

Mothers and Fathers' Beliefs about Parental Investment¹

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Abstract: Parental investment increases the chance of babies' survival and ensures parents' fitness. While adaptive, it does not occur automatically and it takes various forms according to context. Parental beliefs are part of those contexts and this study aims to investigate how parents consider parental investment and their practices of investment in their children. Fifty men and 50 women with children up to six years of age answered two open questions about their conception of investment and their practices. The answers were classified as financial investment, emotional, basic care, intellectual, social-spiritual and family-individual. Men and women indicated to value and practice emotional investment most. In general, mothers reported more investment than fathers, especially with regard to basic care. There were some inconsistencies between reported beliefs and practices. These results may contribute to the study of beliefs and parental investment, especially in relation to fathers who are not always included in these studies.

Keywords: childrearing practices, parent child relations, motherhood, fatherhood

Crenças de Pais e Mães Sobre Investimento Parental

Resumo: O investimento parental aumenta a chance de sobrevivência dos bebês e garante a aptidão dos pais. Embora seja adaptativo, não ocorre automaticamente, assumindo formas diversas de acordo com o contexto. Considerando que as crenças parentais são parte desse contexto, este artigo teve como objetivo analisar crenças de pais e mães sobre investimento parental e o que relatam fazer para investir na criação de seu filho. Cinquenta homens e cinquenta mulheres com filho de até seis anos responderam a duas perguntas abertas sobre concepção de investimento e práticas realizadas. As respostas foram classificadas em: investimento financeiro, emocional, cuidados básicos, intelectual, social-espiritual e familiar-individual. Homens e mulheres indicaram valorizar e realizar mais o investimento emocional. Em geral, mães relatam investir mais que pais, principalmente em relação aos cuidados. Houve algumas incongruências entre crenças e práticas relatadas. Esses resultados podem contribuir para o estudo das crenças e do investimento parental, principalmente dos pais, que nem sempre são incluídos em pesquisas.

Palavras-chave: práticas de criação infantil, relações pais-criança, maternidade, paternidade

Las Creencias de las Madres y los Padres Sobre Inversión Parental

Resumen: Inversión parental aumenta las posibilidades de supervivencia de bebés y garantiza el éxito reproductivo. Aunque sea adaptativa, no ocurre automáticamente, asumiendo distintas formas según el contexto. Considerando que las creencias parentales hacen parte de ese contexto, la finalidad de este estudio fue analizar las creencias de padres y madres sobre inversión parental y lo que relatan hacer para invertir en la creación de sus hijos. Cincuenta hombres y cincuenta mujeres con niños de hasta seis años respondieron a dos preguntas abiertas acerca de sus concepciones de inversión y prácticas realizadas. Las respuestas fueron clasificadas como inversión financiera, emocional, atención básica, intelectual, social-espiritual y familiar-individual. Hombres y mujeres indicaron valorar y realizar más la inversión emocional. En general, las madres reportaron invertir más que los padres, especialmente con relación a los cuidados básicos. Hubo algunas incongruencias entre creencias y prácticas informadas. Estos resultados pueden contribuir al estudio de las creencias y de la inversión parental, principalmente de los padres, que no siempre están incluidos en estos estudios.

Palabras clave: prácticas de crianza infantil, relaciones padres-niños, maternidad, paternidad

Investing in children, taking care for them to develop well and healthily is a task most mothers perform in a wide range of contexts. This attitude is needed for the survival of human infants, who are fragile and dependent on

care at birth. For parents, it is also beneficial to invest in their offspring, so that children can reach adult age, reproduce and transmit their genes (Trivers, 1972), guaranteeing their aptitude.

Although parental investment can differ between men and women, partially due to biological differences (Geary & Flinn, 2001), both invest, whether direct or indirectly. Direct investment includes activities like feeding, holding on the lap, transmitting knowledge, keeping clean. Indirect investment involves guaranteeing the resources needed for survival, protecting the offspring and supporting the partner who is more involved in care (Quilan, 2007, Yeung, Linker

¹ Paper deriving from the first author's Master's thesis under the advice of the second author, defended in 2009 in the Graduate Program in Social Psychology at Universidade do Estado do Rio de Janeiro. Support: Rio de Janeiro Research Foundation (FAPERJ)

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& Brooks-Gunn, 2002). Both can be characterized as parental investment, defined by Trivers (1972) as any investment by parents in a specific descendant and which increases its chances of survival and reproductive success, but reduces the parents' capacity to invest in another descendant.

Despite historical changes, in many cultures, in general, mothers remain responsible for direct parental care, while fathers continue responsible for gaining resources to maintain the family (Brasileiro, Féres-Carneiro & Jablonski, 2002). Transformations seem to be ongoing in parental roles though, making fathers participate directly in their children's care and get closer to them.

Seabra (2007) studied fathers and mothers of children between zero and five years of age in Rio de Janeiro and aimed to investigate different aspects of paternal involvement. The results indicated that, in general, fathers were satisfied with their fatherhood practice, but beliefs that mothers were expected further involvement from them. The authors observed fathers' greater participation in education when children are younger, especially in celebrations. The presence of fathers at events or meetings without the mothers was not observed. Seabra's data revealed that fathers were involved in some daily tasks and care, but that women remained responsible for most of them.

As opposed to Seabra's findings in a Brazilian urban culture, Fouts' study (2008) of two groups of foragers in Central Africa demonstrated greater physical context and proximity between father and child when children were older. The study groups were the Aka and Bofi. Twenty-three children were observed in the first group and 35 in the second, with ages ranging between 18 and 59 months.

Besides differences between maternal and paternal participation, Keller and Chasiotis (2007) discuss factors that interfere in the intensity of maternal investment, such as the child's health and the mother's age. They indicate, for example, that older mothers invest more in their offspring than younger ones. This may be due to the fact that the former have less chance of producing new descendants and need to guarantee their reproductive success by investing intensely in the children they already have.

Another important question in the study about parental investment is its meaning for the research population. In many cases, what is valued in one context may not be in another. The parental beliefs that include this valuation are constructed across the lifetime and influenced by the expectation one has when becoming a parent, as a result of experiences with other children and the reports of other people who had these experiences. These beliefs are neither fixed nor universal, but vary according to different aspects, like the context, historical time, educational level (Lightfoot & Valsiner, 1992).

It is important to highlight that, although parental beliefs and behavior are connected, one should not establish a direct cause-and-effect relation between them. Beliefs serve as mental organizers of actions and are not obligatorily

translated into a certain way of acting because they are constructed in social relations and receive influence from different contexts, with the participation of an active subject in this construction, which could sometimes entail some inconsistencies between what that subject believes and what he does (Lightfoot & Valsiner, 1992).

According to Keller and Chasiotis (2007), parents' type of investment is related to the socialization trajectories they value. These trajectories could be focused on interdependence, characterized as perceiving the individual always as a member of a social system, which duties and obligations towards the group (s)he belongs to; or on independence, which values individualism, autonomy and self-sufficiency. The first is common in traditional rural subsistence societies, while the second predominates among urban individuals in industrial societies. Besides these two orientations, Kagitçibasi (1996) proposed a third, focused on the development of an autonomous-relational self, which involves characteristics of the two models.

Leyendecker, Lamb, Harwood and Sholmerich (2002) studied different contexts, analyzing the socialization targets of Latin mothers who migrated to the United States and Euro-American mothers. The first group of mothers emphasized good behavior qualities, while the other attached greater value to independence-oriented targets. In addition, Central American mothers attributed more importance to self-control in male children. As for Euro-American mothers of boys, qualities related to social expectations received greater emphasis, like decency and honesty for example, while mothers of girls valued self-confidence and independence more highly.

Suizzo (2002) also investigated beliefs about parental care practices, with a view to identifying a cultural parenting model in France. This model consists of shared beliefs and practices. The author studied 278 Parisian mothers and 177 fathers, applying an inventory she had authored about the importance granted to different practices. The results showed that the practices parents value most highly include talking to the child, giving the child a daily bath and giving toys that stimulate the senses. The author considered that she found three cultural models: stimulation, which as the name says is related to the valuation of stimulating the child's development; presentation in public, which refers to concerns with the child's compliance with social expectations; and responsiveness, related to the importance of parents' immediate responses to the child's needs and to the bond between parents and children. The first model was associated with the number of children, demonstrating that, the more children, the greater the value attached to stimulation. The responsiveness and bonding model was valued more highly by mothers than father and by older fathers. Younger fathers, together with fathers with a lower educational level, attached more value to public presentation.

These results may indicate that the fact of having many children makes parents value stimulation, perhaps because they perceive the siblings' beneficial stimulus.

Also, apparently, mothers in general and older fathers, possibly because they are more experienced, consider proximity and readily responding to the child more important. Younger fathers and fathers with a lower education level, on the other hand, prioritize the way children present themselves to other people. This may reflect some insecurity about being criticized by society with regard to how one is educating one's child.

In Brazil, literature about parental beliefs, care practices and socialization trajectories is increasing (Diniz & Salomão, 2010; Seidl-de-Moura et al., 2008; Seidl-de-Moura et al., 2009; Bandeira, Seidl-de-Moura & Vieira, 2009; Vieira et al., 2010). Seidl-de-Moura et al. (2009), in a study of 200 primiparas in Rio de Janeiro, asked them to answer a question from the Socialization Targets Questionnaire, where they should indicate what qualities they would like their child to have as an adult. Answers were analyzed according to five categories: self-improvement, self-control, emotiveness, social expectations and good behavior. The self-improvement category comprised three subcategories: (a) physical and emotional wellbeing, (b) development of personal and economic potential and (c) psychological development (or independence). Emotiveness contained two: (a) emotional warmth and (b) close relations to the family. Social expectations were organized as follows: (a) avoidance of illegal behavior and (b) personal integrity and religious values. Finally, the category good behavior included two subcategories: (a) respect and (b) family-related obligations. The mothers also answered Suizzo's inventory of beliefs about care practices (2002), where three dimensions were identified: stimulation, appropriate presentation in public and responsiveness and bonding. In the target questionnaire, the mothers valued the self-improvement category more highly, which is focused on independence. Social expectations ranked second, which are related to the relation with the other. The authors also found a difference in the personal integrity and religious values subcategory depending on the infant's gender: mothers of boys valued this aspect more highly than mothers of girls. In the inventory of beliefs about practices, the most valued practices were appropriate presentation in public and stimulation. These results indicated that both independence and interdependence are valued, suggesting these mothers' autonomous-relational orientation (Kagitçibasi, 1996). In the study by Bandeira et al. (2009), involving 30 couples from Rio de Janeiro, the same target inventory was used. Findings also showed that both parents value self-improvement and social expectation, demonstrating that they want their children to relate well in society, but without forgetting the desire for autonomy.

Diniz and Salomão (2010) also studied socialization targets of mothers and fathers for their children and attempted to analyze the influence of the child's gender on these targets. The authors studied couples living in João Pessoa, Paraíba, Brazil. Their results are in line with Seidl-de-Moura et al. (2009) and Bandeira et al. (2009). The targets both

fathers and mothers mentioned most were self-improvement and social expectations. Gender differences were found in parental targets; the parents indicated more social expectation targets for sons than for daughters.

Literature about beliefs is extensive, but no studies were found that addressed beliefs about investment. In view of the importance of parental investment, the importance of parents' beliefs about development and the lack of studies on the relation between both, the objective in this study is to analyze fathers and mothers' beliefs about parental investment and their reports on what they do to invest in their child's upbringing.

Method

Participants

Research participants were 50 men and 50 women, who had at least one child of up to six years of age, were over 18 years of age and lived in the State of Rio de Janeiro. They were contacted through indications and, after data collection, suggestions were requested about other parents who could participate. The snowball technique was used. Any person who had at least one child of up to six years old was a possible participant. If (s)he had more than one child in this age range, the youngest child was focused on in the research.

The participating fathers' mean age was 35.3 years ($SD = 6.56$) and the mothers' 33.2 years ($SD = 6.37$). The mean number of children was 1.7 (1.05) and 1.58 (0.83) for fathers and mothers, respectively. On average, the mothers spent 5.22 hours per day with their children ($SD = 2.60$) and the fathers 3.75 hours ($SD = 2.81$). The mothers went out to work less days per week (Father: $M = 5.32$ and $SD = 1.33$; Mother: $M = 4.32$ and $SD = 1.88$) and less hours per day (Father: $M = 8.52$ and $SD = 2.62$; Mother: $M = 6.94$ and $SD = 3$). All participating fathers went out to work and, among the mothers, five did not work or were on leave. Regarding education, 66% of mothers and 46% of fathers had at least finished higher education and only eight men and four women had not finished secondary education.

Most participants were married (68% of women and 72% of men) and lived with the father/mother of their youngest child (82% of mothers and 92% of fathers). All participants, except for three fathers, lived with the son or daughter studied. As for the children, 42% and 48% were female for mothers and fathers, respectively.

Instruments

The following instruments were used.

Form to collect participants' sociodemographic data and characteristics. Includes sociodemographic data about the participants, such as age, marital status, education. Also covers the following information, which was considered important to characterize the sample: number of children,

gender of the youngest child, if the participant lived with this child, if the participant lived with the child's father (mother), how many days (s)he worked per week, how many hours (s) he worked per day and how many hours (s)he spent with the youngest child.

Beliefs in parental investment: Interview with two open questions: (a) "A couple's new baby is born. What do you think they should do to invest in their child's upbringing since childhood?"; (b) "And you, what have you done to invest in your child's upbringing so far?"

Procedure

Data collection. After receiving a favorable opinion from the ethics committee, the potential participants, who had been indicated in advance, were contacted and invited to participate. During this first contact, generally by phone, general information about the research was provided and, in case of interest in participating, a face-to-face meeting was arranged at the participant's convenience. On that occasion, the research objectives and methods were explained in further detail and, in case of agreement, the participant signed the Informed Consent Term, after which the interview started. The interviewees answered freely, answers were audio-recorded and later transcribed by the researcher.

Data analysis. Content analysis was applied, in which the categories were created based on the investigation of answers to the open questions the participants were asked. The 100 participants' answers to the two questions were surveyed; then, six categories were defined that could indicate different types of parental investment. These are:

Financial investment: related to savings, to financial planning when one has children and the expenses involved in raising a child.

Emotional investment: the emotional commitment that is present when raising a child. Covers the full range of affective involvement.

Investment in basic care: concern with primary care, including: taking to the doctor, keeping clean, feeding, breastfeeding, protecting, putting to sleep.

Intellectual investment: related to concern with the child's cognitive development, involves answers like how to seek a good school, investing for the child to progress in life, through course participation, educational toys, stimulation, encouragement of reading.

Social-spiritual investment: involves aspects related to contact with other people, living in society, the importance of knowing how to behave, of having moral values and a religious belief.

Family-personal investment: focused on investment in the parents, in the family, in the family environment offered to the child. Involves answered related to the importance of family participants, of the parents' wellbeing.

The first author analyzed the interview reports. For the sake of reliability analysis, a second evaluator analyzed 20%

of the answers independently. This evaluator was a member of the research groups the authors are part of. The agreement rate amounted to 92%. Based on the coding of the categories, scores were calculated in each, corresponding to the ratio of the number of answers in one category on the total number of answers the participant gave to the question. To give an example:

Mother 03 - I think that the couple should primarily invest in *having a calm, peaceful environment* (family), it's... *to establish the child's personality* (social), *give a lot of love* (emotional), *a lot of caressing* (emotional), it's... *investing in education* (intellectual), it's... *in his studies* (intellectual), *in orientation* (social), *being participatory* (emotional), *a friend* (emotional), *right, to the child, investing in health* (care).

Total answers = -10; *N* answers about family investment (FI) = 1, Score in category IV = 0,10; *N* answers about social investment (SI) = 2, Score in SI = 0,20; *N* answers about emotional investment (EI) = 4; Score in EI = 0,40; *N* answers about intellectual investment (II) = 2, Score in II = 0,20; *N* answers investment in care (CI) = 1, Score in CI = 0,10.

Initially, data were treated with the help of descriptive statistics (means and standard deviations). To investigate associations between ideal investment (beliefs), actual investment (report of what one does) and participants' sociodemographic variables and characteristics, Pearson's correlation tests were applied. To check for differences between fathers and mothers' answers, univariate analyses (GLM) were developed. To verify differences between answers to questions 1 and 2 for fathers and mothers separately, the t-test for dependent samples was applied. Alpha was set at 0.05 in the statistical analyses.

Ethical Considerations

The research was undertaken in compliance with the standards of the National Research Ethics Committee (CONEP, National Health Council, Ministry of Health, Brazil) and the Professional Ethics Code of Psychologists. As the study involves human beings, this research was carefully elaborated to attend to the guidelines established in National Health Council Resolution 196/96 and its expansion. The study was submitted to the Research Ethics Committee at *Universidade do Estado do Rio de Janeiro* (UERJ) under protocol number 035.2008.

Results and Discussion

The tables presented in this part display results for beliefs about investment practices and the reported investment practices. In the text, first, results are commented and discussed about beliefs, identified as ideal, valued or important investment. Then, results are presented and discussed for reported practices, also called actual or real investment.

Concept of Investment

In total, the mothers gave 361 answers to the question "A couple's new baby is born. What do you think they should

do to invest in their child's upbringing since childhood?", with a mean 7.2 answers per participant, while the fathers gave 242 answers, with an average 4.84 answers. The means and deviations of the scores in each of the categories are displayed in Table 1, in the two columns under the header *ideal*.

With regard to the ideal valued investment, fathers and mothers obtained a higher mean score on emotional investment, related to the complete affective involvement in the process of raising a child. In the second place, intellectual investment stood out among women, followed by

social-spiritual, family-personal, financial and, finally, investment in basic care. Among men, the ranking was as follows: intellectual, social-spiritual, family-personal, care and financial. This result is interesting as, traditionally, mothers were responsible for primary care and fathers were in charge of financial support, working to sustain the family (Brasileiro, Féres-Carneiro, & Jablonski, 2002). In the present study, in contrast, the parents indicated that they attribute less value to the financial aspect, and the mothers attribute less importance to basic care actions.

Table 1

Mean and Standard Deviation of Fathers and Mothers' Answers About Type of Investment Valued (Ideal) and Investment in Practice (Real)

Investment	Mothers		Fathers	
	Ideal	Real	Ideal	Real
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Financial	0.10 (0.22)	0.08 (0.18)	0.08 (0.19)	0.09 (0.21)
Emotional	0.27 (0.31)	0.29 (0.25)	0.34 (0.32)	0.26 (0.26)
Care	0.07 (0.14)	0.15 (0.17)	0.10 (0.17)	0.12 (0.19)
Intellectual	0.21(0.27)	0.11 (0.18)	0.19 (0.23)	0.21 (0.25)
Social-Spiritual	0.17 (0.23)	0.26 (0.25)	0.14 (0.24)	0.25 (0.28)
Family-Personal	0.16 (0.28)	0.06 (0.12)	0.12 (0.26)	0.01 (0.03)

Univariate analyses (GLM) were developed to check for differences between fathers and mothers, as well as differences related to the participants' sociodemographic variables and characteristics, in relation to the investment types valued. Significant variation was observed in the importance parents granted to social and spiritual investment, related to the infant's gender, $F(1,48) = 5.02, p < 0.05$. With a mean score of 0.22 ($SD = 0.30$), fathers of girls attributed more importance to this kind of investment than fathers of boys, with a mean score of 0.07 ($SD = 0.16$). It seems that the men in this sample are more concerned with moral education, character, good behavior, religious education for daughters than for sons, differently from findings on Euro-American mothers in the study by Leyendecker et al. (2002) and also on mothers in Rio de Janeiro (Seidl-de-Moura et al., 2009), who valued social expectations and religious values higher for boys than for girls.

Results of the remaining comparisons were not significant, indicating that, in general, the participant's gender and education did not influence the importance attributed to the different types of investment. Regarding education, perhaps no significant difference was found due to the homogeneity of the sample with regard to this variable. On average, the participants' education level was high, with more than half of the participants who finished higher education.

Pearson's correlations were determined between the investment types and the following variables: participants' age, child's age, hours worked per day, days worked per week, hours spent with the child per day and number of children. Table 2 shows the significant results found for mothers and

fathers. The results obtained reveal moderate correlations and this should be taken into account in the following discussion.

In view of the ideal, valued investment results, the more hours the mother has available to spend with her child, the more she values investment in care. Perhaps this reflects her own experience as, having more time available, she will probably apply this care more in daily reality with her own child. The number of children was positively correlated with social-spiritual investment, which demonstrates greater valuation of this investment among mothers with more children and perhaps indicates an underlying religious orientation. As for negative correlations, it seems that, the younger the child, the more the mothers value investments in care. This is expected, as younger children need more care. In this phase, as the mothers are breastfeeding and are concerned with different vaccines, among other aspects related to small children's needs, it is understandable that they consider this type of investment very important.

An inverse relation exists between the time mothers spend with their children and the valuation score of intellectual investment. This result may be related to the fact that mothers with less time available need to trust in alternative care for their children; hence, concern with seeking good teaching institutions would be stronger for these women. Also, a negative correlation was found between intellectual investment and emotional investment. In other words, the more the mothers value their children's cognitive development, the less importance they attribute to emotional aspects and bonding as a form of investment.

Table 2
 Significant Correlations between Investment Types and between the Later and Participants' Variables

Parent	Investment type	Associated variable	r
Mother	Ideal emotional investment	Ideal intellectual investment	-0.44
	Investment in ideal care	Hours spent with the child	0.36
	Investment in ideal care	Child's age	-0.39
	Ideal intellectual investment	Hours spent with the child	-0.35
	Ideal social-spiritual investment	Number of children	0.28
	Real emotional investment	Investment in real care	-0.30
	Real intellectual investment	Child's age	0.40
	Real social-spiritual investment	Number of children	-0.30
Father	Ideal emotional investment	Ideal intellectual investment	-0.47
	Ideal social-spiritual investment	Father's age	0.30
	Real emotional investment	Child's age	-0.36
	Real emotional investment	Number of children	-0.36
	Investment in real care	Real social-spiritual investment	-0.34
	Real intellectual investment	Child's age	0.32

Note. $p < 0.05$.

Among the fathers, less significant correlations were observed than among the mothers. A positive correlation was identified between age and social-spiritual investment, signaling that older fathers, in comparison with younger ones, attach greater value to aspects related to the child's good social life and good public behavior. The opposite was found among French parents in Suizzo's research (2002), where younger fathers put greater emphasis on appropriate public presentation. Finally, like the mothers, fathers who emphasize emotional investment attribute less value to intellectual investment.

Investment Practices

Regarding the question "What have you done to invest in your child's upbringing so far?", 353 answers were registered for the mothers and, again, less answers for the fathers, 252. Mean answer rates corresponded to 7.06 and 5.04 answers per participant for mothers and fathers, respectively. This seems to be related to the fact that, in general, men spend less time with their children, as they spent more time at work than women and perhaps had fewer opportunities to practice certain types of investment. The means and standard deviations per investment type are displayed in Table 1, in the two columns under the heading *real*.

As for the type of investment practices, men and women show some differences. The mothers revealed a higher mean score on emotional investment practices, followed by social and religious aspects, basic care, intellectual, financial and, finally, family-personal aspects. Fathers seem to invest somewhat more in emotional aspects, together with social and spiritual aspects, followed by intellectual aspects, care, the financial part, and very little in family-personal investment. It seems that participants in this sample attempt to spend time with their children, be friends, give affection and also orientations, conversations, teaching good habits, giving

examples etc. They did not report investments in themselves and in family relations with that much intensity though.

Univariate analyses (GLM) were developed to check for differences between fathers and mothers, as well as differences related to participants' sociodemographic variables and characteristics with regard to the investment types they reported in practice. The type of participant (father or mother) showed to be a significant factors in intellectual investment scores, $F(1,98) = 4.42, p < 0.05$. The means corresponded to 0.21 (0.26) and 0.12 (0.19) for fathers and mothers, respectively. Men report more intellectual investment in their children than women, that is, the search for good schools, courses, emphasis on stimulation is more frequent among fathers.

In the sample of mothers, the gender factor was associated with investments in care, $F(1,48) = 4.82, p < 0.05$, and the father's contact with his child was associated with intellectual investment, $F(1,48) = 4.86, p < 0.05$. The mothers of boys ($M = 0.20; SD = 0.19$) indicate more investments in basic care than the mothers of girls ($M = 0.09; SD = 0.14$). Also, mothers who do not live with their child's father ($M = 0.24; SD = 0.30$) report more intellectual investment than mothers who live with the child's father ($M = 0.09; SD = 0.14$). In a way, this result supports the above on fathers' greater intellectual investment in their children. Perhaps mothers who do not live with their child's father attempt to invest more in cognitive aspects, in stimulation, with a view to compensating for this absence, or even due to a lack of option. Without anyone to be concerned with the search for good schools, for example, the only alternative is for the mother to do this.

Pearson's correlations, displayed in Table 2, between the types of investments and the participants' same sociodemographic variables and characteristics complete these results. For the group of mothers, the older their children, the more they report intellectual investments in them. This result is understandable, as this category includes activities that apply

better to somewhat older children, like enrolling in courses, encouraging reading, monitoring homework, among others.

The greater the mothers' emotional investment, the less they practice basic care. It seems that concern with taking to the doctor, feeding, dressing and protecting can lead to lesser emphasis on affective aspects. Also, as observed, the more children, the lesser the investment in orientation, in exposure to contact with other people and in religious education, That is opposed to another result found in this study, showing a significant positive correlation between the number of children and the valuation of social-spiritual investment. The intent to practice this investment may exist, but more children may turn this task harder to accomplish.

As regards the results found for the fathers, like the mothers, the older the children, the more the fathers report intellectual investments. In the study by Seabra (2007), the opposite was verified, that is, fathers were more engaged in school issues when children were younger. On the other hand, the older the children, the lesser the investment in the emotional aspect, like caressing, being there, participating in the child's life. This result may go against the results Fouts (2008) found in foraging peoples in Africa; that author identified greater proximity and physical contact between fathers and children when the child was older. In the present study sample, participants may believe that demonstrations of affect are more necessary in the initial development phases, but are not that essential as children grow up. In addition, the greater the investment in affective aspects, the lesser the investment in cognitive aspects will be, confirming the result with regard to beliefs. Likewise, what the number of children is concerned, the more children the parents had, the less they reported aspects related to dedication, presence and affect. This may be related to men's lack of time since, as observed in this sample, they already spend less time with their children and, the more children, the more this attention has to be divided. A negative correlation was found between investment in basic care and social aspects and the spiritual question, indicating that, the more is invested in health, protection, feeding for example, the less the fathers invest in talking, orienting and teaching the children good habits.

Table 3

Investment Categories with Difference between what is Valued (Ideal) and Practiced (Real)

Participant	Categories	Ideal	Real	<i>t</i>
		Mean (SD)	Mean (SD)	
Mother	Care	0.08 (0.14)	0.16 (0.18)	-2.98*
	Intellectual	0.22 (0.28)	0.12 (0.19)	2.40*
	Social-spiritual	0.17 (0.23)	0.26 (0.25)	-2.09*
Father	Social-spiritual	0.14 (0.24)	0.25 (0.29)	-2.06*

Note.* $p < 0.05$.

As observed, the mothers seem to perform more care tasks like cleaning, feeding etc. than what they reported as important activities. This may be so natural to them that, when questioned about one should do to invest in a child, this type of investment is not easily considered, as they find

In general, differences were found in parental beliefs and practices in comparison with other studies (Fouts, 2008; Leyendecker et al., 2002; Suizzo, 2002) in other contexts. These results prove the non-universal and non-static nature of beliefs. When comparing men and women, curious results were found, which indicate men's greater concern with basic care, although these are still practiced more intensely by women. It seems that mothers still invest somewhat more in their children, mainly with regard to basic care, perhaps also due to the additional time they have to spend time with their children, as they generally spend less time outside the home to work.

Nevertheless, there seems to be a trend towards fathers' greater participation. These fathers may be practicing fatherhood with signs of change, like observed among the fathers in Seabra (2007). The considerable affective investment by men too is very intriguing, as this does not fit into the usual picture, and they now seem to be more emotionally connected with their children.

According to the results presented and considering the socialization trajectories reported in Keller and Chasiotis (2007), there may be a trend for participants in this research to present a relational orientation, as affective aspects, which involve caressing and being there, were both valued and practiced. Similarly, social investment was frequently reported as a type of investment that is put in practice, demonstrating concern with interpersonal relations and life in society, which is also peculiar to relational trajectories. The emphasis on cognitive issues, on concern with school, incentives and stimulation, however, may indicate a double orientation, characterizing the autonomous-relational model for fathers and mothers in this study, in line with the results of other Brazilian studies (Seidl-de-Moura et al., 2009; Bandeira et al., 2009).

Relation between Valued Practices and Reported Practices

In each category, *t*-tests for dependent samples were performed to check for possible differences between what the participants said was important and what they actually reported doing. The results are displayed in Table 3.

it both basic and necessary. When they are asked about their investment in their child, however, and when they start to think about their routine with the child, these basic care actions, like cleaning, feeding, protecting, seem to emerge more frequently. Also, these mothers believe that putting

their children in good schools and encouraging them to study are important aspects, but they value this intellectual investment more than they practice it. The opposite is the case for social-spiritual investment; in this case, they say that they practice orientation, teaching good manners and how to live in society more than what they report as being important. With regard to the fathers, like the mothers, they say that they practice more activities for the sake of orientation, teaching and religious education than what they reported as important actions for parents.

These results can confirm the existing non-linearity in the relation between beliefs and practices, showing that one's thoughts are not always in line with one's actions (Lightfoot & Valsiner, 1992). This is also related to each person's expectation. People often want to do something they find important, but they may not always be able to.

Final Considerations

This study builds on research about parental beliefs in Brazilian groups and specifically contributes to the study of beliefs about parental investment, mainly with regard to fathers, who are often left aside in such research. Some limitations need to be mentioned though, as other aspects that could affect the theme under analysis, like the socioeconomic level, family and marital situation, among others, were not addressed, besides the small number of participants, mostly with high education levels. Therefore, further research is needed, comparing people from different socioeconomic levels or contexts, like urban and rural for example. Likewise, observational studies would be interesting to verify not only the difference between what parents consider important and what they say they practice, but between what they value and what they actually do. This was a first step in the attempt to investigate beliefs about parental investment, relevant in the academic sphere because of the broader research perspective on beliefs and practice and on childrearing differences between fathers and mothers.

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Received: Jul. 15th 2011

1st revision: May 07th 2012

2nd revision: Sept. 17th 2012

Approved: Sept. 20th 2012

How to cite this article:

Bandeira, T. T. A., & Seidl-de-Moura, M. L. (2012). Mothers and fathers' beliefs about parental investment. *Paidéia (Ribeirão Preto)*, 22(53), 355-363. doi:<http://dx.doi.org/10.1590/1982-43272253201307>