

Systematic Review of Interventions with Parents in the Transition to Parenthood

João Marcos de Oliveira, Patrícia Alvarenga, Catiele Paixão, and Paula Kleize Costa Sales

Federal University of Bahia (Universidade Federal da Bahia [UFBA])

Submission: September 17th, 2021.

Accepted: May 4th, 2022.

Section editor: Julia Garcia Durand.

Author Note

João M. de Oliveira  <https://orcid.org/0000-0001-5494-3985>

Patrícia Alvarenga  <https://orcid.org/0000-0001-9079-4956>

Catiele Paixão  <https://orcid.org/0000-0003-4936-2136>

Paula K. C. Sales  <https://orcid.org/0000-0003-1069-3042>

Correspondence concerning this article should be addressed to João Marcos de Oliveira, Universidade Federal da Bahia, Instituto de Psicologia, Rua Aristides Novis, 197, Estrada de São Lázaro, Salvador, BA, Brazil. CEP: 40210-730. Email: joaomarcosdeoliveira@gmail.com

Abstract

This study analyzed the effects of intervention programs aimed at mothers and fathers expecting their first child on the individual, marital, and parental domains of the transition to parenthood. We selected research articles published between 2008 and 2019 from the PsycINFO, PubMed/MEDLINE, Scopus, and Web of Science databases. Data collection was carried out between November and December 2019 by two independent judges, according to the recommendations of PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analyses). After applying the inclusion criteria, we classified the results of 30 articles and 6782 participants into three themes corresponding to each assessed domain. Positive effects on each domain of the transition to parenthood were obtained, mostly from interventions on couple communication, problem-solving, and co-parenting. Enhancements in the couple's relationship improve parents' mental health and marital satisfaction, which may promote parental emotional availability and responsiveness.

Keywords: mental health, marital relationship, co-parenting, intervention, transition to parenthood

REVISÃO SISTEMÁTICA DE INTERVENÇÕES COM PAIS NA TRANSIÇÃO PARA PARENTALIDADE

Resumo

Este estudo analisou os efeitos de programas de intervenção com mães e pais à espera do primeiro filho sobre os domínios individual, conjugal e parental da transição para a parentalidade. Foram selecionados artigos empíricos publicados entre 2008 e 2019 nas bases de dados PsycINFO, PubMed/MEDLINE, Scopus, e Web of Science. A coleta de dados foi realizada por dois juízes independentes, conforme as recomendações do PRISMA (Preferred Reporting Items for Systematic Review e Meta-Analyses). Após a aplicação dos critérios de inclusão, os resultados de 30 artigos e 6782 participantes foram classificados em três temas correspondentes a cada domínio avaliado. Foram verificados efeitos positivos em cada domínio da transição para a parentalidade, principalmente com intervenções sobre a comunicação de casal, solução de problemas e coparentalidade. Os benefícios para o relacionamento do casal favoreceram a saúde mental e a satisfação conjugal dos pais, o que pode promover maior disponibilidade emocional e capacidade de resposta dos pais.

Palavras-chave: saúde mental, relacionamento conjugal, coparentalidade, intervenção, transição para a parentalidade

REVISIÓN SISTEMÁTICA DE INTERVENCIÓNES CON PADRES EN LA TRANSICIÓN A LA PARENTALIDAD

Resumen

Este estudio analizó los efectos de programas de intervención con madres y padres en los dominios individual, matrimonial y parental de la transición a la parentalidad. Se seleccionaron artículos publicados entre 2008 y 2019 de las bases de datos PsycINFO, PubMed/MEDLINE, Scopus y Web of Science. La recolección se realizó por dos jueces independientes, según las recomendaciones de PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analyses). Después de aplicar los criterios de inclusión, se clasificaron los resultados de 30 artículos y 6782 participantes en tres temas correspondientes a cada dominio. Se obtuvieron efectos positivos en cada dominio de la transición, principalmente con intervenciones sobre la comunicación de la pareja, la resolución de problemas y la coparentalidad. Los beneficios en la relación de pareja mejoran la salud mental de los padres y la satisfacción marital, lo que puede promover la disponibilidad emocional y la capacidad de respuesta de los padres.

Palabras clave: salud mental, relación conyugal, coparentalidad, intervención, transición a la parentalidad

Mothers and fathers experience profound changes from pregnancy to the first months after the birth of a biological child, or from the preparation to receive an adopted or stepchild, until their arrival and adaptation to the new family. The concept of transition to parenthood has been used to address this process. It can be defined as a developmental period with a relative beginning and end in which multiple variables interact during the establishment of the parental function related to the first child (Heinicke, 2002; Rosa et al., 2016; Schumacher & Meleis 1994; Umberson et al., 2010). In this context, parents' performance and well-being result from the interaction between individual and environmental factors (Florsheim et al., 2003; McKay & Ross, 2010).

The Five-Domain Structural Model of the Family with a First Child (Cowan et al., 1985) is a theoretical scheme that brings together, in distinct groups known as domains, variables that are relevant to understanding the transition to parenthood. The individual domain refers to the personal characteristics of each parent, the marital domain encompasses the couple's interactions, and the parental domain is associated with the relations between each parent and the baby. This model highlights the preponderant role of factors such as mental health and expectations about pregnancy in the individual domain, marital satisfaction and co-parenting in the marital domain, and parental socialization practices and stress in the parental domain. Family history and social support are crucial in the intergenerational and social domains.

However, the most frequently investigated factors during the transition to parenthood belong to the individual, conjugal, and parental domains (Flykt et al., 2014; Heinicke, 2002), possibly due to the significant impacts that these domains have on the process of becoming a parent when compared to the other domains. The literature shows that the main difficulties related to these three domains are, respectively, maternal depression (Sipsma et al., 2016; Wu & Hung, 2016), a decline in marital satisfaction, especially after the baby is born (Doss & Rhoades, 2017; van Scheppingen et al., 2018); and parental stress (Umberson et al., 2010). These factors, in turn, negatively affect establishing the parents' role (Mitchell, Nuttall, & Wittenborn, 2019).

Because of the challenges that mothers and fathers may experience in the transition to parenthood, interventions are characterized as preventive care proposals insofar as they occur during pregnancy, at the beginning of the postnatal period, or the arrival of adopted children. A literature review published in 2008 showed that 25 randomized clinical trials evaluated the effects of psychoeducational programs focused on parenting and marital relationships (Petch & Halford 2008). The results indicated that the main positive effects were found in knowledge about parenting, maternal responsiveness, and maternal and child attachment. More than ten years have passed, and numerous program planning and implementation advances have been made since then. Additionally, many studies have shown the high prevalence of depression in pregnant women and mothers (Sipsma et al., 2016; Wu & Hung, 2016), which may have led to an increase in the number of interventions addressing mental health issues of mothers and fathers expecting their first child. This study builds on the findings of Petch and Halford (2008), which indicated the predominance of positive results concentrated in the marital and parental domains

during the transition to parenthood. It poses the following objective: to analyze the effects of intervention programs aimed at primiparous mothers or fathers on the individual, marital, and parental domains of the transition to parenthood.

Method

This study is a systematic literature review (Costa & Zoltowski 2014). The search for articles was carried out in the PsycINFO, PubMed/MEDLINE, Scopus, and Web of Science databases using the following combination of keywords: transition to parenthood OR transition to motherhood OR transition to fatherhood AND intervention OR program OR early intervention OR parent preparation OR prevention OR parent education. Each keyword, including those with only one term, was used in quotation marks as an alternative to restricting the searches exclusively to the terms consulted. The collection was carried out between November and December 2019 by two independent judges, according to the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) recommendations and with the aid of the State of Art through Systematic Review software, version 2.3.4.2. The articles that generated disagreements were discussed until a consensus was reached among judges.

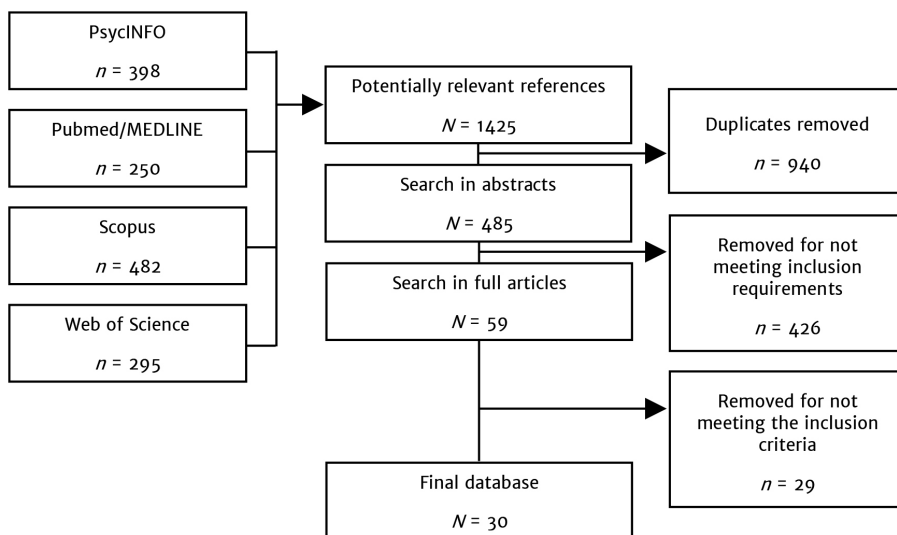
Only articles that reported quantitative empirical research on the evaluation of the effects of psychological interventions for primiparous individuals during the transition to parenting were included in this review. Articles involving multiparous parents were included only in cases where the results were analyzed separately for parents with the first child and parents with more than one child or if parity was considered a control variable. The content of the interventions should be related to at least one of the first three domains of the Five-Domain Structural Model of the Family with a First Child (Cowan et al., 1985): (a) individual, (b) marital, and (c) parental. Participants in each study should have attended interventions during the interval between the pregnancy of the first child and when the child reached 18 months of age. The studies should have been published between the years 2008 and 2019. The quality of the studies was not considered an inclusion criterion to maximize the search potential and offer a broad overview of production in the area. As exclusion criteria, interventions aimed at parents of premature babies or those with congenital problems were disregarded. These conditions require interventions with different characteristics, making it difficult to compare the effects with those found in other studies. Implementation studies with no intervention effects were also excluded.

A total of 1,425 citations from the database searches were archived. After suppressing duplicate references and applying the inclusion and exclusion criteria, the database for this review was composed of 30 non-overlapping articles published in English, comprising 6782 participants (see PRISMA flow diagram in Figure 1). The complete versions available of all selected studies were read systematically to identify the relevant information. The units of analysis (which correspond to the effects of the interventions) were then highlighted in the original text of the articles. The units of analysis identified were grouped into the three categories created from the Five-Domain Model for the analysis of the types of effects of the interventions, namely:

(1) effects on the individual domain, (2) effects on the marital domain, and (3) effects on the parental domain. In addition, the most relevant information related to the participants, instruments, and intervention procedures was also synthesized to characterize the studies.

Figure 1

Search flow and selection of articles in the databases



The categories were defined so that each unit of analysis was classified into only one category. However, considering that each study may have presented more than one type of finding, it was possible to classify the same article in more than one category but not the same result. Among the 30 studies reviewed, 14 articles analyzed outcomes for the individual domain, 17 for the marital domain, and 14 for the parental domain (see Table 2). The analyses were carried out by two independent judges and differences regarding the classifications in the three categories were discussed by the judges until a consensus was reached.

Results

The results will be presented in two parts. First, we examine the general features of the reviewed studies, such as year, journal, and country of publication (Table 1). Second, we describe the features of the interventions with positive impacts and their effects in three specific subsections for each category analyzed (see Table 2).

Table 1 shows the features of the reviewed studies. There was an increase in the number of publications over the search period. Eleven of the 30 studies reviewed were published from 2008 to 2013, while there were 19 publications in the range from 2014 to 2019. The journal with

the most significant number of publications was Prevention Science, with four studies. Much of the research took place in the United States of America (15) and Australia (6). In total, 19 intervention programs were evaluated, of which 14 were nominated. The Family Foundations program was the most frequent, assessed in 10 studies.

Table 1*Characteristics of selected articles*

Authors (year)	Country	Participants		Intervention name	Intervention			Moment			Instrument		
		Mother	Couple		Mother	Couple	Group	Pre	Post	Both	Ques	Obs	Int
Brown, Goslin, and Feinberg (2012)	US		x	Family Foundations			x				x	x	
Buultjens, Murphy, Milgrom, Taket, and Poinen (2018)	AU	x		—			x				x	x	
Daley- McCoy, Rogers, and Slade (2015)	UK		x	—			x	x				x	
Doss, Cícila, Hsueh, Morrison, and Carhart (2014)	US		x	—		x					x	x	
Feinberg and Jones (2018)	US		x	Family Foundations			x				x	x	x
Feinberg, Jones, Kan, and Goslin (2010)	US		x	Family Foundations			x				x	x	
Feinberg, Jones, Roettger, Solmeyer, and Hostetler (2014)	US		x	Family Foundations			x				x	x	x
Feinberg et al. (2015)	US		x	Family Foundations			x				x	x	
Feinberg, Kan, and Goslin (2009)	US		x	Family Foundations			x				x	x	x
Feinberg et al. (2016)	US		x	Family Foundations			x				x	x	x
Feinberg et al. (2019)	US		x	Military Family Foundations		x					x	x	
Feinberg, Roettger, Jones, Paul, and Kan (2015)	US		x	Family Foundations			x				x	x ^a	
Gambrel and Piercy (2015)	US		x	Mindful			x	x				x	x

Table 1
Characteristics of selected articles

Authors (year)	Country	Participants		Intervention name	Intervention			Moment			Instrument		
		Mother	Couple		Mother	Couple	Group	Pre	Post	Both	Ques	Obs	Int
Gao, Xie, Yang, and Chan (2015)	CN	x		Oriented Postnatal Psychoeducation Programme	x				x			x	
Gnazzo, Di Folco, Zavattini, & de Campora (2015)	IT		x	—		x			x			x	
Halford, Petch, and Creedy (2010)	AU		x	Couple CARE for Parents		x	x			x	x	x	x
Hawkins, Lovejoy, Holmes, Blanchard, and Fawcett (2008)	US		x	Marriage Moments	x				x			x	
Kan and Feinberg (2014)	US		x	Family Foundations			x			x	x		
Mihelic, Morawska, and Filus (2018)	AU		x	Baby Triple P	x		x			x	x		
Ngai, Chan, and Ip (2009)	CN	x		Childbirth Psychoeducation	x			x				x	
Nicolson, Judd, Thomson- Salo, and Mitchell (2013)	AU	x		AMPLE Intervention			x			x	x		
Petch, Halford, Creedy, and Gamble (2012)	AU		x	Couple CARE for Parents		x	x			x	x	x	x
Popp, Fuths, and Schneider (2019)	DE		x	Baby Triple P			x			x	x		x
Reichle, Backes, and Dette- Hagenmeyer (2012)	DE		x	Beginnings matter			x			x	x		
Shapiro, Nahm, Gottman, and Content (2011)	US		x	Bringing Baby Home			x			x	x	x	x
Solmeyer, Feinberg, Coffman, and Jones (2014)	US		x	Family Foundations			x			x		x	

Table 1
Characteristics of selected articles

Authors (year)	Country	Participants		Intervention name	Intervention			Moment			Instrument		
		Mother	Couple		Mother	Couple	Group	Pre	Post	Both	Ques	Obs	Int
Takeishi, Nakamura, Kawajiri, Atogami, and Yoshizawa (2019)	JP		xb	—	x	x	x				x		
Timlin and Simpson (2017)	UK	x		Dru yoga			x		x		x		
Toivanen et al. (2018)	FI	x		Nyytti®			x			x	x		x
Vlismas, Malloch, and Burnham (2013)	AU	x		M&M program			x		x		x		x
TOTAL		7	23		4	6	24	4	5	21	29	9	3

Note = ^aAssociated with cortisol collection. ^bA mother or father participated without the partner. Ques = questionnaire; Obs = observation; Int = interview.

Intervention effects were mainly evaluated with standardized scales (29 studies). Twelve of these 29 investigations combined the results of standardized scales with another type of measure, and nine studies used observations. Regarding sociodemographic factors, 24 studies recruited predominantly or exclusively adults of the middle or upper class with the highest level of schooling; only six studies involved participants with a lower level of education, low income, or teenage mothers. In summary, the examination of the general features of the studies indicates the predominance of North American research, with the Family Foundations program being the most investigated intervention. Also noteworthy is the small number of studies performed with low-income and low-schooling samples.

Table 2
Classification of selected articles based on the positive effects of investigations

Authors (year)	Variables with positive effects in the individual domain
Daley-McCoy et al. (2015)	Postpartum depression (mothers and fathers).
Buultjens et al. (2018)	Postpartum depression.
Doss et al. (2014)	Perceived stress.
Feinberg, Jones et al. (2015)	(a) Length of postpartum hospital stay associated with economic strain and (b) length of postpartum hospital stay associated with prenatal anxiety.
Feinberg et al. (2016)	(a) Parental stress, (b) levels of worry, (c) depression, and (d) anxiety.
Feinberg et al. (2019)	Depression.
Feinberg et al. (2010)	Depression (non-married mothers).
Feinberg, Roettger et al. (2015)	(a) Frequency of cesarean section, (b) length of gestation, and (c) days in the hospital.
Gambrel and Piercy (2015)	Negative affection (fathers).

Table 2*Classification of selected articles based on the positive effects of investigations*

Authors (year)	Variables with positive effects in the individual domain
Gao et al. (2015)	Postpartum depression.
Gnazzo et al. (2015)	Risk symptoms for depression: panic and anxiety (both), anxiety, unhappiness, self-harm thoughts, pessimism and tiredness, concentration (mother), and difficulties sleeping (father).
Ngai et al. (2009)	(a) Learned resourcefulness e (b) depressive symptoms.
Timlin and Simpson (2017)	(a) Stress, (b) negative affect, (c) dysfunctional coping, and (d) problem-focused coping.
Toivanen et al. (2018)	(a) Negative emotions, (b) fear of childbirth, and (c) positive emotions.
Authors (year)	Variables with positive effects in the marital domain
Daley-McCoy et al. (2015)	(a) Marital satisfaction (mothers) and (b) couple communication (fathers).
Brown et al. (2012)	(a) Marital satisfaction and (b) co-parenting.
Doss et al. (2014)	(a) Marital satisfaction (mothers – both interventions, high-risk fathers), (b) frequency of affection (mothers), (c) parenting alliance (mothers – both interventions), (d) criticism (high-risk fathers), and (e) childcare involvement (fathers).
Feinberg et al. (2010)	Marital satisfaction (mothers and fathers of boys).
Gambrel and Piercy (2015)	Marital satisfaction (fathers).
Halford et al. (2010)	(a) Negative communication (both), (b) relationship adjustment, and (c) self-regulation (mothers).
Kan and Feinberg (2014)	Partner psychological aggression (fathers with frequent preprogram partner psychological aggression and fathers with severe preprogram partner physical aggression).
Petch et al. (2012)	(a) Conflicts and invalidation (mothers) and (b) relationship satisfaction (high-risk mothers).
Reichle et al. (2012)	Marital satisfaction (intervention with communication module).
Shapiro et al. (2011)	(a) Competition for the baby's attention (both) and (b) intrusiveness during partner-baby relation (fathers who took the workshop pre-birth).
Solmeyer et al. (2014)	Co-parenting competition (mothers of boys and fathers with sons and daughters).
Buultjens et al. (2018)	Couple dyadic adjustment.
Feinberg and Jones (2018)	Negative co-parenting.
Feinberg et al. (2009)	(a) Affection towards partner, (b) negative communication (mothers), (c) co-parental competition and triangulation, and (d) co-parental inclusion (mothers).
Feinberg et al. (2016)	(a) Coparental competition, (b) co-parenting positivity, (c) endorsement of partner's parenting, (d) triadic relationship quality, (e) positive communication, (f) physical violence, (g) negative communication with depression as moderator, (h) co-parenting withdrawal, with depression as moderator, and (i) self-reported co-parenting, with depression as moderator.
Feinberg et al. (2019)	(a) Co-parenting closeness, (b) co-parental support, and (c) Couples' conflict resolution (participants that completed more than four modules).
Takeishi et al. (2019)	Co-parenting support.

Table 2*Classification of selected articles based on the positive effects of investigations*

Authors (year)	Variables with positive effects in the individual domain
Authors (year)	Variables with positive effects in the parental domain
Gambrel and Piercy (2015)	Maternal identity.
Buultjens et al. (2018)	(a) Postnatal maternal attachment and (b) perceived parenting competence.
Feinberg et al. (2016)	(a) Parent-to-child violence, (b) parent-to-child psychological violence, and (c) parenting positivity.
Feinberg et al. (2010)	(a) Parental stress (both), (b) parent self-efficacy (both), and (c) harsh, physical, over-reactive, lax, and permissive parenting (both).
Feinberg et al. (2009)	(a) Positive parenting (both) and (b) negative parenting (both).
Gao et al. (2015)	Maternal role competence.
Gnazzo et al. (2015)	(a) Parental stress and (b) a sense of comfort in the parental role.
Halford et al. (2010)	Parental stress (fathers).
Kan and Feinberg (2014)	Parent-child physical aggression (mothers with frequent preprogram partner psychological aggression).
Nicolson et al. (2013)	(a) Intrusiveness and (b) hostility.
Petch et al. (2012)	Intrusiveness (high-risk mothers).
Reichle et al. (2012)	(a) Knowledge about early child development, (b) anger control problems in interaction with the child, (c) security in interaction with the child, and (d) parental sensitivity.
Toivanen et al. (2018)	(a) Parenthood-related personal goals and (b) security, and (c) self-efficacy.
Vlismas et al. (2013)	(a) Pleasure of interactions mother-child, (b) dyadic reciprocity mother-child, (c) frequency and duration of the infant-directed speech, (d) postnatal maternal attachment, (e) use of music and enjoyment (only one category) of interactions, (f) movement interactions, and (g) attentional and affective/social components of mothers' speech.

Effects on individual domain

Studies classified in the individual category involved positive effects on the physical or mental health of the participating parents. A total of 14 studies found positive results in this domain, and interventions spanned from one to 20 sessions, with an average of seven meetings. Most reviewed studies with effects in this domain had couples as participants. Five studies performed the intervention only with mothers. Most interventions were implemented in groups. Exceptionally, three studies ran interventions with each couple, and two interventions were performed individually with each mother. The sessions, in most studies, started in the prenatal period and ended in the postpartum period. Three studies reported that the sessions were held only during the prenatal period, and in three other studies, the sessions were conducted only during the postpartum period.

Interventions with results classified in this category primarily focused on communication and problem-solving in the marital relationship, both of which were addressed in seven studies. The other four studies addressed mutual support and co-parenting. In addition, different less common themes that produced benefits in the individual domain were expectations about becoming parents, self-management of parents' emotions, relaxation or mindfulness practices,

cognitive restructuring techniques to modify thoughts, yoga classes, information about coping with the fear of childbirth and normalization, which consists of recognizing physical, emotional, and marital changes as phenomena naturally related to the transition to parenthood. Most research with positive results in the individual domain showed positive effects on parents' mental health. Studies have shown a reduction in symptoms or risk for depression and anxiety and in the frequency of negative emotions, such as worry and anxiety.

Some reviewed studies detected different results depending on the gender of the participant. Reports of improvement in perceived stress, anxiety, unhappiness, thoughts of self-harm, pessimism, tiredness, and concentration were confirmed only in mothers. Specifically, unmarried mothers presented a reduction in depressive symptoms. Regarding fathers, studies found decreases in negative affect and sleep problems. An essential aspect of the studies that showed positive effects on parents' mental health was the variety of instruments for assessing this dimension, making it difficult to compare results.

Another positive effect found in the individual domain concerns parents' physical health. There was a reduction in a postpartum inpatient stay, positive effects on the duration of pregnancy, and less likelihood of cesarean delivery. Finally, studies also showed positive results on coping strategies, which indicates an increase in coping focused on the problem, a decrease in dysfunctional coping, and the maintenance of the ability to learn.

In short, most of the interventions that impacted the individual domain found positive effects on mental health, with decreases in indicators or risk for psychopathology. Another result worth mentioning refers to benefits for maternal gestational health.

Effects on the marital domain

In the marital category, the revised studies evaluated possible positive effects on relationship satisfaction, perception of partner support, reduction of aggressive interactions (physical or psychological), couple's communication, and co-parenting. A total of 17 articles found positive effects on the marital domain, and interventions lasted from 1 to 30 sessions, with an average of eight sessions.

Most studies with positive effects on the marital domain had couples as participants, except for one study, which included only mothers. Most interventions were performed in groups, bringing men and women together. Two studies linked group sessions with individual couples' sessions. In one study, the meetings were conducted with either one or two couples. In two studies, the intervention was conducted only with the couple. Most of the interventions included meetings during both the prenatal and postpartum periods; however, three studies conducted sessions only in the prenatal period. Regarding program content, couple communication, and problem-solving skills were the most frequently addressed issues. Interventions also approached co-parenting, emotional support, and the couple's adjustment and empathy.

Promoting co-parenting was the most common result in this category, evidenced by nine articles that found improvements for mothers and fathers. However, in one study,

enhancements in co-parenting occurred only for mothers, and in another investigation, benefits were found only for mothers of boys. One study highlighted that the proportion of changes in co-parenting was more significant for fathers than mothers. Regarding couples' communication, six studies revealed an improvement after the intervention. While two of these studies found positive effects for both men and women, three investigations identified improvements only for fathers or only for mothers.

Another dimension frequently affected by interventions was satisfaction with the relationship. Five studies highlighted effects on the mother and father's marital satisfaction, while two articles highlighted positive impacts only on the mother's conjugal satisfaction. One study verified a reduction in the initial decline in marital satisfaction only for men at high risk for adjusting to parenting. Two studies reported positive results in the couple's dyadic adjustment, one of which found improvements specifically for women. Two other studies highlighted an increase in the frequency of the demonstration of affection for men and women.

Positive impacts were also found in psychological or physical aggression. The reduction in partner psychological aggression was found in a study with parents prone to high frequencies of psychological or physical aggression before the intervention. In another study, there was a reduction in the levels of physical violence by the partner.

In summary, the results in this category indicated positive effects on co-parenting among the reviewed studies. There was also evidence of a positive impact on the couple's communication and relationship satisfaction.

Effects on parental domain

The studies reviewed in the parental category verified positive effects on mother-baby or father-baby relationships, whether based on skills for direct interaction, trust, and availability or abilities to promote the child's well-being. The number of sessions in the interventions ranged from 1 to 30, averaging eight sessions.

Most of the studies in this category had couples as participants, except for five studies conducted only with mothers. Most interventions were performed in groups, with both men and women. Two studies combined group sessions with sessions involving the couple. In one study, the intervention was conducted individually with the mother; in another study, the program was performed only with the couple. Most interventions were conducted with meetings during the prenatal and postpartum periods. Three studies performed sessions only in the postnatal period, and one study performed sessions only during the prenatal period.

Couple communication was the most frequent issue addressed by interventions with positive effects on the parental domain and was targeted in six studies. Other themes covered by effective interventions were knowledge about how to take care of a baby, promotion of parental bonding, normalizing or recognizing changes inherent to the transition to parenting, child development, and using music in interactions.

Most studies in this category showed positive effects on parenting practices. The results indicated reductions in permissive and authoritarian practices, as well as in physical punishment and intrusiveness. Some studies referred to these changes as increases in positive parenting and decreased levels of negative parenting in fathers and mothers. Two studies found more safety and effectiveness in parenting, and two other studies found positive effects on responsiveness and emotional availability.

Another reported impact was promoting comfort or safety regarding parental identity, with similar results for both parents. Three studies reported reductions in parental stress after the intervention. Studies in this category also revealed an increase in the quality of attachment and an increase in the pleasure felt by the mother when interacting with the child. Other studies highlighted expanding knowledge about child development and infant caregiving, as well as the development of personal parenting-related goals.

In summary, the studies reviewed within the parenting domain found positive effects on parenting practices, with increases in positive parenting strategies and decreases in negative practices. Investigations also verified increases in positive feelings related to the parental role.

Discussion

The present study analyzed the effects of intervention programs with primiparous mothers or fathers on the individual, marital, and parental domains of the transition to parenthood. Among the methodological characteristics of the research with positive effects, the predominance of high-income samples and hetero-affective couples awaiting biological children stood out, as well as the use of standardized scales and tests to assess intervention effects. Regarding the issues addressed by the interventions, communication, problem-solving, and co-parenting were the most frequent. The sessions ranged from 1 to 30, with an average of 7–8 meetings.

The results of the reviewed articles revealed positive effects on the three domains. The impact on the individual domain occurred mainly in the mental health of fathers and mothers. Reductions were found in the frequency of negative emotions and the symptoms of depression and anxiety; as for the impacts on conjugality, the most common result was to favor co-parenting. Regarding parenting, the most frequently reported positive effects were decreases in negative parenting practices, such as physical aggression, and increases in positive techniques, such as emotional responsiveness and availability.

These results indicate that programs focusing on improving communication skills, the ability to solve problems, and other aspects that favor the couple's relationship produce benefits that allow fathers and mothers to go through the transition to parenthood with better conditions to deal with the challenges and changes typical of this stage of development. The reason for this is possibly related to the fact that the development of these skills facilitates the resolution of conflicts and everyday problems and promotes positive interactions between spouses. Hence, negative emotions and dissatisfaction with the marital relationship are minimized, which tends

to increase parents' emotional availability to interact with the baby and use responsive and positive parenting practices (Hameister et al., 2015).

However, the concentration of studies in only two developed countries and the predominance of high-income samples indicate the need for developing countries to invest in this field of research to verify whether intervention programs with similar characteristics may favor the transition to parenting in couples from low-income backgrounds. Vulnerable families face high rates of maternal depression and parental stress and are more prone to use negative parenting practices than families with high education and income (Florsheim et al., 2003; Teubert & Pinquart, 2010), which may require intervention programs with different characteristics. For example, moderate or severe depression associated with a limited repertoire of parenting practices can reduce the benefits of brief, highly structured programs.

Another aspect worth mentioning is the differences in the effects of interventions related to the participant's gender. It is essential to highlight that, culturally, parenting presents different challenges for mothers compared to fathers (Salmela-Aro et al., 2000). It is thus essential to assess how mothers' and fathers' specific needs can interact with intervention resources and lead to different impacts on men and women. Work issues and negotiating caregiving responsibilities between mothers and fathers, which represent essential variables for co-parenting, must be carefully evaluated, as well as their possible interactions with intervention effects. Few studies have analyzed these aspects. Additionally, the different contemporary family configurations and the increase in adoptions by same-sex couples require further studies due to the particularities of the transition to parenthood in these contexts.

Compared to the findings of the literature review published in 2008 (Petch & Halford 2008), the results of the current study reveal an increase in research evaluating intervention effects on parents' mental health. This increase is likely related to evidence of maternal depression (Sipsma et al., 2016; Wu & Hung, 2016) and parental stress (Umberson et al., 2010) that has accumulated in the last decade. The benefits that interventions focused on the couple can produce on the mental health of mothers, and fathers support the notion of reciprocal influences between marital relationship quality and mental health, already documented by correlational or longitudinal studies (Finkbeiner et al., 2013; Rollè et al., 2017; Sipsma et al., 2016). In this sense, the literature reviewed in the present study emphasizes the idea that interventions with couples are a promising way to promote individual mental health.

The reviewed studies also found typical limitations of studies that evaluate intervention programs. The designs generally do not allow the identification of the specific components of the interventions that produced the verified effects. Furthermore, few studies assessed fidelity to the intervention model. An alternative to overcome these limitations is the adoption of procedures that make it possible to evaluate the processes that lead to the expected results (Hofmann & Hayes 2018).

In summary, this study revealed that it is possible to promote individual, marital, and parental aspects of the transition to parenthood among primiparous couples by intervening in

communication, problem-solving skills, and parenting practices aimed at the baby. However, the scarcity of studies with vulnerable samples is notable. Different results obtained for women and men are also worthy of attention, as they indicate that mothers' and fathers' specific needs can interact with intervention strategies and content, resulting in different effects. Finally, meta-analyses regarding effect sizes obtained by the interventions are needed so that professionals who assist couples in the transition to parenthood can make decisions based on highly accurate evidence when choosing intervention strategies.

References

- Brown, L. D., Goslin, M. C., & Feinberg, M. E. (2012). Relating engagement to outcomes in prevention: The case of a parenting program for couples. *American Journal of Community Psychology, 50*(1/2), 17–25. <https://doi.org/10.1007/s10464-011-9467-5>
- Buultjens, M., Murphy, G., Milgrom, J., Taket, A., & Poinen, D. (2018). Supporting the transition to parenthood: Development of a group health-promoting programme. *British Journal of Midwifery, 26*(6), 387–397. <https://doi.org/10.12968/bjom.2018.26.6.387>
- Costa, A. B., & Zoltowsky, A. P. C. (2014). Como escrever um artigo de revisão sistemática. In S. H. Koller, M. C. P. P. Couto, & J. V. Hohendorff (Org.), *Manual de produção científica* (pp. 55–70). Penso.
- Cowan, C. P., Cowan, P. A., Heming, G., Garret, E., Coysh, W. S., Curtis-Boles, H., & Boles III, A. J. (1985). Transitions to parenthood: His, hers, and theirs. *Journal of Family Issues, 6*(4), 451–481. <https://doi.org/10.1177/019251385006004004>
- Daley-McCoy, C., Rogers, M., & Slade, P. (2015). Enhancing relationship functioning during the transition to parenthood: A cluster-randomised controlled trial. *Archives of Women's Mental Health, 18*(5), 681–692. <https://doi.org/10.1007/s00737-015-0510-7>
- Doss, B. D., Cicila, L. N., Hsueh, A. C., Morrison, K. R., & Carhart, K. (2014). A randomized controlled trial of brief co-parenting and relationship interventions during the transition to parenthood. *Journal of Family Psychology, 28*(4), 483–494. <https://doi.org/10.1037/a0037311>
- Doss, B. D., & Rhoades, G. K. (2017). The transition to parenthood: Impact on couples' romantic relationships. *Current Opinion in Psychology, 13*, 25–28. <https://doi.org/10.1016/j.copsyc.2016.04.003>
- Feinberg, M. E., Boring, J., Hostetler, M. L., Karre, J., Irvin, J., & Jones, D. E. (2019). Supporting military family resilience at the transition to parenthood: A randomized pilot trial of an online version of Family Foundations. *Family Relations, 69*(1), 109–24. <https://doi.org/10.1111/fare.12415>
- Feinberg, M. E., & Jones, D. E. (2018). Experimental support for a family systems approach to child development: multiple mediators of intervention effects across the transition to parenthood. *Couple and Family Psychology: Research and Practice, 7*(2), 63–75. <https://doi.org/10.1037/cfp0000100>
- Feinberg, M. E., Jones, D. E., Hostetler, M. L., Roettger, M. E., Paul, I. M., & Ehrenthal, D. B. (2016). Couple-focused prevention at the transition to parenthood, a randomized trial: Effects on co-parenting, parenting, family violence, and parent and child adjustment. *Prevention Science, 17*(6), 751–764. <https://doi.org/10.1007/s11121-016-0674-z>
- Feinberg, M. E., Jones, D. E., Kan, M. L., & Goslin, M. C. (2010). Effects of Family Foundations on parents and children: 3.5 years after baseline. *Journal of Family Psychology, 24*(5), 532–542. <https://doi.org/10.1037/a0020837>
- Feinberg, M. E., Jones, D. E., Roettger, M. E., Hostetler, M. L., Sakuma, K. L., Paul, I. M., & Ehrenthal, D. B. (2015). Preventive effects on birth outcomes: Buffering impact of maternal stress, depression, and anxiety. *Maternal and Child Health Journal, 20*(1), 56–65. <https://doi.org/10.1007/s10995-015-1801-3>
- Feinberg, M. E., Jones, D. E., Roettger, M. E., Solmeyer, A. R., & Hostetler, M. L. (2014). Long-term follow-up of a randomized trial of Family Foundations: Effects on children's emotional, behavioral, and school adjustment. *Journal of Family Psychology, 28*(6), 821–831. <https://doi.org/10.1037/fam0000037>
- Feinberg, M. E., Kan, M. L., & Goslin, M. C. (2009). Enhancing co-parenting, parenting, and child self-regulation: Effects of Family Foundations 1 year after birth. *Prevention Science, 10*, 276–285. <https://doi.org/10.1007/s11121-009-0130-4>
- Feinberg, M. E., Roettger, M. E., Jones, D. E., Paul, I. M., & Kan, M. L. (2015). Effects of a psychosocial couple-based prevention program on adverse birth outcomes. *Maternal and Child Health Journal, 19*(1), 102–111. <https://doi.org/10.1007/s10995-014-1500-5>
- Finkbeiner, N. M., Epstein, N. B., & Falconier, M. K. (2013). Low intimacy as a mediator between depression and clinic couple relationship satisfaction. *Personal Relationships, 20*(3), 406–421. <https://doi.org/10.1111/j.1475-6811.2012.01415.x>
- Florsheim, P., Sumida, E., Mccann, C., Winstanley, M., Fukui, R., Seefeldt, T., & Moore, D. (2003). The transition to parenthood among young African American and Latino couples: Relational predictors of

- risk for parental dysfunction. *Journal of Family Psychology*, 17(1), 65–79. <https://doi.org/10.1037/0893-3200.17.1.65>
- Flykt, M., Palosaari, E., Lindblom, J., Vänskä, M., Poikkeus, P., Repokari, L., ... Punamäki, R.-L. (2014). What explains violated expectations of parent-child relationship in transition to parenthood? *Journal of Family Psychology*, 28(2), 148–159. <https://doi.org/10.1037/a0036050>
- Gambrel, L. E., & Piercy, F. P. (2015). Mindfulness-based relationship education for couples expecting their first child - part 1: A randomized mixed-methods program evaluation. *Journal of Marital and Family Therapy*, 41(1), 5–24. <https://doi.org/10.1111/jmft.12066>
- Gao, L., Xie, W., Yang, X., & Chan, S. W. (2015). Effects of an interpersonal-psychotherapy-oriented postnatal programme for Chinese first-time mothers: a randomized controlled trial. *International Journal of Nursing Studies*, 52(1), 22–29. <https://doi.org/10.1016/j.ijnurstu.2014.06.006>
- Gnazzo, A., Guerriero, V., Di Folco, S., Zavattini, G. C., & de Campora, G. (2015). Skin to skin interactions. Does the infant massage improve the couple functioning? *Frontiers in Psychology*, 6, 1–9. <https://doi.org/10.3389/fpsyg.2015.01468>
- Halford, W. K., Petch, J. F., & Creedy, D. K. (2010). Promoting a positive transition to parenthood: A randomized clinical trial of couple relationship education. *Prevention Science*, 11(1), 89–100. <https://doi.org/10.1007/s11121-009-0152-y>
- Hameister, B. R., Barbosa, P. V., & Wagner, A. (2015). Conjugalidade e parentalidade: Uma revisão sistemática do efeito spillover. *Arquivos Brasileiros de Psicologia*, 67(2), 140–155. Recuperado de http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1809-52672015000200011
- Hawkins, A. J., Lovejoy, K. R., Holmes, E. K., Blanchard, V. L., & Fawcett, E. (2008). Increasing fathers' involvement in child-care with a couple-focused intervention during the transition to parenthood. *Family Relations*, 57(1), 49–59. <https://doi.org/10.1111/j.1741-3729.2007.00482.x>
- Heinicke, C. M. (2002). The transition to parenting. Em M. H. Bornstein (Ed.), *Handbook of parenting: Being and Becoming a Parent* (vol. 3, pp. 363–388). Lawrence Erlbaum Associates.
- Hofmann, S. G., & Hayes, S. C. (2018). TCC moderna CBT: Movendo-se em direção a terapias baseadas em processos. *Revista Brasileira de Terapias Cognitivas*, 14(2), 77–84. <https://doi.org/10.5935/1808-5687.2018001>
- Kan, M. L., & Feinberg, M. E. (2014). Can a family-focused, transition-to-parenthood program prevent parent and partner aggression among couples with young children? *Violence & Victims*, 29(6), 967–980. <https://doi.org/10.1891/0886-6708.VV-D-12-00162>
- McKay, K., & Ross, L. E. (2010). The transition to adoptive parenthood: A pilot study of parents adopting in Ontario, Canada. *Children and Youth Services Review*, 32(4), 604–610. <https://doi.org/10.1016/j.chilcyouth.2009.12.007>
- Mihelic, M., Morawska, A., & Filus, A. (2018). Does a perinatal parenting intervention work for fathers? A randomized controlled trial. *Infant Mental Health Journal*, 39(6), 687–698. <https://doi.org/10.1002/imhj.21748>
- Mitchell, E. A., Nuttall, A. K., & Wittenborn, A. (2019). Maternal depressive symptoms and warm responsiveness across the transition to parenthood. *Journal of Child and Family Studies*, 28, 1604–1612. <https://doi.org/10.1007/s10826-019-01392-x>
- Ngai, F. W., Chan, S. W. C., & Ip, W. Y. (2009). The effects of a childbirth psychoeducation program on learned resourcefulness, maternal role competence and perinatal depression: A quasi-experiment. *International Journal of Nursing Studies*, 46, 1298–1306. <https://doi.org/10.1016/j.ijnurstu.2009.03.007>
- Nicolson, S., Judd, F., Thomson-Salo, F., & Mitchell, S. (2013). Supporting the adolescent mother-infant relationship: Preliminary trial of a brief perinatal attachment intervention. *Archives of Women's Mental Health*, 16(6), 511–520. <https://doi.org/10.1007/s00737-013-0364-9>
- Petch, J. F., & Halford, W. K. (2008). Psycho-education to enhance couples' transition to parenthood. *Clinical Psychology Review*, 28(7), 1125–1137. <https://doi.org/10.1016/j.cpr.2008.03.005>

- Petch, J. F., Halford, W. K., Creedy, D. K., & Gamble, J. (2012). A randomized controlled trial of a couple relationship and co-parenting program (Couple CARE for Parents) for high- and low-risk new parents. *Journal of Consulting and Clinical Psychology, 80*(4), 662–673. <https://doi.org/10.1037/a0028781>
- Popp, L., Fuths, S., & Schneider, S. (2019). The relevance of infant outcome measures: A pilot-RCT comparing Baby Triple P Positive Parenting Program with care as usual. *Frontiers in Psychology, 10*, 1–9. <https://doi.org/10.3389/fpsyg.2019.02425>
- Reichle, B., Backes, S., & Dette-Hagenmeyer, D. E. (2012). Positive parenting the preventive way: Transforming research into practice with an intervention for new parents. *European Journal of Developmental Psychology, 9*(1), 33–46. <https://doi.org/10.1080/17405629.2011.629037>
- Rollè, L., Prino, L. E., Sechi, C., Vismara, L., Neri, E., Polizzi, C., Trovato, A., Volpi, B., Molgora, S., Fenaroli, V., Ierardi, E., Ferro, V., Lucarelli, L., Agostini, F., Tambelli, R., Saita, E., Crugnola, C. R., & Brustia, P. (2017). Parenting stress, mental health, dyadic adjustment: A structural equation model. *Frontiers in Psychology, 8*, 839. <https://doi.org/10.3389/fpsyg.2017.00839>
- Rosa, J. M., Melo, A. K., Boris, G. D. J. B., & Santos, M. A. (2016). A construção dos papéis parentais em casais homoafetivos adotantes. *Psicologia: Ciência e Profissão, 36*(1), 210–223. <https://doi.org/10.1590/1982-3703001132014>
- Salmela-Aro, K., Nurmi, J.-E., Saisto, T., & Halmesmäki, E. (2000). Women's and men's personal goals during the transition to parenthood. *Journal of Family Psychology, 14*(2), 171–186. <https://doi.org/10.1037//0893-3200.14.2.171>
- Schumacher, K. L., & Meleis, A. I. (1994). Transitions: A Central concept in nursing. *Image: The Journal of Nursing Scholarship, 26*(2), 119–127. <https://doi.org/10.1111/j.1547-5069.1994.tb00929.x>
- Shapiro, A. F., Nahm, E. Y., Gottman, J. M., & Content, K. (2011). Bringing baby home together: Examining the impact of a couple-focused intervention on the dynamics within family play. *American Journal of Orthopsychiatry, 81*(3), 337–350. <https://doi.org/10.1111/j.1939-0025.2011.01102.x>
- Sipsma, H. L., Callands, T., Desrosiers, A., Magriples, U., Jones, K., Albritton, T., & Kershaw, T. (2016). Exploring trajectories and predictors of depressive symptoms among young couples during their transition to parenthood. *Maternal and Child Health Journal, 20*(11), 2372–2381. <https://doi.org/10.1007/s10995-016-2064-3>
- Solmeyer, A. R., Feinberg, M. E., Coffman, D. L., & Jones, D. E. (2014). The effects of the Family Foundations prevention program on co-parenting and child adjustment: A mediation analysis. *Prevention Science, 15*(2), 213–223. <https://doi.org/10.1007/s11121-013-0366-x>
- Takeishi, Y., Nakamura, Y., Kawajiri, M., Atogami, F., & Yoshizawa, T. (2019). Developing a prenatal couple education program focusing on co-parenting for Japanese couples: A quasi-experimental study. *The Tohoku Journal of Experimental Medicine, 249*(1), 9–17. <https://doi.org/10.1620/tjem.249.9>
- Teubert, D., & Pinquart, M. (2010). The association between co-parenting and child adjustment: A meta-analysis. *Parenting: Science and Practice, 10*(4), 286–307. <https://doi.org/10.1080/15295192.2010.492040>
- Timlin, D., & Simpson, E. E. A. (2017). A preliminary randomised control trial of the effects of Dru yoga on psychological well-being in Northern Irish first-time mothers. *Midwifery, 46*, 29–36. <https://doi.org/10.1016/j.midw.2017.01.005>
- Toivanen, R. A., Korja, R., Saisto, T., Rouhe, H., Muotka, J., & Salmela-Aro, K. (2018). Changes in emotions and personal goals in primiparous pregnant women during group intervention for fear of childbirth. *Journal of Reproductive and Infant Psychology, 36*(4), 363–380. <https://doi.org/10.1080/02646838.2018.1462477>
- Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A life course perspective. *Journal of Marriage and the Family, 72*(3), 612–629. <https://doi.org/10.1111/j.1741-3737.2010.00721.x>
- van Scheppingen, M. A., Denissen, J. J. A., Chung, J. M., Tambs, K., & Bleidorn, W. (2018). Self-esteem and relationship satisfaction during the transition to motherhood. *Journal of Personality and Social Psychology, 114*(6), 973–991. <https://doi.org/10.1037/pspp0000156>

Vlismas, W., Malloch, S., & Burnham, D. (2013). The effects of music and movement on mother–infant interactions. *Early Child Development and Care*, 183(11), 37–41. <https://doi.org/10.1080/03004430.2012.746968>

Wu, W. R., & Hung, C. H. (2016). First-time mothers' psychiatric health status during the transition to motherhood. *Community Mental Health Journal*, 52(8), 937–943. <https://doi.org/10.1007/s10597-015-9892-2>

EDITORIAL BOARD**Editor-in-chief**

Cristiane Silvestre de Paula

Associated editors

Alessandra Gotuzo Seabra
Ana Alexandra Caldas Osório
Luiz Renato Rodrigues Carreiro
Maria Cristina Triguero Veloz Teixeira

Section editors**“Psychological Assessment”**

Alexandre Luiz de Oliveira Serpa
André Luiz de Carvalho Braule Pinto
Vera Lúcia Esteves Mateus
Juliana Burges Sbicigo

“Psychology and Education”

Alessandra Gotuzo Seabra
Carlo Schmidt
Regina Basso Zanon

“Social Psychology and Population's Health”

Enzo Banti Bissoli
Marina Xavier Carpena

“Clinical Psychology”

Carolina Andrea Ziebold Jorquera
Julia Garcia Durand
Natalia Becker

“Human Development”

Maria Cristina Triguero Veloz Teixeira
Rosane Lowenthal

Technical support

Camila Fragoso Ribeiro
Giovanna Joly Manssur
Giovana Gatto Nogueira

EDITORIAL PRODUCTION**Publishing coordination**

Surane Chilianí Vellenich

Editorial intern

Élcio Marcos de Carvalho Júnior

Language editor

Bardo Editorial (Irina Migliari & Andrew Benson)

Layout designer

Acqua Estúdio Gráfico