

TORNAR-SE PAI: MODELO DA EXPERIÊNCIA DOS PAIS EM PERÍODO PÓS-NATAL¹

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Resumo: Perceber-se como pai é um desafio grande na transição para a paternidade. A importância do papel dos profissionais da área da saúde na determinação dessa percepção após o nascimento dos filhos tem sido pouco explorada. O objetivo deste estudo é analisar as relações entre a eficácia percebida por pais primíparos e sua percepção do auxílio recebido das enfermeiras, e dos acontecimentos importantes no período pós-parto. Amostragem e método: 160 casais participaram de um estudo correlacional preenchendo questionários após o nascimento de seu primeiro filho. Resultados: Um modelo da experiência pós-parto foi estabelecido, no qual a colaboração das enfermeiras e seu auxílio contribuíram diretamente e indiretamente para a percepção do controle e dos acontecimentos pelos pais. Elas contribuem indiretamente para a percepção da própria eficácia pelos pais. Implicações: O auxílio dado pelos profissionais da saúde, principalmente pelas enfermeiras, aos pais após o nascimento de uma criança, faz uma diferença positiva importante nas experiências dos pais.

Palavras-chave: paternidade; eficácia percebida; aliança parental; enfermagem; modelo de equação estrutural; Bandura.

BECOMING A PARENT: A MODEL OF PARENTS' POST-PARTUM EXPERIENCE

Abstract: Perceiving oneself as parent is a key challenge during the transition to parenthood. The importance of health professionals in determining perceived efficacy in parents upon the birth of their child is few explored. The objective of this study is to analyze the relations between the first time parents' perceived efficacy and their perceptions of nurses' help-giving and critical events during post-partum period. Sample and Method: One hundred sixty couples participated in a correlational study by completing questionnaires after the birth of their first child. Results: A model of parents' postpartum experience was established where nurses' collaboration and help-giving practices contribute directly and indirectly to the parents' perception of control and perceptions of events. They contribute indirectly to parent's perceived self-efficacy. Implications: The help given by health professionals, especially nurses, to parents following the birth of a child makes a major positive difference in the parents' experiences.

Key words: Parenting; perceived efficacy; parenting alliance; nursing; structural equation modelling; Bandura.

Introduction: The transition to the role of parent is a turning point in the evolution of the family. Both mothers and fathers face numerous challenges as individuals, partners and parents.

Each challenge is significant and important in itself in developing and maintaining the balance required for the survival and growth of the family. Perceiving oneself to be an effective parent in the post-partum period appears to be a key challenge in maintaining family balance. And to perceive parenting efficacy is essential to adapting to the role of parent. The purpose of this paper is to examine the nature of relations between first-time parents' perceived

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efficacy and their perceptions of nurses' help-giving practices and critical events during the post-partum period.

-*Perceived Parenting Efficacy* is defined as 'beliefs or judgements a parent holds of their capabilities to organize and execute a set of tasks related to parenting a child' (Montigny & Lacharité, 2005). During the postpartum period, first time parents aim to develop such beliefs about themselves (Bandura, 1996). In this cognitive process, parents assess their abilities to deal with various situations and perform the tasks associated with the parenting role (Bandura, 1977). Perceived parenting efficacy varies depending on parents' beliefs about whether a given behaviour will lead to given outcomes (outcomes expectations) and their beliefs about their capabilities in performing the behaviour that leads to these outcomes (self-efficacy expectations). Perceived parenting efficacy is not a global trait or a personality characteristic (Bandura, 1996), but varies depending on the particular task and context which confronts the individual.

Research on the factors contributing to the development of perceived parental efficacy published in the health and psychology literature has focused either on mothers' sense of efficacy or has highlighted differences between mothers and fathers (Reece & Harkless, 1998). Most research, whether in nursing or psychology, has been inspired by Bandura's social cognitive theory (1997) which identifies four sources of information in developing an individual's personal efficacy beliefs.

-*Enactive mastery experience* is the most important source of information regarding an individual's capabilities and limitations (Bandura, 1997). Little is known about how previous experience influences paternal perceptions of efficacy. However, previous experience with children under the age of one year (Savard, 1997) as well as experience acquired in hospital during the immediate post-partum period (Rutledge & Pridham, 1987) are determinants of maternal perceptions of efficacy.

Perceptions of personal efficacy are also influenced by *vicarious experience*, which provides a reference point for the individual to assess his own abilities to master a given situation (Bandura, 1997).

Researchers have observed that attending pre-natal meetings during pregnancy (Savard, 1997) as well as information sessions on infant care during the post-partum period (Rutledge & Pridham, 1987) contributed to maternal perceptions of efficacy. No information is available on the influence of vicarious experience on fathers.

Fluctuations in an individual's *physiological and psychological state* may be interpreted as signs of vulnerability and even inefficacy (Bandura, 1997). Hence mothers who perceive themselves to be in good health assess their parenting experience as positive (Rutledge & Pridham, 1987). Meanwhile a high stress level in mothers (Reece & Harkless, 1998) and a high level of anxiety in fathers and mothers are associated with low perceived parenting efficacy (Bolté, 1994). *Verbal persuasion* may reinforce individuals' beliefs that they are able to achieve their goals. Bandura (1997) asserts that it is easier for an individual to maintain a feeling of personal efficacy when significant others believe in their abilities and say so. A number of studies have established that, for mothers, the quality of their relationship with their partner (Reece & Harkless, 1998), the quality and availability of their social network (Mercer, 1990) and their satisfaction regarding the help received (Bellemare, 1993) influenced their feeling of competence. Fathers feel more competent if satisfied with the support they are given by their partners (Bolté, 1994).

Since studies have focused mainly on mothers, little information is available on the factors that determine paternal perceived efficacy and on those that are common to both parents. As well, little is known about the contribution of professional assistance and of events of the postpartum period to parental sense of efficacy.

Perceived Parenting Efficacy, Help-Giving and Events during the Post-Partum Period: From the pre-natal to the post-natal period, parents are in close contact with various groups of care providers, such as nurses, midwives, physicians, who may influence them. Nurses' contribution to perceived parenting efficacy is of particular interest, for these health professionals have numerous opportunities to interact with parents. Their professional role places them in a good position to develop a helping relationship

with their client (O.I.I.Q. 1996, AWHONN, 1999). The nurse’s role is to “enable individuals to become better able to solve problems, meet needs, or achieve aspirations by promoting the acquisition of competencies” (Dunst & Trivette 1994, p. 162). It is questioned whether the help given by nurses to parents during the post-partum period is a factor in the development of perceptions of parenting efficacy.

Similarly, during the postpartum period, parents experience various events which have been reported to be critical, as much for fathers (Montigny, 2002; Montigny & Lacharité, 2002, 2004, 2005) as for both parents. These events are related to coming to terms with the physical and emotional changes during the postpartum period, coping with parental demands, maintaining conjugal functioning, coming to terms with environmental demands, and exchanging information with nurses. The question is whether critical events while in hospital influence perceptions of parenting efficiency.

Methodology

The aim of this study is to examine the nature of relations between first-time parents’ perceived efficacy and their perceptions of nurses’ help-giving practices and critical events during the post-partum period, considering the contribution of the quality of

the marital relationship, the quality of social support, parents’ experience and level of anxiety, perceived infant temperament, income, education and the parent’s relationship style to perceived parental efficacy. These variables are factors linked to perceived parental efficacy in previous studies, as seen previously. The hypothesis are: 1- There is a direct, positive relation between the quality of the help-giving practices and the quality of events during the post-partum period. 2- There is a direct, positive relation between the nurses’ help-giving practices and critical events during the immediate post-partum period and parents’ perceived efficacy, controlling for parenting alliance, social support, infant temperament, anxiety, income, education, past experiences and health status. 3- There is an indirect relation between help-giving practices and perceptions of efficacy.

The other variables serve as a control for the factors usually studied during this transition period. Certain variables are expected to influence perceived parenting efficacy to varying degrees. Fathers and mothers in the sample are studied in two separate groups in order to identify what is common to both parents’ experience.

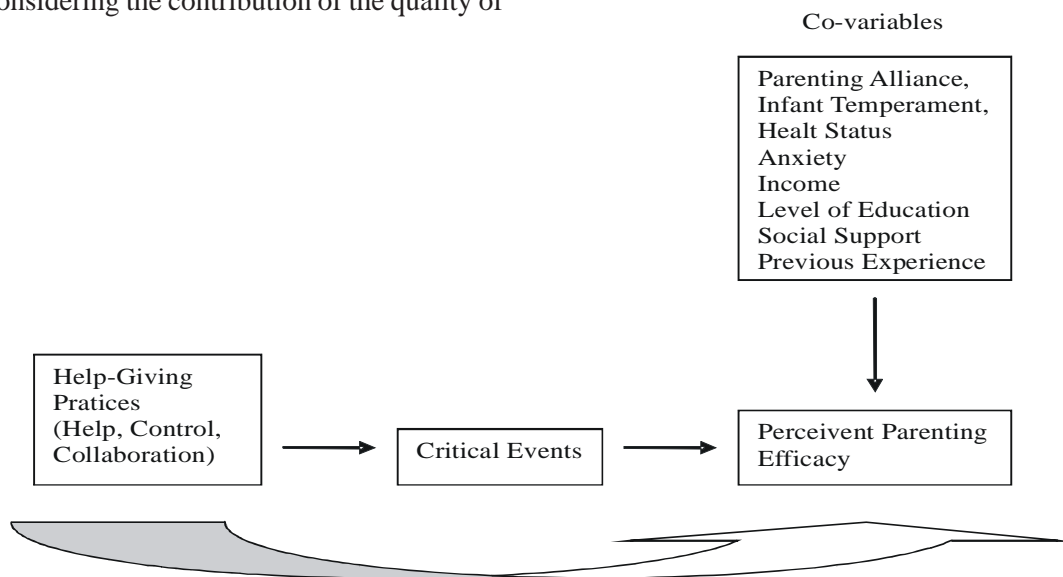


Figure 1. Hypothetical Model A of Parents’ Post-Partum Experience.

Participants: The sample consisted of 160 mothers and 160 fathers, first-time parents, who were living together and were able to speak, understand and read French. Mothers had given birth either vaginally or by caesarean. Neither mother nor child had any health problem during the post-partum period.

Exclusion criteria were: couples not living together, younger than 18 years of age, who could not read, speak and understand French and mothers or children with health problems post-natally. The sample is representative of the population of first time parents in Quebec (Montigny & Lacharité, 2005)- Table 1

Table 1 - Socio Demographic and Obstetrical Data

		Fathers	Mothers
Age (M, SD)		29.9 (s.d.=5.5)	27.2 (s.d.=4.6).
Education (N, %)	11 years and less	57 (35,6%)	45 (27,5%)
	Between 12 and 15 years	39 (24,4%)	47 (29,4%)
	16 years and more	64 (40%)	68 (42,5%)
Status of work (N, %)	Full time	137 (85,6%)	120 (75%)
	Part time	15 (9,4%)	19 (11,9%)
	Unemployed	8 (5%)	21 (13,2%)
Length of time living together (M, SD)		4.5 years (s.d.=3)	
	Married (N, %)	69 (43,1%)	
	Common law (N, %)	91 (56,8%)	
Family income (N, %)	Less than 30,000 (CAD)	31 (19,4%)	
	Between 30,000 to 60,000 (CAD)	71 (44,4%)	
	From 60,000 to 90,000 (CAD)	36 (22,5%)	
	More than \$90,000 (CAD)	22 (13,8,%)	
Type of birth (N, %)	Vaginal birth	126 (77,7%), 55,4% with epidural	
	Caesarean birth	34 (21,2%)	
Length of stay in hospital (%)		73% between one to three days	
Type of infant feeding (N, %)	Breastfeeding	134 (84%)	
	Bottle feeding	26 (16%)	

The subjects come from the urban and semi-urban area of Western Quebec in Canada. Parents were recruited and all the eligible were approached by the research assistant before their discharge from

the hospital. Eighty percent of parents approached agreed to participate. The main reasons for refusal were lack of time or interest in the study. Parents who agreed were then visited at home, at a time that

suited them, on average on the sixteenth post-partum day (M: 16, range 7 to 25 days). Questionnaires, which took about 50 minutes to complete, were answered individually by each parent.

Material

The dependent variable, perceived parenting efficacy during the post-partum period was measured

with Reece's instrument (Reece & Harkless, 1998), as described in table 2. This instrument was initially developed to measure mothers' self-efficacy perceptions and beliefs during the immediate post-partum period (Reece, 1993), and later validated with a sample of fathers. The French version was validated with mothers and fathers (Montigny, 2002). The score was determined by adding all the items and dividing by the total number of questions.

Table 2 - Study Variables and Measuring Instruments

Variable	Instrument	Definition	Items	Reliability mothers	Reliability fathers
Perceived Parenting Efficacy	Parent Expectations Survey (PES) (Reece, 1992).	Parents' beliefs about their capabilities to mobilize the motivation, cognitive resources, and courses of action.	25 items 10 point scale	0.91	0.91
Nurses' Help-Giving and Collaboration Practices.	Helping Practices Scale (Dunst, Trivette & Deal 1995; Dunst, Trivette & Hamby, 1996).	Parents' beliefs about the help received from professionals in terms of enabling.	16 items 5 point scale	0.94	0.90
	Parent-Care Provider Collaboration Inventory (Lacharité, Moreau & Moreau, 1999)	Parents' perceptions of empowerment through a relationship of collaboration and intimacy with the member of the nursing team they had contact.	15 items 5 point scale	0.84	0.75
	Perception of Control Scale (Affleck, Tennen & Rowe, 1991)	Parents' perceptions of having influence over services and interactions with the service providers.	1 items 10 point scale		
Events during Post-Partum Period	Inventory of Critical Incidents during Post-Partum Period (Montigny & Lacharité, 2000)	Significant incidents for parents during the post-partum period that may influence their adjustment to the role of parent.	85 items 10 point scale	0.89	0.92
Parenting alliance	Parenting Alliance Inventory (Abidin & Brunner, 1995)	The extent to which partners form a team to perform the various tasks associated with parenting	20 items 5 point scale	0.90	0.89
Social support	Social Support Question. (Dunst et al., 1996)	The extent to which people in their network had helped in recent weeks.	18-item	0.79	0.79
Infant temperament	Inventory of Perceptions of the Neonate (IPN) (Broussard & Hartner, 1970)	Parents' perceptions of their neonate's behaviour as compared to the average infant with respect to crying, spitting, sleeping, feeding, elimination.	5 items 5 point scale.	0.76	0.76
Anxiety	State Trait Anxiety Inventory (Spielberger, 1983)	How an individual feels now in terms of apprehension, tension, nervousness or worry.	20 items 4 point scale	0.91	0.84
Education	Socio-demographic questionnaire (Montigny 2002)	Level of education	20 questions		
Income		Family income			
Health		Health status at time of birth			
Previous experience		Type and intensity of experience (previous experience with children, attendance at pre-natal classes)			

Three instruments were used to measure nurses' help-giving practices and collaboration practices. In the Helping Practices Scale, parents

indicate their perceptions of a professional's behaviour: the higher the score, the more positive the perception. Parents completed the instrument by recalling a nurse

who was significant, either because the relationship was good, or because it was bad, or because they met this nurse more often, in accordance with a procedure developed and tested by Lacharité et al., (1999). This approach allows a wider range of information to be collected rather than focusing the answer on relations with the nursing team in general. The second instrument, the Parent–Care Provider Collaboration Inventory, was designed on the basis of Mc Grew e Gilman’s (1991) and Descutner e Thelen’s (1991)¹. Lastly, the Perception of Control Scale (Affleck, Tennen & Rowe, 1991) measures the extent to which individuals were able to obtain the required resources, support and services from a given helper. Perceived control is measured on a 10-point Likert scale where 1 is a very low perceived control level and 10 a high level.

The Inventory of Critical Incidents during the Post-Partum Period (Montigny & Lacharité, 2000) which measures the presence and intensity of *events during the post-partum Period* was based on the findings of a qualitative survey of 26 primiparous parents during the immediate post-partum period. It comprises 85 items that describe critical incidents during the post-partum period divided into five categories: coming to terms with physical and emotional changes during the post-partum period; coping with the demands of parenthood; maintaining conjugal functioning; exchanging information with nurses; and coming to terms with environmental demands. Parents must indicate whether they experienced the incident and whether the incident was negative or positive for them, on a scale of 1 (very difficult) to 9 (very easy). The total score is a function of the average number of events multiplied by the average intensity; a low score implies a low number of events or events with a negative valence, while a high score implies many positive events.

Other Study variables- As mentioned previously, literature on the period surrounding the birth of the first child and the development of perceptions of parenting efficacy led to include a

¹ Internal consistency is 0.76 for the 15 items. In this study, as questions 10 and 11 were negatively or weakly correlated with the other questions, we corrected the scale to give a 13-question scale

set of variables that may, as components of parents’ internal and external environment, contribute to their experience. Therefore, parenting alliance, social support, perceived infant temperament, level of anxiety, previous experience with children, health status, income and education were retained in the study. The French version, translated by GREDEF (1997a,b), of Parenting Alliance Inventory (Abidin & Brunner, 1995) was used to measure parenting alliance. The higher the score, the more positive the parent’s perception of forming a team to perform the various tasks. The *quality of social support* was measured using the Social Support Questionnaire (Dunst et al., 1996) which explore the contribution of other health care providers in developing parents’ sense of efficacy.

The perceptions of infant temperament was measured by the Inventory of Perceptions of the Neonate of Broussard & Hartner’s (1970). The IPN score is obtained by subtracting the infant’s score from the average infant’s score. The high score indicates a positive perception, while a low or negative score indicates a negative parent’s perception.

The state scale of the Spielberger’s (1983) - *Anxiety Inventory* - was used to measure *anxiety*². A sociodemographic questionnaire (Montigny, 2002) was used to collect *sociodemographic data* in regards to education, income, health status and previous experience. Parents’ previous experience is scored as a global experience factor where the type of experience is multiplied by the intensity in order to obtain a global variable.³

Data Analysis

Hypothetical model A was tested using a three-step procedure. Firstly, preliminary analyses of the variables were conducted to ensure that the data did not violate the basic premises inherent in the multivariate analyses. Secondly, structural

² Question 18 was omitted because it was negatively correlated with the other items. To ensure the scales were coherent, negative scores were recoded so that a higher score implies a higher level of calm, and a lower score, a higher level of anxiety.

³ Ethical Considerations: The study was approved by the institutional ethics committees of a medical center and of a university. Informed consent was obtained from all participants.

equation modeling analyses of structural equations using AMOS (5.0) software were based on the covariance matrices. The model was tested for equality between the two groups (fathers and mothers) by constraining all parameters to be equal. This procedure made it possible to verify whether the same factors were associated in the same way in both groups (Coulombe, 2001), which met the research objective. The evaluation of the plausibility of the model for each parent and of the equality model was based on 1) absolute fit indices. chi-square, goodness-of-fit index, root mean square error approximation; 2) comparative fit indices, nonnormed fit index (NNFI) comparative fit index; 3) and parsimonious fit indices parsimonious normed fit index, Akaike criterion, as recommended by Hoyle & Panter (1995).

Results

Variables were found to be distributed normally for skewness and kurtosis. A univariate ANOVA test between the variables “gender” and “perceived efficacy” yielded a gender effect of $p < 0.01$, which justifies studying fathers and mothers separately. Table 3 shows the mean scores for fathers and mothers as a function of the study variables.

Table 3 - Means and Standard Deviations of Study Variables

Variables	Mothers	Fathers
Perceived Parenting Efficacy		
M.	8.45	8.15
S.D.	0.92	1.20
Help-Giving Practices		
M.	4.22	4.07
S.D.	0.72	0.63
Parent–Nurse Collaboration		
M.	3.87	3.66
S.D.	0.74	0.60
Critical Events		
M.	10.56	10.14
S.D.	1.57	1.64
Parenting Alliance		
M.	4.61	4.58
S.D.	0.36	0.33
Anxiety		
M.	3.38	3.42
S.D.	0.45	0.35
Support		
M.	3.76	3.64
S.D.	0.74	0.70
Perceptions of Infant Temperament		
M.	3.17	4.33
S.D.	3.14	3.37
Previous Experience		
M.	11.69	7.97
S.D.	5.43	4.58
Perception of Control		
M.	7.49	7.34
S.D.	2.28	2.08

Model of Parents' Post-Partum Experience

Hypothetical Model A

A model-development strategy was used (Jöreskog 1993). Model A (Figure 1) was subjected to structural equations analyses using AMOS 5.0 software. This model is based on the hypothesis under study, previously described. Model A as proposed was not plausible ($X^2(150, N=160/160)=629.211, p < 0.001$), the chi-square being significant.

The hypothetical model was modified on the basis of theoretical and statistical grounds. Variables were removed because their relationship with the dependent variable was not significant ($c.r.=$ or < 1.96). Direct links were added based on modification indices as long as such modification could be justified theoretically. Figures 2 and 3 show the standardised estimates and fit indices of revised model B. While the regression coefficients between the variables differ slightly for fathers and mothers, the fit indices of equality model B (with constrained parameters) indicate that the model is plausible.

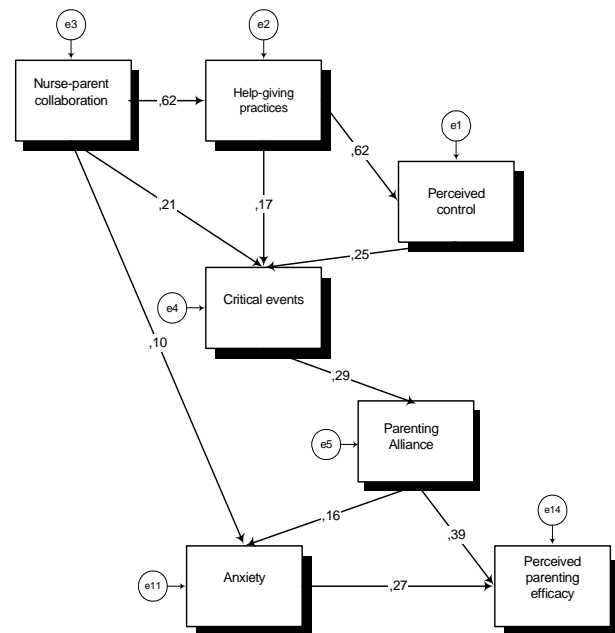


Figure 2. Revised Model B . Equality Model of Mothers' Post-Partum Experience.

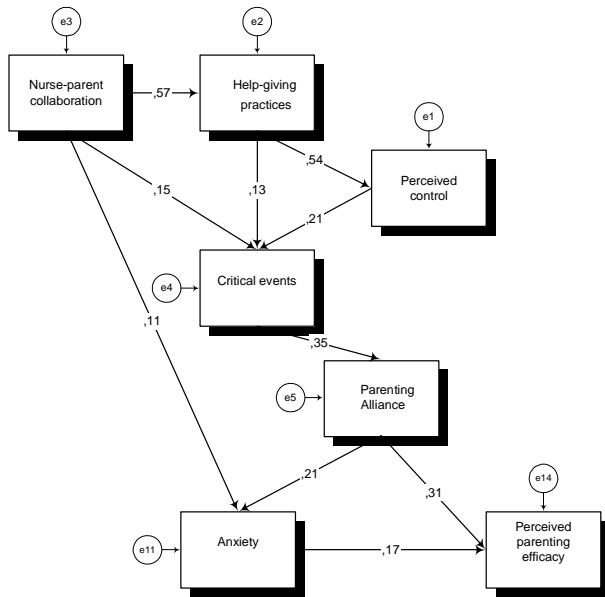


Figure 3. Revised Model . Equality Model of Fathers' Post-Partum Experience.

Revised model B shows that parents have common experience during the immediate post-partum period. Hypothesis 1. There is a direct, positive relation between the quality of the help-giving practices and the quality of events during the post-partum period.. (supported). Hypothesis 2. There is a direct, positive relation between the nurses' help-giving practices and critical events during the immediate post-partum period and parents' perceived efficacy. (rejected) Hypothesis 3. There is an indirect relation between help-giving practices and perceptions of efficacy, (supported).

Both the quality of nurses' help-giving practices and nurse-parent collaboration are directly linked to parents' perceptions of post-partum events, confirming hypothesis 1. Furthermore, the quality of help-giving practices and collaboration indirectly influences perceptions of events, through perceptions of control. Hypothesis two had predicted a direct relation between nurses' help-giving practices, critical events and perceived parental efficacy, which is not observed, thus this hypothesis is rejected. A series of indirect associations is observed between perceptions of collaboration and help-giving practices, events and perceived parenting efficacy, thus supporting hypothesis three.

As in earlier studies (Reece & Harkless, 1998), the model of parents' post-partum experience shows the importance of individuals' psychological state in the development of their perceptions of efficacy. The level of situational anxiety is directly related to parents' perceptions of efficacy, so that the calmer the parent, the greater his perceived self-efficacy.

Contrary to the assumptions draw from Bandura's theory (1997) and earlier studies (Gross, Rocissano & Roncoli, 1989, Savard, 1997), neither the physiological health status of parents in this study, nor their enactive experience in terms of previous experience with children were related to their perceptions of efficacy. Social support, as well as parent's perceptions of infant temperament, education and income were not retained as variables that influence parents' perceptions of efficacy. These findings contradict those of studies in which the maternal level of education was linked to perceived efficacy (Perreault, 1996).

Answer Tree software (version 3.1) was then used to verify the nature of associations between variables. The parenting alliance was associated with perceptions of efficacy ($p < 0.001$; $F = 30.97$, $df = 2.32$) so that parents with very positive perceptions of their alliance (4.65 to 5) had very positive perceptions of their efficacy ($M = 8.67$, $s.d. = 1.01$). In such cases, events and perceptions of help and collaboration were not associated with perceptions of parenting efficacy. The reverse was observed: perceptions of weak alliance (3.2 to 4.3) were associated with low perceived efficacy ($M = 7.58$, $s.d. = 1.06$). For these parents ($N = 70$), perceptions of help were associated with efficacy, so if perceptions of help were low (1.07 to 3.25), perceived efficacy decreased ($M = 6.5$, $s.d. = 0.91$), and when perceptions of help were high (3.25 to 5), perceived efficacy was high ($M = 7.7$, $s.d. = 1.01$).

Discussion

Using data collected from 160 mothers and 160 fathers who formed couples, a model examining the nature of relations between perceptions of efficacy of first-time fathers and mothers and their perceptions of nurses' help-giving practices and critical events

during the post-partum period, was modified, according to modifications indices suggested by AMOS. Thus, a plausible model of post-partum experience, taking into account the quality of the marital alliance and the level of anxiety of both parents was developed, which better reflects the complexity of human development. A number of the elements in this model of parents' experience of the postpartum period are discussed below.

Some limits identified pertain to the research's objectives and some to the model itself. This study aimed to examine parents' perceptions of efficacy, of critical events and of nurses' help giving. As such, we cannot assume that parents reported what actually happened. There is always the possibility that some confounding factor is causing the observed relationships.

The plausibility of a model does not guarantee its validity. Since this model was the result of several modifications, it must be duplicated with another sample. Although the sample represents a broad socioeconomic spectrum, we recommend that the sample for the duplicate model be taken from a different population pool, with respect to both environment and hospital, to ensure that the model's plausibility extends beyond that of a model of the experience of first-time parents in the Western Quebec region. It would also be interesting to duplicate this study with single parents and second time parents.

The model of parents' post-partum experience shows that the quality of nurse-parent collaboration directly influences the latter's perceptions of help in terms of enabling and empowerment. Moreover, both of these types of help have a direct and indirect influence on perceptions of control and parents' perceptions of events during the post-partum period. These four variables influence, through the parental alliance, the development of perceptions of parenting efficacy during the immediate post-partum period, as posited in the study's underlying hypotheses.

This type of association between the help given by a professional and the perceived self-efficacy of help receivers has already been observed in other contexts. For example, Dunst et al. (1988, 1996) and McGrew & Gilman (1991) noted a positive association between certain types of help and the feelings of

efficacy, perceived control and psychosocial well-being reported. This was corroborated by Lacharité et al. (1999) that if parents have a positive perception of care providers' help-giving practices, their perception of control is enhanced.

The discovery of these direct and indirect links between relationships with nurses and the development of "perceived parenting efficacy" has implications for professional health care towards families. In a social context where mother and infant care has been modified both with respect to hospital practices (integrated mother-infant unit, for example), care providers (integration of midwives, for example) and philosophy (promotion of breastfeeding, for example), health professionals need to have a clear picture of the importance of nursing care in parents' experience.

The model of parents' post-partum experience highlights that parenting alliance is a determinant of perceived parenting efficacy during the post-partum period. Earlier studies had identified marital satisfaction and partner support as determinant factors of perceived parental efficacy, for mothers (Belsky, 1981, Majewsky, 1986, Reece & Harkless, 1998, Shereshefsky & Yarrow, 1973) and fathers (Bolté 1994, Gibaud-Wallston, 1977). In view of the associations observed with Answer Tree software, we question whether the quality of the alliance is a protective variable for parents, given that parents who report a high perception of alliance do not seem to be affected by the quality of help given by nurses and by events during the post-partum period.

Bandura (1997) often made the point that anxiety and perceptions of efficacy were two concepts that must be defined and measured differently. Perceived self-efficacy in a given behaviour does not mean being calm in the face of the behaviour. However, feeling calm or anxious in the face of a given behaviour may affect perceptions of efficacy. Bandura (1997) demonstrated that high levels of anxiety inhibit perceptions of efficacy and, as a result, the performance of a given behaviour; had linked mothers' perceptions of efficacy to behavioural competence. The model of post-partum experience shows how relationships with nurses (nurse-client collaboration, help-giving practices, perceptions of

events and perception of control) influence anxiety and perceptions of parenting efficacy, a positive perception of one resulting in a perception of well-being and parenting efficacy. What is not known is whether nurse-parents relationships may have an impact on the actual behaviour adopted by parents with their infant.

As observed previously, variables that were removed from the model pertained to parents' health status, income, education, social support and previous experience. These variables had been included in the initial model because some literature had identified that they could contribute as factors to parents' perceived efficacy. However, these previous studies were carried out with samples of mothers and had not used SEM as a method of data analysis (Gross, Rocissano & Roncoli 1989, Savard, 1997). As for social support, the instrument used to measure this concept was different from that of other studies (Oakley, 1992) which might account for this variable not being retained in the model.

These findings shed new light on parents' post-partum experience and demonstrate the special and important contribution of nurses' collaboration and help, events during the post-partum period, and perception of control and parenting alliance to developing perceptions of parenting efficacy. Like Small & Luster (1990), we find that closed, intimate relationships have a greater influence when the environment is less favourable, in this study, when parenting alliance is weaker.

Conclusion

This study demonstrates that relationships with nurses (perceptions of collaboration, help, control and events) during the immediate post-partum period influence the development of "perceived parenting efficacy," as predicted in the research hypotheses. Given the complexity of helping practices, it is impossible to identify a set of key behaviours on the basis of this study. However, the study demonstrates that when the behaviours, attitudes and beliefs embodied by nurses aim to empower families, it makes a difference in parents' perceptions during the immediate post-partum period. These innovative

results provide interesting avenues for research, teaching and practice.

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