Father Involvement: Construction of a Theoretical Model Based on a Literature Review

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Abstract

An ample body of scientific evidence exists, documenting the importance of the father-child relationship. The objective of this study was to develop a theoretical model of father involvement, organized according to the principles of Structural Equation Modeling, which require specification of the variables associated with the central construct, based on empirical data. In 2015, a systematic search was conducted in the databases APA PsycNET, Bireme, PEPSIC, Web of Science and IndexPsi *Periódicos*, using the descriptors "involvement" and "father", crossed with "measure", "scale", "tool" or "instrument", in both the English and Portuguese languages. There were no restrictions on the year of publication. In total, 39 complete texts were located, that included data on father involvement, (b) factors affecting father involvement and (c) impacts of father involvement on other variables. The model presented synthesizes the results of these studies, representing an advance in theory development in this area. This model increases the visibility of conceptual issues about father involvement and its correlates, and, following empirical testing, may contribute to the improvement of intervention programs for fathers. **Keywords**: Father involvement, theoretical model, development, wellbeing.

Envolvimento Paterno: Construção de um Modelo Teórico Baseado em uma Revisão da Literatura

Resumo

Um corpo amplo de evidências científicas já existente documenta a importância da relação pai-filho. O objetivo deste estudo foi desenvolver um modelo teórico de envolvimento paterno, organizado de acordo com princípios de Análise de Equações Estruturais, que requerem especificar as variáveis associadas ao construto central, com base em dados empíricos. Em 2015, foi realizada uma busca sistemática nas bases de dados eletrônicas APA PsycNET, Bireme, PEPSIC, *Web of Science e IndexPsi* Periódicos, usando os descritores "envolvimento" e "paterno", cruzados com "avaliação" ou "instrumento", nos idiomas inglês e português. Não foram impostas restrições em relação ao ano de publicação. Foram encontrados 39 textos completos que incluíam dados empíricos sobre o envolvimento paterno. As informações encontradas foram agrupadas em três categorias: (a) dimensões do envolvimento paterno, (b) fatores que afetam o envolvimento paterno e (c) impactos deste envolvimento sobre outras variáveis. O modelo apresentado sintetiza os resultados dos estudos e representa um avanço no desenvolvimento teórico na

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área. Este modelo aumenta a visibilidade de questões conceituais sobre o envolvimento paterno e seus correlatos, e, depois da sua testagem empírica, poderá contribuir para o aprimoramento de programas de intervenção para pais.

Palavras-chave: Envolvimento paterno, modelo teórico, desenvolvimento, bem-estar.

Envolvimiento Paterno: Construcción de un Modelo Teórico Basado en una Revisión de la Literatura

Resumen

Un cuerpo de evidencia científica ya existente documenta la importancia de la relación padre-hijo. El objetivo de este estudio fue desarrollar un modelo teórico de envolvimiento paterno, organizados de acuerdo con los principios de la Análisis de Ecuaciones Estructurales, que requieren especificar las variables asociadas con el constructo central, basada en datos empíricos. En 2015, se realizó una búsqueda sistemática en las bases de datos electrónicas *APA PsycNET, Bireme, PEPSIC, Web of Science e IndexPsi Periódicos*, utilizando los descriptores "*envolvimento*" y "*paterno*", cruzados con "*avaliação*" o "*instrumento*", en Inglés y Portugués. No hubo restricciones en el año de publicación. Se encontraron 39 textos completos que incluían datos empíricos sobre el envolvimiento paterno, (b) factores que afectan el envolvimiento paterno y (c) el impacto de este envolvimiento en otras variables. El modelo sintetiza los resultados de los estúdios y representa un avance en el desarrollo teórico del área. Este modelo aumenta la visibilidad de las cuestiones conceptuales sobre el envolvimiento paterno y sus correlatos, y, después de su comprobación empírica, puede contribuir a la mejora de los programas de intervención para los padres.

Palabras clave: Envolvimiento paterno, modelo teórico, desarrollo, bienestar.

Researchers' interest in studying father involvement is increasing, especially in recent decades (Volker, 2014). When initial studies on this question appeared in the academic literature, researchers focused on the effects of fathers' physical presence versus absence in the family environment (Cia, 2009), comparing indicators of child development in both situations. Starting in the 1990s, in addition to the focus on face to face interactions between fathers and their children, two further concepts were introduced: (a) accessibility, which captures the extent to which the father is both physically and psychologically available to his child, and (b) responsibility, which involves tasks that the father performs, to guarantee his child's care and welfare, such as taking the child to the doctor or maintaining relationships with paid caregivers (Lamb, 1997; Pleck, 2010). Currently, father involvement is understood as a multidimensional construct, covering a range of skills and encompassing

affective, cognitive and ethical dimensions of the father-child relationship, and which involves observable behavioral components that can be either direct (father-child interactions) or indirect such as financial support, or psychological support to the mother (Pleck, 2007).

Although there is a considerable body of literature on the concept of father involvement, there is not yet a theoretical model of father involvement, indicating the relationship between this construct and other variables (Pleck, 2007; 2010). According to Pasquali (2010), the absence of an empirically-tested theoretical model makes it difficult to build effective tools to guide professional practice and to improve the quality of research in a given area.

A criterion for the construction of scientific, theoretical models is that they can be empirically tested. A psychometric approach to the development and evaluation of such models is through the use of Structural Equation Models (Byrne, 2010). Using this approach, initially the researcher examines empirical studies on the subject, to obtain evidence about the dimensions of the phenomenon of interest and relations between this phenomenon and other variables. Next, the researcher proposes a model that indicates probable links among these variables (Byrne, 2010; Kline, 2011). Thus, the objective of the present study was to construct an initial theoretical model of father involvement that integrates results of empirical studies, indicating: (a) the dimensions of father involvement, (b) factors that may affect father involvement, and (c) the possible impacts of father involvement on other constructs (outcomes).

Method

A literature search was conducted from February to March, 2015, using the following databases: APA PsycNET, Bireme, PEPSIC, Web of Science (using the *portal de periódicos CAPES*) and IndexPsi Periódicos. The descriptors used, in Portuguese, were: "envolvimento" and "paterno" and "avaliação" or "instrumento". In English, the descriptors used were: "father" and "involvement" and "measure" or "instrument" or "scale" or "tool", with the aim of finding studies with empirical evidence on the subject. No limit was imposed on the date of publication. Only articles for which the full text could be acquired were considered for analysis, as articles must pass through a peer review process, to be published, and the full article contains important information that is unavailable in abstracts. In addition, the empirical information reported in these articles had to contribute to identifying: (a) the dimensions of father involvement, (b) factors that affect father involvement, or (c) impacts of father involvement on other variables. Two researchers analyzed the articles and reached a consensus (Anfara, Brown, & Mangione, 2002) about the articles that met these criteria.

Of the 95 articles initially encountered, 41 were excluded because the full text was not available. During the analysis process, a further 15 articles were excluded, because they did not contain empirical results that were relevant to the objectives of this study, resulting in a final total of 39 articles for analysis.

Results

Dimensions of Father Involvement

To construct a unified theory of father involvement, it is important to examine how different researchers understand and operationalize this concept. In seven articles that focused on the creation or evaluation of psychometric instruments to measure father involvement, the authors examined empirical data to confirm or reject their expectations concerning this construct (see Table 1).

Wysocki and Gavin (2004), together with other authors, highlighted the importance of evaluating both the quantity and the quality of father involvement (Finley & Schwartz, 2004; Gomez & Leal, 2007). For example, Finley and Schwartz (2004), and Gomez and Leal (2007) analyzed the emotional quality of the fatherchild relationship, as experienced by the father.

In addition, father involvement includes "direct" activities, involving face-to-face interactions with the child, and "indirect" activities, encompassing tasks or interactions with others, in the interests of the child. With respect to direct involvement, Escribano et al. (2013) highlighted fathering practices related to child discipline and supervision. Finley and Schwartz (2004) also investigated direct fathering, focusing on actions related to the child's homework. In addition, they investigated indirect involvements, examining financial support provided to the family. In three of the studies (Dick, 2004; Halme et al., 2010; Ly & Goldberg, 2014), father involvement was operationalized based on concepts proposed by Lamb (1997): interaction (direct involvements), accessibility and responsibility (indirect involvements).

Other scholars drew on more than one theory to construct their instruments. In addition to using Lamb's (1997) definition, Ly and Goldberg (2014), for example, examined fathers' *cognitive* involvement, while Dick (2004), Finley and Schwartz (2004), and Gomez and Leal (2007) investigated fathers' *emotional* involvement. Finally, Dick (2004) verified fathers' *social functions* (fathers' contributions to their child's social adaptation, involving moral, gender, and financial issues).

Factors Affecting Father Involvement

In 15 of the studies on father involvement, the researchers reported evidence on factors that appear to influence the father-child relationship. These factors are varied (see Table 2), including aspects of the father's general living conditions, together with indicators of the father's and the mother's characteristics and abilities. *Factors Related to the Fathers*. Many investigators have examined characteristics of the fathers that affect the father-child relationship. Broger and Zeni (2011), for example, found that fathers who lived with their children were more strongly engaged parents, compared to those who did not reside with their children (Grzybowski & Wagner, 2010). Although divorced fathers have a lower level of involvement, Warpechowski and Mosmann (2012) reported that these fathers had a positive view of their parenting role, and desired a greater participation in the lives of their children.

The father's age (Broger & Zeni, 2011) and educational level (Grzybowski & Wagner, 2010; Silva & Aiello, 2009) are also correlated with

Table 1

Description of the Studies Grouped in the Category "Dimensions of Father Involvement".

Reference	Country	Participants	Child's age	Dimensions of father involvement that were evaluated
Wysocki & Gavin (2004)	USA	224 couples (father and mother) – child with a chronic disease	2 - 18 years	Quantity of father involvement
Finley & Schwartz (2004)	USA	2353 men and women	R*	Measure 1: Quality of father's affective involvement Measure 2: Emotional, social, and spiritual involvement; Financial, ethical responsible, and protective involvement; Guidance in- volvement
Gomez & Leal (2007)	Portugal	105 fathers and 107 mothers, during pregnancy	G**	Prenatal attachment
Escribano, Aniorte, & Orgilés (2013)	Spain	423 children	8 - 12 years	Parental Involvement; Positive Parenting; Inconsistent Discipline; Poor Supervision
Dick (2004)	USA	311 men	R*	Positive Engagement; Positive Emotional Responsiveness; Negative Engagement; Moral Father Role; Good Provider Role; Gender Role Model; Androgynous Role Model; Accessible Father; Responsible Father
Halme, Tarkka, Paavilainen, Nummi, & Åstedt-Kurki (2010)	Finland	1084 fathers	3 - 6 years	Shared activity of father and child; Enjoy- ment of engagement; Potential engagement; Daily confrontations related to engagement.
Ly & Goldberg (2014)	USA	101 fathers of children with atypical development	2 - 17 years	Avoidance; Involvement with child's thera- peutic activities

Note. *R = a retrospective study; participants described interactions they had with their parents, in the past. **G = data were collected during the gestation of the child; the parents were expecting a child.

Reference	Country	Participants	Child's age	Factors affecting father involvement
Silva & Aiello (2009)	Brazil	13 fathers, each with a mentally disabled child	2 - 4 years	Father: educational level
Brandão & Figueiredo (2012)	Portugal	105 fathers	0 - 1 month	Father: practical involvement at the time of the child's birth
Cia & Barham (2006)	Brazil	58 fathers	10 - 14 years	Father: number of hours and work period (work shift)
Warpechowski & Mosmann (2012)	Brazil	3 divorced fathers	3 - 16 years	Father: marital status
Broger & Zeni (2011)	USA	54 fathers of chronically ill children	Up to 21 years	Father: marital status, age, and educational level
Grzybowski & Wagner (2010)	Brazil	234 fathers and mothers, following separation or divorce	6 - 12 years	Father: cohabiting with the child, educational level, type of occupation Father-mother relationship: quality of the marital relationship
Habib & Lancaster (2010)	Australia	78 fathers – expecting first child	G*	Father: father's emotional involvement during the gestation period
Van Ee, Sleijpen, Kleber, & Jongmans (2013)	Netherlands	80 fathers with posttraumatic stress	18 - 42 months	Father: mental health
Cauce, Conger, King, & Widaman (2011)	USA	450 children of two-parent Mexican-origin families	5 th grade	Father: adherence to cultural norms
Shapiro, Krysik, & Pennar (2011)	USA	197 mothers whose families were at risk for child abuse	3 months	Father: capacity to deal with financial tasks
Waller & Bitler (2008)	USA	3103 unmarried, expecting fathers and mothers	Newborn	Father: abortion intention
Murray, Rosengard, Weitzen, Raker, & Phipps (2012)	USA	300 pregnant, teenage mothers (12-19 years old)	G*	Father: support given to the mother during pregnancy, practical involvement at time of birth Mothers: sociodemographic characteristics
Falceto, Fernandes, Baratojo, & Giugliani (2008)	Brazil	153 families	4 months	Mother: if she has paid work Father-mother relationship: quality of the marital relationship
Ehrenberg, Gearing-Small, Hunter, & Small (2001)	Canada	58 dual-earner couples	Up to 9 years	Father-mother relationship: shared parenting
Formoso, Gonzales, Barrera, & Dumka (2007)	USA	115 Mexican American two-parent families	11 - 14 years	Father-mother relationship: quality of the marital relationship parenting alliance

Table 2
Description of the Studies Grouped in the Category "Factors that may Affect Father Involvement".

Note. *G = data were collected during the gestation of the child; the parents were expecting a child.

father involvement; the greater the father's age and educational level, the greater his parenting involvement. Moreover, the greater the father's ability to provide for his family (reflected in family income and car ownership), the higher the level of father involvement (Shapiro et al., 2011). The father's mental health also affects his parenting involvement. Van Ee et al. (2013) demonstrated the negative influence of posttraumatic stress on the quality of the fatherchild relationship.

In addition to the home front situation and the father's sociodemographic profile, researchers have also investigated the influence of the father's paid job on his parenting involvement. Type of occupation (Grzybowski & Wagner, 2010), number of hours spent working and the timing of work hours (work shift; Cia & Barham, 2006) all affect father involvement; a greater number of hours at home during the child's nonschool, waking hours is associated with greater parenting involvement.

Other researchers have studied the earliest indicators of parenting behaviors as predictors of involvement levels, later on. The same as mothers, a father's involvement with his child starts during pregnancy (Piccinini, Silva, Gonçalves, Lopes, & Tudge, 2004). Intentions to terminate a pregnancy, among unmarried fathers and mothers, are related to a reduced probability that the father will help to meet expenses associated with the pregnancy, for example (Waller & Bitler, 2008). On the other hand, the more intense the father's emotional involvement during the gestation period (Habib & Lancaster, 2010) the greater: (a) the support he gives to the mother (Murray et al., 2012), (b) his practical involvement at the time of his child's birth (Brandão & Figueiredo, 2012; Murray et al., 2012), and (c) the likelihood that the father will engage in parenting activities at the beginning of his child's life.

Finally, Cauce et al. (2011) examined the influence of cultural norms on the father-child relationship. When children evaluated their father's involvement, fathers who adhered to cultural norms regarding their family responsibilities were evaluated more positively.

Factors Related to the Mothers. Murray et al. (2012) observed that the mother's sociode-

mographic characteristics (such as race, age, and country of birth) affect the probability that the father will register the birth of their child, which is a critical step for fathers to establish a longterm involvement with their child. Maternal employment is also important. Falceto et al. (2008) noted that when mothers did not have a paid job, there was a lower probability of the fathers being involved with their child, than when the mothers were economically active.

Factors Related to the Relationship Between the Child's Father and Mother. Falceto et al. (2008), Formoso et al. (2007), and Grzybowski and Wagner (2010) found that poor quality marital relationships are associated with low fathering involvement. On the other hand, a constructive alliance between the father and the mother positively influenced the quality of the father-child relationship (Formoso et al., 2007). In addition, the ability of the couple to engage in shared parenting (through cooperation and mutual support) was also positively related to father involvement (Ehrenberg et al., 2001).

Outcomes of Father Involvement

In addition to the evidence on factors that may affect father involvement, in 19 papers, the authors presented results that point to developmental outcomes for the children, their mothers, their fathers or for the family as a whole, that may be affected by father involvement (see Table 3). For each family member, the evidence points to multiple impacts on the person's life.

Outcomes of Father Involvement for the Children. Bronte-Tinkew et al. (2006), Cia and Barham (2009), Cia, Barham and Fontaine (2010), Formoso et al. (2007), Freeze et al. (2014) and Ramchandani et al. (2013) reported negative relationships between the quality of father involvement and the occurrence or frequency of the following difficulties, among their children: (a) mental health problems (such as depression), (b) externalizing behaviors (negative behaviors directed towards others), (c) internalizing behaviors (self-directed, negative behaviors), or (d) hyperactivity. For example, Uji et al. (2014) reported that children with authoritarian fathers (with a lower quality of

Reference	Country	Participants	Child's age	Outcomes of Father Involvement
Ramchandani et al. (2013)	United Kingdom	192 families	1 year	Child: externalizing behaviors
Cia, Barham, & Fontaine (2010)	Brazil	20 teachers, 99 children (whose fathers participated in an intervention program)	8 years (average)	Child: externalizing and internalizing behaviors
Cia & Barham (2009)	Brazil	97 couples (father and mother) and 20 teachers	6 - 9 years	Child: hyperactivity, externalizing and internalizing behaviors
Bronte-Tinkew, Moore, Capps, & Zaff (2006)	USA	7242 children (teenagers)	Up to 18 years	Child: externalizing behaviors
Freeze, Burke, & Vorster (2014)	South Africa	80 male children	14 - 18 years	Child: externalizing behaviors
Cia, Barham, & Fontaine (2012)	Brazil	97 couples (father and mother)	6 - 9 years	Child: academic achievement, self-concept
Falco, Esposito, Venuti, & Bornstein (2008)	Italy	19 children	35.3 months (average)	Child: emergence of symbolic behavior
Salonna et al. (2012)	Slovakia	1863 children	16.8years (average)	Child: overall health
Uji, Sakamoto, Adachi, & Kitamura (2014)	Japan	1320 adults	R*	Child: depression, anxiety, symptoms of stress-related health problems, social functioning, psychological wellbeing
Formoso et al. (2007)	USA	115 Mexican American two-parent families	11 - 14 years	Child: mental health (depression), externalizing behaviors
Cerniglia, Cimino, & Ballarotto (2014)	Italy	77 families	23 - 26 months	Child: quality of the father-child relationship during meals, when the father fed the child
Tessier et al. (2009)	Colombia	338 families	1 year	Child: locomotor, social, speech, hearing and motor coordination development Family: environmental stimulation, social openness, and positivity of the mother-child interactions
Séjourné, Beaumé, Vaslot, & Chabrol (2012)	France	51 couples (father and mother)	0 - 4 months	Mother: postpartum depression
Fagan & Lee (2010)	USA	100 teenage mothers	0 - 3 months	Mother: postpartum depression

Table 3
Description of the Studies Grouped in the Category "Outcomes of Father Involvement".

Reference	Country	Participants	Child's age	Outcomes of Father Involvement
Séjourné, Vaslot, Beaumé, Goutaudier, & Chabrol (2012)	France	119 couples (father and mother)	0 - 2 months	Mother: postpartum depression
Alexander, O'Riordan, & Furman (2010)	USA	176 low-income, preg- nant couples	G**	Mother: intention and involvement in breastfeeding
Shapiro et al. (2011)	USA	197 mothers whose families were at risk for child abuse	3 months	Mother: sense of loneliness Family: prenatal care, cases of domestic violence, family income
Bonner, Hardy, Willard, & Hutchinson (2007)	USA	23 fathers (primary caregivers of a child with a chronic illness)	9.5 years (average)	Father: psychological distress, depression
Frascarolo, Zaouche-Gaudron, & Favez (2005)	Switzerland	13 fathers (first child)	0 - 18 months	Family: family alliance

Note. R = a retrospective study; participants described interactions they had with their parents, in the past. *G = data were collected during the gestation of the child; the parents were expecting a child.

involvement) showed more unfavorable results on measures of depression, anxiety, physical symptoms, social functioning and psychological wellbeing.

In addition to these impacts on children's psychological wellbeing, children whose fathers had lower levels of involvement tended to have weaker academic achievement levels and a poorer self-concept (Cia et al., 2012). On the positive side, Falco et al. (2008) observed that fathers' positive involvement favored the emergence of symbolic behavior among children with Down syndrome. Other positive consequences of more frequent father involvement include greater overall health of the children (Salonna et al., 2012). In this sense, fathers with a higher quality father-child relationship reported fewer difficulties in feeding their two-year old child (Cerniglia et al., 2014). In a more comprehensive study, Tessier et al. (2009) found that when father involvement was high, it had a positive effect on the development of male children in the following areas: locomotor, social, speech, hearing and motor coordination.

Outcomes of Father Involvement for the Mothers. Researchers found that the more lim-

ited the father's initial involvement, or the lower the mother's satisfaction with this involvement, the more intense the symptoms of maternal postpartum depression (Fagan, & Lee, 2010; Séjourné, Beaumé, et al., 2012; Séjourné, Vaslot, et al., 2012) and the greater the sense of maternal loneliness (Shapiro et al., 2011). In addition, Alexander et al. (2010), found that the father's support significantly influenced the mother's intention and subsequent involvement in breastfeeding.

Outcomes of Father Involvement for the Fathers. In the current literature review, Bonner et al. (2007) conducted the only study on the effects of father involvement on the fathers, themselves. These researchers studied fathers whose children had cancer. Fathers with a greater level of involvement reported greater psychological distress and higher levels of depression. There were no studies about outcomes of parenting involvement for fathers of children with typical development.

Outcomes of Father Involvement for the Family Environment. Tessier et al. (2009) found that families with more involved fathers were assessed as providing more stimulating environments, were more open to other people (such as the extended family and neighbors), and had more positive mother-child interactions. Frascarolo et al. (2005) reported stronger family alliances when the father was more participative. In a third study, Shapiro et al. (2011) found associations between positive father involvement and: (a) better prenatal care during pregnancy, (b) fewer cases of domestic physical violence, and (c) higher family income.

Discussion

This literature review indicates that researchers have expanded the concept of father involvement and have gathered empirical evidence supporting the relationship between a variety of conditions that may affect father involvement, as well as a range of potential outcomes. Investigators have shown that differences in father involvement may be related to antecedent conditions such as age, education, marital status, and health conditions of the fathers and mothers, and to the quality of the relationship between the two parents. In addition, there are significant developmental outcomes associated with father involvement, mostly for their children, but also for the mothers and for the fathers themselves. Taken together, this empirical evidence can be used to construct an initial theoretical model of father involvement.

The results of this literature review generally confirm the results reported by Gomes, Bossardi, Cruz, Crepaldi and Vieira (2014), who compared information about different instruments that are being used to assess father involvement. Based on an analysis of 15 scientific papers, these authors emphasized the importance of Lamb's (1997) tripartite concept of fathering (interaction, accessibility and responsibility), which provided a conceptual framework for most of the measures they encountered. However, some instruments were also constructed to evaluate more specific dimensions of the father-child relationship, such as emotional (or affective) involvement, parenting practices (discipline and educational involvement), and father-child communication. Gomes et al. discussed the importance of assessing these dimensions to capture both the quality and quantity of the father's engagement. In the articles reviewed in the current study, additional dimensions were described, including the cognitive and social dimensions of fathering, and indirect fathering involvements. In addition to further expanding our understanding of father involvement, we also examined information about factors that may either affect or be affected by father involvement.

The information found in a systematic literature review depends on the descriptors that are used. For example, in this review, none of the researchers assessed father involvement in terms of the extent to which the father physically stimulated his child. According to Manfroi, Macarini and Vieira (2011), the most frequent type of father-child interaction is active play (a physical dimension of paternal involvement), which is important for child development. In addition, characteristics of the children (such as their social skills) were not investigated in any of the studies that comprised this review, although other authors have shown that child-related factors such as social responsiveness can modify father involvement (Mehall, Spinrad, Eisenberg & Gaertner, 2009; Volker, 2014). The absence of this information may be linked to the descriptors used in this study, as some authors may have used more general descriptors (such as "child development"), or have used other descriptors (such as "father engagement"). Thus, in order to present a more complete theoretical model (see Figure 1), these two additional concepts were included (in boxes with broken perimeter lines), together with the concepts described in the results of this study.

As shown in Figure 1, father involvement may function as an intervening variable, which modifies the impact of the contextual conditions and abilities of the parents on the development and welfare of the child, the father, and the mother. With respect to factors that affect father involvement, the evidence was organized to capture the influence of personal, social and cultural characteristics of each of the parents, individually, as well as the quality of the relationship between them, which is coherent with theo-

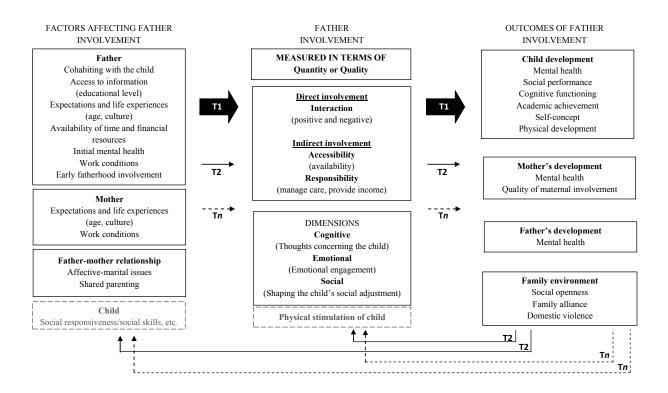


Figure 1. Theoretical model of father involvement. Conditions at Time 1 (T1) affect father involvement, which, in turn, modifies outcomes for each family member. These outcomes spur adjustments to fathering conditions or involvements, at Time 2 (T2), and so on, over time (Tn).

retical considerations presented by other authors (Cabrera, Shannon, & Tamis-Lemonda, 2007; Volker, 2014). In terms of outcomes associated with differences in the quality of the father-child relationship, the evidence suggests that father involvement is associated with developmental outcomes for all family members. Child development outcomes were the most commonly reported, which is consistent with the findings of other authors who have investigated factors affecting child development (Cabrera et al., 2007; Lamb, 2010; Volker, 2014).

Based on our analysis and synthesis of the empirical evidence on father involvement, we propose a theoretical model that specifies the relationship between father involvement and other variables, helping to identify important correlates that can contribute to future work on this topic. Information about the impacts of the father-child relationship on children, mothers, and fathers point to the potential benefits of intervention programs to help fathers be more constructively involved parents. However, this model now needs to be empirically tested, using a structural equation modeling approach. In addition, experimental, intervention studies are needed to determine whether there are causal relationships between the antecedent conditions specified in the model and the quality of father involvement, and if increases in father involvement lead to improved outcomes. In closing, the use of an evidence-based, comprehensive, theoretical model of father involvement can make a significant contribution to increasing the effectiveness of interventions to improve the quality of father-child relationships.

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Recebido: 21/09/2015 1ª revisão: 14/04/2016 Aceite final: 05/05/2016