125	-2.453	.014
Anxiety	←	Care	-.288	.176	-1.634	.102
Anxiety	←	Control	.418	.195	2.145	.032
Resistance	←	Care	-.233	.099	-2.350	.019
Final model			**Estimate**	**SE**	**CR**	***P***
Distrust	←	Care	-.324	.128	-2.530	.011
Anxiety	←	Control	.406	.194	2.096	.036
Resistance	←	Care	-.239	.100	-2.386	.017

As to the Final model (lower part of Table 3), the standardized regression weights were as followed: Distrust ← Care: -.305; Anxiety ← Control: .238; and Resistance ← Care: -.330. The Care construct was more related to the attachment variables than Control. The adjusted model had an RMSEA of .096, indicating a reasonable fit. Meanwhile, the values of the other metrics were > .45: RFI was .445, GFI was .575, AGFI was .529, and NFI was .472, what is not a good fit, but the model is supported by previous data.

The two SEMs showed differences in the relationship between parental style and attachment style with regard to the parenting figure. Maternal control mattered highly, whereas paternal control had little effect. Paternal care helped explain the attachment dimensions but not maternal care.

Those results reinforce maternal style effect in attachment, but shows a new strenght to a not usually studied variable, maternal control.

Discussion and conclusions

The goal of this research was to explore the relationship between attachment and parental styles, using Life History Theory.

Using Cluster Analysis, the percentage of secure style in our sample was 48.0%, while using Compute Variables, the percentage was 67.9%. This shows thart not only age and method of data gathering, but the specific statistical analysis can impact the results, indicating the need to exercise caution when analyzing the data. Notwith-standing, the sample was within the expected range (Bjorklund & Pellegrini, 2002; Schmitt et al., 2004; Van IJzendoorn & Bakermans-Kranenburg, 2010), showing a universal characteristic of attachment style. As a Compute Variables analysis showed a higher attachment prevalence, it might be more sensitive to diferences in the avoidance category. For this reason, we suggest its use.

Using SEMs, we were able to understand how perceived parental style and attachment style work together. We were also able to compare differences between paternal and maternal style. The two resulting models were coherent with the theoretical approach, Life History Theory, in the sense that a more controlling parent was associated with a more insecure attachment, coherent with the fast strategy. But the result shed light on important differences. Maternal control was a predictive dimension for insecure attachment in women. Higher maternal control was associated with greater Resistance to

Proximity, Distrust, and Anxiety. Care was important only for the Resistance to Proximity dimension. This result is distinct from the current parental style literature, which focus most of the time only in Care, or in their joint influence of Control and Care (Wilhelm, Gillis & Parker, 2016; Kokkinos, 2013; McDermott & Barik, 2014; Timpano et al., 2015).

The impact of high control was specifically reported to be negative in some studies (Belsky et al., 2007; Timpano et al., 2015), although it was not separated from Care. Despite this finding, paternal Care was a predictive dimension for insecure attachment in women, more so than Control. This difference in the effect of paternal and maternal styles was expected (Bourne et al., 2014), but shows how Care and Control should be considered separately in future researches.

The context of children and their parents, siblings, and environment provides different cues, influencing their self and how they perceive others, what is also coherent with Life History Theory (Hursty & Kavanagh, 2017). This shows that both parents should be considered in research and intervention, and in a country like Brazil this is especially important, as there is socialization for autonomy and relatedness at the same time (Seidl-de-Moura et al., 2013).

Three limitations of the present study should be mentioned. First, as a correlational study, drawing conclusions about cause-effect relationships between attachment and parental style is impossible. The use of SEMS only allowed finding out that the final model is not falsifiable (Pilati & Laros, 2007). Second, the parental and attachment style measures reflect current representations of parents and attachment, which can be affected by a range of biases, including current affective states or relationships with parents (Bourne et al., 2014; Zaman & Fivush, 2013). Third, the present results are limited to a female population, characteristic of the middle class of Brazil. Because each model explains the sample, the models have to be cross-validated with independent models, as suggested by Lei and Wu (2007).

Those results show that there may be separate pathways by which fathers and mothers impact the development of boys and girls (Wilhelm, Gillis & Parker, 2016), and we suggest that longitudinal studies and studies with men should be performed.

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