Berthelot, N., Larouche, K., Garon-Bissonnette, J., Deschênes, K., Drouin-Maziade, C., & Lemieux, R. (2024). Spillover effects on the relationship with the partner of a mentalization-based intervention for pregnant women. Infant Mental Health Journal. Online ahead of print https://doi.org/10.1002/imhj.22113
Received: 23 October 2023 | Accepted: 20 March 2024

DOI: 10.1002/imhj.22113

RESEARCH ARTICLE

WILEY

Spillover effects on the relationship with the partner of a mentalization-based intervention for pregnant women

Nicolas Berthelot[1,2,3,4,5] | **Karl Larouche**[1,2,3,4,5] | **Julia Garon-Bissonnette**[1,2,4,5,6] | **Kim Deschênes**[2,3,4,5,7] | **Christine Drouin-Maziade**[1,2,4,5] | **Roxanne Lemieux**[1,2,5]

[1]Department of Nursing Sciences, Université du Québec à Trois-Rivières, Trois-Rivieres, Quebec, Canada

[2]Centre d'études interdisciplinaires sur le développement de l'enfant et la famille, Trois-Rivieres, Quebec, Canada

[3]CERVO Brain Research Center, Quebec City, Quebec, Canada

[4]Interdisciplinary Research Center on Intimate Partner Relationship Problems and Sexual Abuse, Montreal, Quebec, Canada

[5]Groupe de recherche et d'intervention auprès de l'enfant vulnérable et négligé, Trois-Rivieres, Quebec, Canada

[6]Department of Psychology and Human Development, Vanderbilt University, Nashville, Tennessee, USA

[7]Department of Psychology, Université du Québec à Trois-Rivières, Trois-Rivieres, Quebec, Canada

Correspondence
Nicolas Berthelot, Professor of Psychology, Department of Nursing Sciences, Université du Québec à Trois-Rivières, Trois-Rivières, Québec, Canada, PO Box 500, Canada.
Email: nicolas.berthelot@uqtr.ca

Funding information
Public Health Agency of Canada, Grant/Award Number: 1617-HQ-000015; Fonds de Recherche du Québec—Santé, Grant/Award Number: 280166; Canada Research Chairs, Grant/Award Number: 950-232739

Abstract

The birth of a child has been associated with a decline in couple satisfaction, which has implications for the child's social-emotional development. This study investigated the potential spillover effect on pregnant women's perceptions of their relationships with their partners of the Supporting the Transition to and Engagement in Parenthood (STEP) program, a brief trauma-informed mentalization-based prenatal group intervention. Participants (94% White) were recruited in prenatal clinics and through online advertisements in Quebec, Canada. Both quantitative and qualitative data were collected from participants assigned to the STEP program ($n = 42$) and those receiving treatment-as-usual (TAU; $n = 125$). Women participating in STEP reported significant improvements in their relationships with their partners compared to those assigned to TAU. More precisely, they reported higher couple satisfaction, enhanced communication, and increased interest in their partners' emotional experience. The qualitative analysis further substantiated these results, with participants reporting having involved their partners in their pregnancy, shared their insights about themselves with their partners and gained fresh perspectives on their relationships. Participants in STEP also expressed sharing program materials with their partners and considered that such interventions should be extended to expecting fathers. This study underscores the potential of mentalization-based interventions to indirectly contribute to couple relationships, which may have positive implications for parenting and the infant.

KEYWORDS
dyadic adjustment, prenatal, prevention, reflective functioning, trauma

1 | INTRODUCTION

An important body of literature documented a decrease in couple satisfaction during the first years following the birth of a child, especially in couples having experienced childhood trauma (River et al., 2020) or having expected a baby during the pandemic (McMillan et al., 2021). In turn, poor dyadic adjustment in expecting parents or those with a young child was shown to be associated with higher parenting stress (deMontigny et al., 2020), poorer mental health (Mangialavori et al., 2019), greater sexual difficulties (Baumann et al., 2020), lower antenatal (Brandão et al., 2019) and postnatal (Kekeç & Dikmen, 2023) bonding with the child and poorer parenting alliance and co-parenting (Jiménez-Picón et al., 2021). The quality of the relationship between parents is also a protective factor for infant development. Indeed, good couple functioning during pregnancy has been longitudinally associated with lower negative affectivity (Stapleton et al., 2012) and higher surgency and regulatory capacity (Mayrand et al., 2021) in infants, as well as higher rates of father-infant secure attachment relationships (Tian et al., 2023). Inversely, conflicts between parents are associated with problematic developmental outcomes in their children, namely, in terms of physiological regulation (Porter & Dyer, 2017) and behavioral problems (Vaez et al., 2015). This underlines the need for brief interventions that could support couple functioning in adults expecting a child, especially amongst the most vulnerable populations including parents having experienced childhood trauma.

KEY FINDINGS

1. The STEP program, a prenatal group intervention drawing from the principles of mentalization-based interventions, is associated with improvements in pregnant women's relationships with their partners, an effect that is not observed in participants receiving the natural trajectory of prenatal care.
2. Women who participated in the prenatal intervention qualitatively reported involving their partners in their pregnancy, sharing their insights, and seeing their relationships from a new perspective.
3. Mentalization-based interventions may contribute to interpersonal relationships, namely in terms of improvements in couple functioning among expecting parents.

STATEMENT OF RELEVANCE

Poor dyadic adjustment in expecting parents has negative implications for parenting and infant development. By increasing the quality of couple functioning during pregnancy, the intervention may contribute to mitigate the well-documented decline in couple satisfaction in new parents and support infant mental health.

1.1 | The STEP Program: A mentalization-based prenatal group intervention

In recent years, the STEP (Supporting the Transition to and Engagement in Parenthood) program (Berthelot et al., 2018; Drouin-Maziade et al., 2019) has been developed to foster resilience and well-being in pregnant women exposed to early life adversity in order to mitigate the well documented impact of childhood trauma on pregnant women's health and functioning (Garon-Bissonnette et al., 2022; Menke et al., 2019; River et al., 2020; Steele et al., 2016) and to contribute to interrupting intergenerational cycles of childhood trauma (Madigan et al., 2019; van IJzendoorn et al., 2020). STEP is a prenatal group intervention drawing from core principles of mentalization-based interventions (Bateman et al., 2013; Karterud, 2015; Luyten & Fonagy, 2019) and from practice guidelines with survivors of complex trauma (Kezelman & Stavropoulos, 2012). The program is manualized and aims to enhance reflective capacities in pregnant women by (a) providing knowledge regarding childhood trauma, (b) supporting a better understanding of the impact of trauma on current functioning, (c) supporting abilities to identify and regulate emotions in stressful situations, (d) providing opportunities for interactions with other women having experienced adversity, and (e) connecting participants with existing resources in the community. Contrary to many prenatal interventions, the main focus of STEP is the developing mother rather than the child to be born. Indeed, we hypothesize that, in order for mothers who have experienced trauma to be fully sensitive to their children, they have to have already experienced someone else's sensitivity toward their own needs. Therefore, the program focuses on facilitating the mentalization of the self as a person and as a mother, before mentalizing the baby, which occurs in the later sessions of the program. The STEP program is divided into three distinct sections. The initial section, titled "Becoming a Mother," is designed to delve into and normalize the array of emotions that

accompany pregnancy, while also fostering the adoption of healthy strategies for managing these emotions. Following this, the second section, labeled "A Look at My Own History," aims to facilitate a deeper understanding of trauma by examining its nature and consequences, validating participants' emotional responses to trauma, encouraging reflection on past experiences with significant others, and exploring coping mechanisms. Lastly, the concluding section, 'Looking Ahead,' seeks to assess participants' needs and strengths, introduce available resources to enhance resilience, and encourage participants to envision both positive and challenging moments they may encounter with their child. The program can be delivered in person or online in a synchronous mode. In the current study, 40 participants (95%) received the online version. Previous research showed that women who participated in the program reported high levels of satisfaction across all of the sessions, a significant decrease in psychological distress (Berthelot et al., 2021) and generally considered that the program met their needs, namely owing to the pertinence of the activities, the secure framework and the group format (Berthelot, Goupil, et al., 2022).

To respond to the upsurge in psychological distress in pregnant women during the COVID-19 pandemic, the program was subsequently adapted to meet the needs of all pregnant women, whether or not they had experienced trauma during their childhood. The resulting adaptation (STEP-COVID: Supporting the Transition to and Engagement in Parenthood during the COVID-19 pandemic; Drouin-Maziade et al., 2021) is a 6-week group intervention offered online in a synchronous mode. The program differed from the original program in that the specific content on childhood adversity was shortened and reworked to be more inclusive, and some activities were adapted to address specific issues related to the pandemic. A preliminary evaluation of STEP-COVID showed that women who participated in the intervention, and not women receiving treatment-as-usual (TAU), showed a significant decrease in psychological distress and a significant increase in positive affectivity over the course of pregnancy (Berthelot et al., 2023). Participants in STEP-COVID also reported significant changes during the program on resilience-promoting factors (Berthelot, Drouin-Maziade, et al., 2022).

An important constraint inherent to prenatal interventions such as STEP is that their duration is restricted by the limited length of pregnancy. Therefore, choices inevitably have to be made regarding which domains of functioning will and will not be addressed in the course of the intervention. Accordingly, one chief limitation of STEP is that it does not address couple functioning. However, the intervention taps into a number of dimensions that were previously shown to be associated with the quality of the relationship with the partner, including reflective capacities (Borelli et al., 2021; Jessee et al., 2018), emotion regulation (Rassart et al., 2022; Sousa-Gomes et al., 2023), history of childhood trauma (Berthelot et al., 2014; Brassard et al., 2022), and COVID-related distress (Carrese-Chacra et al., 2023; Randall et al., 2022). The question thus arises as to whether a brief intervention, drawing from the principles of mentalization-based interventions offered to pregnant women in the absence of their partners, could promote the quality of couple relationships.

This study used mixed-methods to evaluate the spillover effects of the STEP program on women perceptions of changes in their relationships with their partners. In the first place, we assessed whether women who participated in STEP identified greater positive changes in their relationships with their partners or the other parents (when no longer in a relationship) than women receiving TAU in terms of satisfaction, communication, ability to confide in their partners, interest in their partners' internal world as well as the emotional support they offer to the latter. In the second place, we looked at every reference to the partners or the other parents during semistructured interviews administered after the ending of the program to evaluate participants' appreciation of the intervention.

2 | METHODS

2.1 | Recruitment strategy and group assignation

The current study was briefly introduced by nurses during pregnancy-related medical appointments and was advertised on social media between September 2019 and May 2021. A research assistant contacted all potential participants showing interest in the study to inform about the research protocol and the interventions offered. Pregnant women who reported being interested in participating in the research completed a series of questionnaires on a secure web portal to see if they met the intervention inclusion criteria (i.e., being between 12 and 28 weeks of pregnancy and being available for the scheduled program) and to collect baseline data. Participants were next assigned to the intervention or control (TAU) groups using a nonrandomized clinical trial. Assignation was mainly based on the participant availability when groups were scheduled: those who could not attend groups when they were scheduled or who could not integrate the intervention because no group was currently running were automatically assigned to the TAU arm of the study. In the current study, TAU was defined has having free access to a range of psychosocial and medical services including prenatal classes and usual prenatal care

offered universally to expecting parents in the Province of Quebec, Canada.

Two versions of the intervention were offered by the research team: (1) the original STEP program (i.e., eight to nine intervention sessions developed for pregnant women with a history of childhood trauma) and (2) STEP-COVID (six sessions). Women who reported a history of childhood trauma at baseline assessment received an invitation to participate either in the original STEP program or the STEP-COVID program and were ultimately free to choose the version of the intervention they wished to participate in. Those who did not experience childhood trauma were automatically assigned to STEP-COVID. After group assignation, a semistructured interview was carried out with women of the intervention arm to clarify the conditions for participation (i.e., being able to ensure confidentiality during the meetings) and to thoroughly verify exclusion criteria consisting of suffering from important difficulties that compromise the emotional availability required by the program such as suicidal ideation, active violence, mental health disorders not stabilized (ex. psychosis), significant drug or alcohol use, important self-destructive behavior, or uncertainty of wanting to carry the pregnancy to term.

The two versions of the intervention were evaluated using the same protocol (clinical trial #NCT04829864 and #NCT05419167). The final sample comprised 42 pregnant women who participated in one of the two versions of the intervention ($n = 25$ STEP and $n = 17$ STEP-COVID) and 125 pregnant women who were assigned to TAU (Figure 1). Women in both arms of the study completed the baseline and postintervention assessments at the same moment of pregnancy. The study received ethical approval from our University Ethics Committee (CER-16-226-10) and from the Institutional Review Board of our regional health center (CER-2016-016). All participants provided consent for participating in the study.

2.2 | Measures

2.2.1 | Sociodemographic characteristics

Women were asked about their age, marital status, education level, race/ethnicity and annual household income at the baseline assessment.

2.2.2 | History of childhood trauma

Women completed two complementary retrospective measures of childhood trauma: the Childhood Trauma Questionnaire (CTQ-28; Bernstein et al., 2003) and the Childhood Interpersonal Traumas Checklist (CITC; Lemieux & Berthelot, 2018). The CTQ-28 assesses five types of traumas: physical, sexual, and psychological abuse as well as physical and psychological neglect. The instrument includes 28 items rated on a 5-point Likert scale (1 = *never true* to 5 = *very often true*). The CTQ-28 was shown to have good psychometric properties in clinical and community samples (Bernstein et al., 2003). The Cronbach's alpha for the CTQ in this study was .82. The CITC is a self-reported measure assessing the occurrence, during childhood or adolescence, of 33 potentially traumatic experiences, including abuse and neglect and other types of interpersonal trauma (e.g., parental mental illness, role reversal, bullying, absence of proper boundaries in the family). The instrument has been shown to be complementary to existing measures of childhood trauma such as the CTQ-28 (Legendre et al., 2024). In the current study, participants were classified as having experienced childhood trauma when they endorsed ≥ one type of abuse or neglect according to the validated cut-offs of the CTQ-28 (Walker et al., 1999), ≥ one experience of abuse or neglect at the CITC, or ≥ three other types of potentially traumatic experiences at the CITC.

2.2.3 | Changes in couple functioning

The subscale *Relationship with partner* from the *Changes in domains of functioning during pregnancy* (Berthelot et al., 2020) questionnaire was administered toward the end of pregnancy. The five items of the subscale tap into the participants' perception of changes concerning the relationship with their partners using a 5-point Likert scale ranging from 1 (*Greatly deteriorated*) to 5 (*Greatly improved*). When the participant was no longer in a relationship with the partner, the items were answered in relation to the other parent. The five items evaluate satisfaction, communication, ability to confide in the partner, interest toward the partner's feelings and emotional support offered to the partner (see Berthelot et al., 2023). Both the total score and scores at each item were used in the present study. The Cronbach's alpha for the relationship with partner subscale was .88.

2.2.4 | Qualitative evaluation of the program

Our team developed a semistructured interview to gather participant perceptions regarding their experience of the STEP program, once it was completed. This interview allowed evaluating (1) the needs and expectations they had before the program, (2) whether the program addressed or not these needs and expectations, (3) the most and the least appreciated aspects or activities of the program,

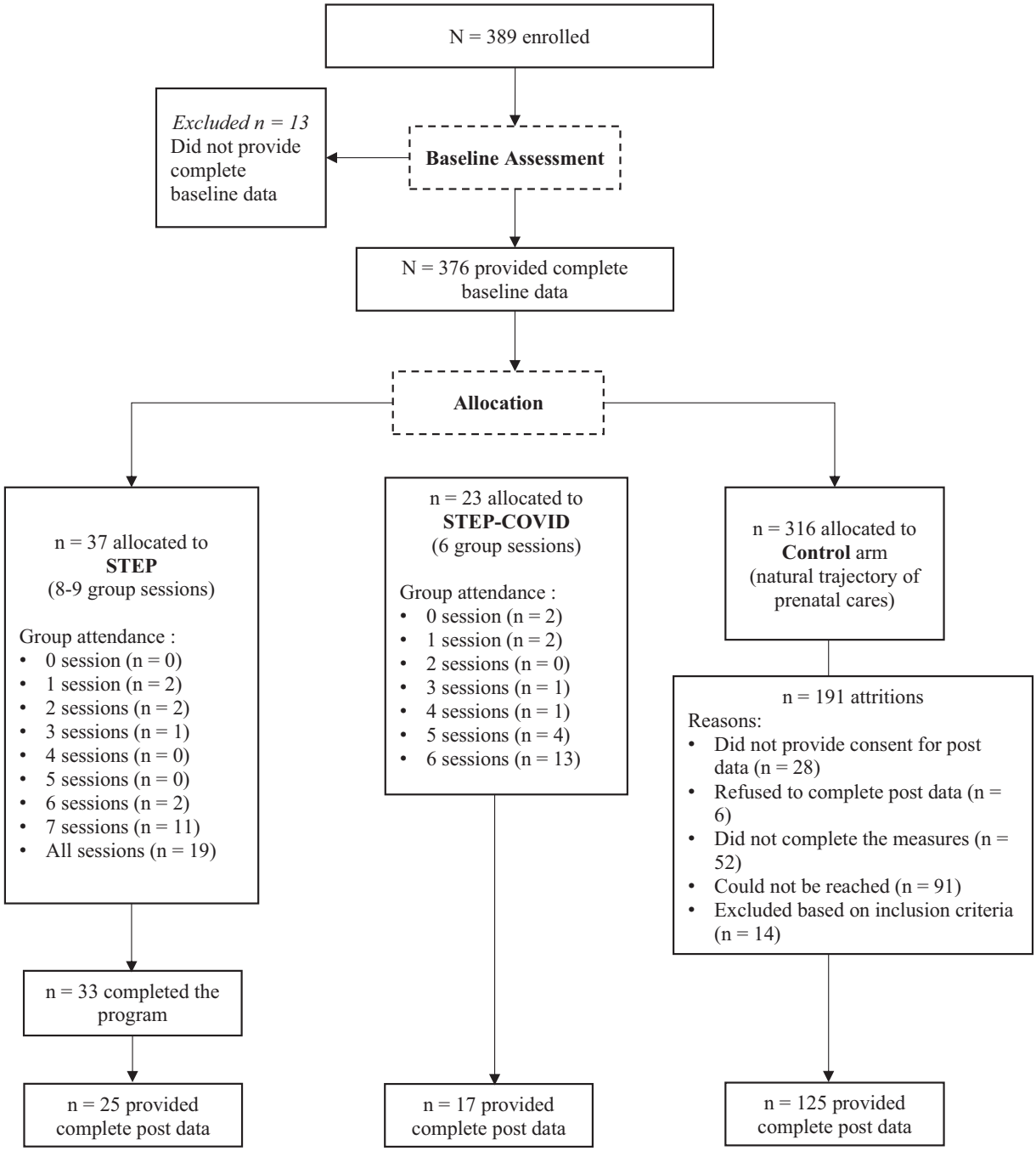

FIGURE 1 Study flow chart.

and (4) whether they observed changes in their functioning following their participation in the program, especially regarding their behaviors, emotions, and cognitions. Examples of questions used in the interview are as follows: "In general, what do you think of the STEP program?," "Do you consider that the topics covered during the STEP program were sensitive to your personal, family, social and cultural situation?," "What did you like least about the STEP program?" and "Did you observe any changes in the way you felt during or after your participation in the program?." None of the questions addressed couple functioning. Interviews were conducted by trained doctoral students in psychology not involved in the offering of the intervention. Interviewers were informed to be flexible while conducting the interviews, to get the clearest picture possible of a participant's experience and to try to prompt a free discussion as much as possible. They completed the interview online (via a teleconferencing platform), in our lab or at the participant's residence, at the participant's convenience. Interviews were recorded and subsequently

TABLE 1 Sociodemographic characteristics of participants.

Demographic characteristics	Total ($N = 167$)	Intervention arm (STEP)[a] ($n = 42$)	Control arm (TAU) ($n = 125$)
Age, mean (SD), [range]	29.71 (4.43) [18–42]	28.71 (4.36) [21–41]	30.05 (4.42) [18–42]
Ethnicity[b]			
Caucasian/white	157 (94.0)	38 (90.5)	119 (96.7)
Black	3 (1.8)	1 (2.7)	2 (1.6)
Latina	1 (.6)	–	1 (.8)
First Nations	1 (.6)	1 (2.7)	–
Education status, *n* (%)			
High school diploma or less	15 (9.0)	4 (9.5)	11 (8.8)
Collegial or professional training	74 (44.3)	18 (42.9)	56 (44.8)
University degree	78 (46.7)	20 (47.6)	58 (46.4)
Annual familial income (CAD)[c]**, *n* (%)**			
$44,999 or less	18 (10.6)	7 (16.7)	11 (8.8)
$45,000–74,999	28 (16.8)	8 (19.0)	20 (16.0)
$75,000–94,999	48 (28.8)	10 (23.8)	38 (30.4)
$95,000 or more	70 (41.9)	16 (38.1)	54 (43.2)
Marital status			
Married/common-law union	163 (97.6)	41 (97.6)	122 (97.6)
History of childhood trauma, *n* (%)	91 (54.5)	29 (69.0)	62 (49.6)

Abbreviations: STEP, Supporting the Transition to and Engagement in Parenthood; TAU, treatment-as-usual.

[a]For the analyses, participants of the two versions of the STEP programs (STEP and STEP-COVID) were merged into a single intervention group.

[b]Missing values for $n = 5$.

[c]Missing values for $n = 3$.

transcribed verbatim. Information that could have permitted the participants to be identified was removed from the verbatim.

2.3 | Data analysis strategy

Regarding the quantitative part of the study, bivariate correlations were conducted as a preliminary analysis to evaluate potentially confounding variables. T-tests and independent chi-square tests were also used to compare groups on sociodemographic characteristics. To meet the main objectives, a univariate analysis of variance was conducted for the cumulative score of couple functioning as well as for each of the five dimensions. Effect sizes were determined with Cohen's *d*, interpreted as small (.20), medium (.50) or large (.80) (Cohen, 1992). Analyses were performed using SPSS 29.0 (IBM, 2022). Very few data were missing: age (.6%), parity (.6%), race/ethnicity (3.0%), annual household income (1.8%), satisfaction (1.8%), communication (1.2%), ability to confide in the partner (2.4%), interest showed toward the partner's feelings (1.2%), emotional support offered to the partner (1.2%).

Regarding the qualitative part of the study, verbatims were first screened for spontaneous mentions of participants' relationships with their partners or the other parent. These passages were next analyzed by three members of the team (first, second, and third author) to identify the themes evoked. Participants are not identified by their real names in the current article.

3 | RESULTS

Participant characteristics are described in Table 1. Groups (STEP vs. TAU) did not differ in terms of age (t (164) = 1.70, p = .09), education level (χ^2 (2) = .06, p = .97), and annual household income (t (162) = 1.63, p = .11). Prior to performing the main analysis, we further verified whether the assumption of homogeneity of variance was respected. Despite the largely unequal number of participants in each group, a nonsignificant Levene test ($p = .25$) confirmed that this assumption was not violated and that performing an ANOVA would not result in an increased risk of type 1 error (Delacre et al., 2019).

TABLE 2 Comparisons between participants assigned to STEP or to TAU in terms of changes in couple functioning during pregnancy.

	Intervention arm (STEP)		Control arm (TAU)					
	M	SD	*M*	SD	*F*	*dl*	*p*	Cohen's *d*
Couple functioning[a]	3.88	.79	3.62	.69	4.23	1, 160	.04	.35
Satisfaction	3.95	1.00	3.61	.89	4.23	1, 162	.04	.36
Communication	3.98	.99	3.65	.82	4.52	1, 163	.04	.36
Ability to confide	3.78	.91	3.73	.81	.11	1, 161	.74	.06
Interest	3.98	.85	3.57	.78	7.90	1, 163	.01	.50
Emotional support	3.73	.92	3.57	.84	1.28	1, 163	.26	.18

Note: Two-sided *p*-values were obtained from ANOVAs.

Abbreviations: STEP, Supporting the Transition to and Engagement in Parenthood; TAU, treatment-as-usual.

[a]Four participants assigned to TAU and one participant assigned to STEP were excluded since they had missing data.

As shown in Table 2, women who participated in STEP identified greater positive changes in their relationships with their partners than women assigned to TAU. Analysis of each dimension revealed that participants from the experimental arm reported higher couple satisfaction, better communication with their partners and a greater interest concerning the latter's feelings than women of the control arm.

The finding that participating in STEP has contributed to better couple functioning finds additional support in the qualitative analyses. Indeed, during the satisfaction interview, 12 of the 42 (29%) pregnant women who participated in the STEP program spontaneously reported positive changes regarding their couple relationship when asked about the perceived benefits of the program. These changes were categorized according to four themes: *Co-parenting*, *Communicating toward a shared understanding of oneself, New perspectives*, *Sharing the material*. A fifth theme, labeled *A program intended for or involving fathers*, was also recurrent in participants' narratives.

3.1 | Co-parenting

Many women reported that their participation in STEP made them more inclined to involve their partners in their pregnancy. Even though the activities of the program did not directly involve discussions around the relationship with the fathers, it is as if the activities initiated personal reflections in participants about the place and the role of the other parent.

> *"It helped me to clarify my thoughts regarding the place I leave for him in relation to the baby." (Sue, participant in STEP-TRAUMA)*

> *"I find it easier to manage parenthood with my partner." (Elsa, participant in STEP-TRAUMA)*

> *"During the program, I was really taking my time, thinking, talking with my partner, really trying to involve him in the everyday aspect of the pregnancy." (Madison, participant in STEP-COVID)*

> *"To learn to discuss it with our partners, to say how we are going to manage it, how we are going to help each other through it, how we are going to put up with it? Hmm, that's what I'd say above all - is what it brought into my life." (Hazel, participant in STEP-COVID)*

3.2 | Communicating toward a shared understanding of oneself

Some participants talked about how the program helped them to get a better understanding of themselves and of the repercussions of their traumatic life histories and reported communicating about their insights with their partners, which helped them to team up with them.

> *"With the program, I felt as if I had more tools to communicate with my partner. I progressed on a personal level, worked on my own issues, and it made it easier to explain to him what I was dealing with, it made it kind of more concrete." (Sue, participant in STEP-TRAUMA)*

> *"Yes, communicating with my partner, the program helped me a lot, because it enabled me to see the things I wasn't doing so well, and then to show my boyfriend, my partner, that there are ways of talking to me, that it could be more beneficial for both of us." (Emma, participant in STEP-TRAUMA)*

"It's hard being pregnant, all alone with another baby all the time. And he comes home from work and he's really happy, he's seen a lot of people, and you spent the day locked up because your daughter decided to sleep in spite of the nice weather outside. Now I'm trying to talk to my partner more, to explain to him what I'm going through, instead of blaming him for everything when he comes home at night." (Zoe, participant in STEP-COVID)

"Well, I had tools to manage my emotions, but I didn't necessarily talk to my partner about it, but then I realized that it's also good to tell him about it. So he better understands some of my reactions." (Claire, participant in STEP-TRAUMA)

3.3 | New perspectives

The STEP program helped some participants to challenge their perception about their partners, to see things differently when it comes to their couple relationship:

"I think there are things that are clearer in terms of my relationship with my spouse. I think I interpret it differently and I think, I hope, I understand him better." (Elsa, participant in STEP-TRAUMA)

"On the other hand, seeing that my spouse is my only source of support in every domain of my life got me thinking: is he comfortable with it?" (Evelyn, participant in STEP-COVID)

"I was thinking wow okay, my boyfriend can be there, you know even if sometimes he doesn't do everything I'd like him to do, well he's there for me, if I'm sad I can snuggle up to him." (Naomi, participant in STEP-COVID)

"I have the impression that the program has made me realize that my boyfriend is perhaps a nice support there, and I use it more." (Dana, participant in STEP-TRAUMA)

3.4 | Sharing the material

Some women considered that the activities of the program would have also been beneficial for their partners and reported sharing the material with them after the sessions.

"During the program, I kept saying that, my boyfriend having that meeting would have been a super good tool for him. There were a lot of things that would have applied to him, that it would have been good for him to have these tools. So I shared some of it with him." (Sandy, participant in STEP-TRAUMA)

"What I'd learned, well, I talked about it with my boyfriend." (Chloe, participant in STEP-COVID)

"As I finished the sessions, I'd tell my partner about the exercises we'd done, and about what I'd learned and what it had allowed me to reflect on and discover about myself." (Delilha, participant in STEP-TRAUMA)

"I just felt like every time, without breaking confidentiality, I said to my boyfriend, well this activity is great and kind of repeated the activity with him." (Addison, participant in STEP-TRAUMA)

"We were dealing with a lot of issues during the program, and I tried to apply what we were discussing during the sessions in our everyday lives. I liked it and I encouraged my boyfriend to do it too." (Addison, participant in STEP-TRAUMA)

3.5 | A program intended for or involving fathers

Although not reflecting a change in the couple relationship, many participants reported that they think fathers should also have access to the STEP program.

"I was also thinking that maybe it would be fun for dads who have experienced trauma or other things to be able to participate in this." (Charlotte, participant in STEP-TRAUMA)

"I even wish that my spouse could have had access to this program." (Evelyn, participant in STEP-COVID)

"Maybe groups of parents together (mmh mmh) maybe that would allow dad to get involved too." (Sophia, participant in STEP-COVID)

"My boyfriend was disappointed because there was no similar activity for him or anything. And

he didn't have anyone to help him deal with his emotions." (Violet, participant in STEP-COVID)

"I would recommend the STEP program to lots of people. In fact, I'd recommend it to my partner." (Claire, participant in STEP-TRAUMA)

"It's a lot richer than I thought it would be and then I told them my only regret, my boyfriend would have really liked to have been able to join us." (Addison, participant in STEP-TRAUMA)

4 | DISCUSSION

The study evaluated, using mixed-methods, whether a brief intervention, drawing from the principles of mentalization-based interventions, offered to pregnant women in the absence of the other parent, could have a potential spillover effect on the quality of the relationship with the partners. Results showed that women who participated in STEP identified greater positive changes in their relationships with their partners over the course of pregnancy than women receiving TAU. This finding is supported by qualitative analyses showing that improving the relationship with the partner naturally emerged as a core benefit of the intervention.

More precisely, the quantitative analyses showed that participants in STEP reported higher couple satisfaction, better communication with their partners and a greater level of interest in the partners' psychological experience. To our knowledge, this is the first study evaluating whether mentalization-based interventions could have spreading effects over couple functioning (Byrne et al., 2020; Lavender et al., 2023). Interestingly, even though only small to medium effect size differences were observed between participants in STEP and women receiving TAU, these effect sizes were similar to those reported in clinical trials evaluating couple-focused interventions during pregnancy (Pinquart & Teubert, 2010). At first glance, it appears surprising that an intervention that is not explicitly addressing the relationship with the other parent may positively contribute to the quality of this relationship. However, the finding is not at odds with the goal of mentalization-based interventions. Indeed, a preserved capacity to mentalize under stressful circumstances, such as the arrival of a new child, would enable individuals to empathize with their partners and validate their feelings, communicate effectively, reduce misunderstandings, resolve conflicts and deepen intimacy (Bateman, 2022). Accordingly, fostering changes in interpersonal relationships is a core principle of mentalization-based practices, namely in the context of trauma (Luyten & Fonagy, 2019).

The qualitative analyses provide some leads to inform on the processes through which STEP may have indirectly contributed to better couple functioning. First, women reported that they were more likely to involve their partners in their pregnancy during and after the program. This is particularly encouraging considering that both pregnant women and expecting men would express the desire for more paternal involvement during pregnancy (Xue et al., 2018) and given the consistent findings linking the quality of fathers' involvement during pregnancy to positive outcomes in terms of maternal well-being (Giurgescu & Templin, 2015; Yargawa & Leonardi-Bee, 2015), child development (Alio et al., 2010; Cardenas et al., 2022; Meier & Avillaneda, 2015) and paternal engagement after childbirth (Diniz et al., 2021; Redshaw & Henderson, 2013).

Second, as shown in a previous study (Berthelot et al., 2022), some participants identified that the program led to new insights about their functioning and the impact of their traumatic past. They reported sharing their insights with their partners, which contributed to a shared benevolent understanding of themselves. Said differently, some participants had the impression that the intervention contributed to *self-focused* and *trauma-specific* reflective functioning which enabled communication and emotional proximity. This is congruent with quantitative findings linking better self-focused (Borelli et al., 2021) and trauma-specific (Ensink et al., 2014) reflective functioning in pregnant women exposed to early life adversity to the quality of the relationship with their partner or the other parent. This is also in line with Midgley and colleagues' (2019) qualitative observation that foster caregivers' participation in a reflective parenting program contributed to a better understanding of self and other, which had positive repercussions on their home life.

Third, the discourse of some participants illustrated that they made new insights regarding their partners and that seeing things from a different lens enhanced their appreciation of the relationship. Transposed in conceptual terms, some participants had the impression that the program also contributed to *others-focused* reflective functioning and that considering the mental states of their partners permitted closeness and intimacy. This is consistent with previous clinical studies of group-delivered mentalization-based parenting intervention showing an increase in reflective functioning over the course of the program (Lavender et al., 2023) and findings from Jessee et al. (2018) that higher attachment-focused reflective functioning in mothers of infants was associated with more positive engagement and less conflict with the partners as well as positive indices of coparenting during a family play session.

Finally, some participants reported that they redid some activities with their partners or informed them of the topics covered, as they considered this could also be beneficial to them. Whereas the findings are promising and somewhat suggest that intervening with one member of the union may be sufficient for leading to some positive changes in the relationship with the other parent while awaiting a child, one problem with this approach is that it puts a heavy strain on the shoulders of pregnant women. Indeed, participants had to initiate the discussions with their partners after the sessions, to share their insights, to inform about their new knowledge, and therefore to carry the burden of change. It led a vast number of participants to suggest that partners should be invited to participate in the program or at least have access to a similar intervention. The development and evaluation of an adaptation of STEP for expecting fathers thus appears as an important priority, an opinion that is also shared by clinicians and stakeholders (Berthelot et al., 2018).

While providing valuable insights into potential spillover effects of a mentalization-based prenatal group intervention for couple functioning, some limitations have to be considered when interpreting the results and generalizing the findings. A first limitation is the exclusive reliance on self-reported measures, which are subject to recall bias and social desirability and may have led to an overestimation of the effects of the interventions. The risk of bias is however limited by the use of two complementary methods (quantitative and qualitative) yielding congruent findings. Second, changes in couple functioning were retrospectively assessed toward the end of pregnancy, instead of relying on prepost measurements using largely validated questionnaires of couple functioning such as the dyadic adjustment scale. Third, participants in this study were predominantly white, educated, and in a couple relationship. This limits the generalizability of the findings to a more diverse population in terms of ethnicity, socioeconomic status and gender. Fourth, participants drawn from the two versions of the STEP program were combined for the analyses as the small sample sizes prevented distinct analyses. However, the qualitative analyses showed that the four specific benefits of STEP identified by participants were similarly reported by participants in the two versions of the program. Finally, even though participants assigned to TAU or STEP had similar sociodemographic characteristics, they were not randomized, which increases the risk of bias.

In sum, the findings underscored that the partner or the other parent generally occupies a crucial place in a pregnant woman's mind, and that the insights experienced in during an intervention are likely to be reinterpreted from the partners' perspective. The finding that a brief intervention focusing on the pregnant women's psychological experience was associated with better couple functioning, as manifesting through an increase in the level of satisfaction, more efficient communication, and enhanced interest towards the partner's psychological experience, offers primary support regarding the spillover effect on significant attachment relationships of mentalization-based interventions. By indirectly contributing to prenatal couple functioning, the intervention may lay the foundations for effective coparenting and emotional stability in the home and thus contribute to offering a positive, supportive, nurturing, secure, and reflective environment for the infant to grow in.

ACKNOWLEDGMENTS

The authors wish to thank all participants who took part in our study as well as research coordinators and assistants from the STEP Project (Sylvie Moisan, Gabrielle Duguay, Vanessa Bergeron, Sabrina Bernier) for their contribution to data collection. The work was supported by the Public Health Agency of Canada [grant number 1617-HQ-000015], the Canada Research Chairs [grant number 950-232739] and the Fonds de recherche du Québec – Santé [grand number 280166]. The funding organizations had no role in the writing of this article.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author [NB] upon reasonable request. The data are not publicly available due to ethical restrictions.

ORCID

Nicolas Berthelot https://orcid.org/0000-0001-6781-0460

REFERENCES

Alio, A. P., Salihu, H. M., Kornosky, J. L., Richman, A. M., & Marty, P. J. (2010). Feto-infant health and survival: does paternal involvement matter? *Maternal and Child Health Journal*, *14*(6), 931–937. https://doi.org/10.1007/s10995-009-0531-9

Bateman, A. (2022). Mentalization-based treatment. In S. K. Huprich (Ed.), *Personality disorders and pathology: Integrating clinical assessment and practice in the DSM-5 and ICD-11 era* (pp. 237–258). American Psychological Association.

Bateman, A., Bales, D., & Hutsebaut, J. (2013). *A quality-manual for MBT*. Anna Freud Center. https://mentalisation.org/wp-content/uploads/2018/09/a-quality-manual-for-mbt-edited-april-23rd-2014.pdf

Baumann, M., Bigras, N., Paradis, A., & Godbout, N. (2020). It's good to have You: The moderator role of relationship satisfaction in the link between child sexual abuse and sexual difficulties.

Journal of Sex & Marital Therapy, *47*(1), 1–15. https://doi.org/10.1080/0092623x.2020.1797965

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., Desmond, D., & Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, *27*(2), 169–190. https://doi.org/10.1016/s0145-2134(02)00541-0

Berthelot, N., Drouin-Maziade, C., Bergeron, V., Garon-Bissonnette, J., & Sériès, T. (2022). Une intervention de groupe brève pour favoriser le bien-être des femmes enceintes pendant la pandémie de COVID-19 et soutenir la résilience des familles. *International Journal of Child and Adolescent Resilience/Revue internationale de la résilience des enfants et des adolescents*, *9*(1), 167–181. https://doi.org/10.54488/ijcar.2022.307

Berthelot, N., Drouin-Maziade, C., Garon-Bissonnette, J., Lemieux, R., Sériès, T., & Lacharité, C. (2021). Evaluation of the acceptability of a prenatal program for women with histories of childhood trauma: STEP (Supporting the Transition to and Engagement in Parenthood). *Frontiers in Psychiatry*, *12*, 1–8. https://doi.org/10.3389/fpsyt.2021.772706

Berthelot, N., Garon-Bissonnette, J., Drouin-Maziade, C., Bergeron, V., & Series, T. (2023). STEP-COVID: A pilot study of a prenatal intervention for pregnant women during the COVID-19 pandemic. *Scientific Reports*, *13*(1), 6466. https://doi.org/10.1038/s41598-023-33369-8

Berthelot, N., Garon-Bissonnette, J., Lemieux, R., & Drouin-Maziade, C. (2020). *Questionnaire sur les changements dans les domaines de fonctionnement en cours de grossesse*. Université du Québec à Trois-Rivières. Trois-Rivière.

Berthelot, N., Godbout, N., Hébert, M., Goulet, M., & Bergeron, S. (2014). Prevalence and correlates of childhood sexual abuse in adults consulting for sexual problems. *Journal of Sex & Marital Therapy*, *40*(5), 434–443. https://doi.org/10.1080/0092623X.2013.772548

Berthelot, N., Goupil, É., Drouin-Maziade, C., Lacharité, C., Lemieux, R., & Garon-Bissonnette, J. (2022). L'expérience des participantes au programme STEP: une intervention prénatale pour les femmes ayant subi de mauvais traitements durant leur enfance /*Participants' experience of the STEP program: A prenatal intervention for women with histories of childhood maltreatment*. *Revue de psychoéducation*, *51*(3), 227–249. https://doi.org/10.7202/1093886ar

Berthelot, N., Lemieux, R., & Lacharite, C. (2018). Development of a prenatal program for adults with personal histories of childhood abuse or neglect: A Delphi consensus consultation study. *Health Promotion and Chronic Disease Prevention in Canada*, *38*(11), 393–403. https://doi.org/10.24095/hpcdp.38.11.01

Borelli, J. L., Ensink, K., Gillespie, M. L., Falasiri, E., Bernazzani, O., Fonagy, P., & Berthelot, N. (2021). Mothers' self-focused reflective functioning interacts with childhood experiences of rejection to predict current romantic relationship quality and parenting behavior. *Family Process*, *60*(3), 920–934. https://doi.org/10.1111/famp.12603

Brandão, T., Brites, R., Pires, M., Hipólito, J., & Nunes, O. (2019). Anxiety, depression, dyadic adjustment, and attachment to the fetus in pregnancy: Actor–partner interdependence mediation analysis. *Journal of Family Psychology*, *33*(3), 294–303. https://doi.org/10.1037/fam0000513

Brassard, A., Charbachi, N., Claing, A., Godbout, N., Savard, C., Lafontaine, M.-F., & Péloquin, K. (2022). Childhood sexual abuse, dyadic empathy, and intimate partner violence among men seeking psychological help. *Journal of Interpersonal Violence*, *37*(23-24), NP22114–NP22134. https://doi.org/10.1177/08862605211069690

Byrne, G., Murphy, S., & Connon, G. (2020). Mentalization-based treatments with children and families: A systematic review of the literature. *Clinical Child Psychology and Psychiatry*, *25*(4), 1022–1048. https://doi.org/10.1177/1359104520920689

Cardenas, S. I., Morris, A. R., Marshall, N., Aviv, E. C., Martínez García, M., Sellery, P., & Saxbe, D. E. (2022). Fathers matter from the start: The role of expectant fathers in child development. *Child Development Perspectives*, *16*(1), 54–59. https://doi.org/10.1111/cdep.12436

Carrese-Chacra, E., Hollett, K., Erdem, G., Miller, S., & Gouin, J.-P. (2023). Longitudinal effects of pandemic stressors and dyadic coping on relationship satisfaction during the COVID-19 pandemic. *Family Relations*, *72*(3), 645–664. https://doi.org/10.1111/fare.12885

Cohen, J. (1992). A power primer. *Psychological Bulletin*, *112*(1), 155–159. https://doi.org/10.1037//0033-2909.112.1.155

Delacre, M., Leys, C., Mora, Y. L., & Lakens, D. (2019). Taking parametric assumptions seriously: Arguments for the use of Welch's F-test instead of the classical F-test in one-way ANOVA. *International Review of Social Psychology*, 32(1): 13, 1-12. https://doi.org/10.5334/irsp.198

deMontigny, F., Gervais, C., Pierce, T., & Lavigne, G. (2020). Perceived paternal involvement, relationship satisfaction, mothers' mental health and parenting stress: A multi-sample path analysis. *Frontiers in Psychiatry*, *11*, https://doi.org/10.3389/fpsyt.2020.578682

Diniz, E., Brandão, T., Monteiro, L., & Veríssimo, M. (2021). Father involvement during early childhood: A systematic review of the literature. *Journal of Family Theory & Review*, *13*(1), 77–99. https://doi.org/10.1111/jftr.12410

Drouin-Maziade, C., Berthelot, N., & Lemieux, R. (2021). *Programme STEP—Population générale (Contexte pandémie COVID-19): Guide des animateurs*. Universite Québec à Trois-Rivières, Qc, Canada. ISBN 978-2-9818743-4-4.

Drouin-Maziade, C., Lemieux, R., & Berthelot, N. (2019). *Programme STEP: Guide à l'intention de l'équipe d'animation*. Université du Québec à Trois-Rivières, Qc, Canada. ISBN 978-2-9818743-1-3.

Ensink, K., Berthelot, N., Bernazzani, O., Normandin, L., & Fonagy, P. (2014). Another step closer to measuring the ghosts in the nursery: Preliminary validation of the Trauma Reflective Functioning Scale. *Frontiers in Psychology*, *5*, 1471. https://doi.org/10.3389/fpsyg.2014.01471

Garon-Bissonnette, J., Bolduc, M. G., Lemieux, R., & Berthelot, N. (2022). Cumulative childhood trauma and complex psychiatric symptoms in pregnant women and expecting men. *BMC Pregnancy Childbirth*, *22*(1), 10. https://doi.org/10.1186/s12884-021-04327-x

Giurgescu, C., & Templin, T. N. (2015). Father involvement and psychological well-being of pregnant women. *MCN: The American Journal of Maternal/Child Nursing*, *40*(6), 381–387. https://doi.org/10.1097/nmc.0000000000000183

Jessee, A., Mangelsdorf, S. C., Wong, M. S., Schoppe-Sullivan, S. J., Shigeto, A., & Brown, G. L. (2018). The role of reflective functioning in predicting marital and coparenting quality. *Journal of Child*

and Family Studies, *27*(1), 187–197. https://doi.org/10.1007/s10826-017-0874-6

Jiménez-Picón, N., Romero-Martín, M., Ramirez-Baena, L., Palomo-Lara, J. C., & Gómez-Salgado, J. (2021). Systematic review of the relationship between couple dyadic adjustment and family health. *Children*, *8*(6), 491. https://www.mdpi.com/2227-9067/8/6/491

Karterud, M. (2015). *Mentalization-based group therapy (MBT-G)*. Oxford Press.

Kekeç, H. T., & Dikmen, H. A. (2023). The relationship of social support perceived by mothers and fathers and dyadic adjustment with maternal and paternal attachment in the postpartum period. *Developmental Psychobiology*, *65*(1), e22358. https://doi.org/10.1002/dev.22358

Kezelman, C., & Stavropoulos, P. (2012). "The last Frontier"; *Practice guidelines for treatment of complex trauma and trauma informed care and service delivery*. Kirribilli, Australia: Adults Surviving Child Abuse.

Lavender, S. R., Waters, C. S., & Hobson, C. W. (2023). The efficacy of group delivered mentalization-based parenting interventions: A systematic review of the literature. *Clinical Child Psychology and Psychiatry*, *28*(2), 761–784. https://doi.org/10.1177/13591045221113392

Legendre, M., Milot, T., Rousseau, M., Lemieux, R., Garon-Bissonnette, J., & Berthelot, N. (2024). Beyond abuse and neglect: validation of the childhood interpersonal trauma inventory in a community sample of adults. *Frontiers in Psychiatry*, *15*. https://doi.org/10.3389/fpsyt.2024.1358475

Lemieux, R., & Berthelot, N. (2018). *Childhood interpersonal traumas checklist*. Université du Québec à Trois-Rivières, Qc, Canada.

Luyten, P., & Fonagy, P. (2019). Mentalizing and trauma. In A. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice* (2nd ed., pp. 79–99). American Psychiatric Association Publishing.

Madigan, S., Cyr, C., Eirich, R., Fearon, R. M. P., Ly, A., Rash, C., Poole, J. C., & Alink, L. R. A. (2019). Testing the cycle of maltreatment hypothesis: Meta-analytic evidence of the intergenerational transmission of child maltreatment. *Development and Psychopathology*, *31*(1), 23–51. https://doi.org/10.1017/S0954579418001700

Mangialavori, S., Terrone, G., Cantiano, A., Franquillo, A. C., Scalea, G. L. D., Ducci, G., & Cacioppo, M. (2019). Dyadic adjustment and prenatal parental depression: A study with expectant mothers and fathers. *Journal of Social and Clinical Psychology*, *38*(10), 860–881. https://doi.org/10.1521/jscp.2019.38.10.860

Mayrand, K., Milot, T., Lemelin, J.-P., Lemieux, R., & Berthelot, N. (2021). *The role of pregnant women's couple satisfaction and psychological symptoms in their infant's temperament*. Society for Research in Child Development Biennial Meeting.

McMillan, I. F., Armstrong, L. M., & Langhinrichsen-Rohling, J. (2021). Transitioning to parenthood during the pandemic: COVID-19 related stressors and first-time expectant mothers' mental health. *Couple and Family Psychology: Research and Practice*, *10*(3), 179–189. https://doi.org/10.1037/cfp0000174

Meier, M. E., & Avillaneda, L. (2015). A literature review of paternal involvement in prenatal care. *Journal of Family Strengths*, *15*(1), 10. https://doi.org/10.58464/2168-670X.1279

Menke, R. A., Swanson, L., Erickson, N. L., Reglan, G., Thompson, S., Bullard, K. H., Rosenblum, K., Lopez, J. P., & Muzik, M. (2019). Childhood adversity and sleep are associated with symptom severity in perinatal women presenting for psychiatric care. *Archives of Women's Mental Health*, *22*(4), 457–465. https://doi.org/10.1007/s00737-018-0914-2

Midgley, N., Cirasola, A., Austerberry, C., Ranzato, E., West, G., Martin, P., Redfern, S., Cotmore, R., & Park, T. (2019). Supporting foster carers to meet the needs of looked after children: A feasibility and pilot evaluation of the Reflective Fostering Programme. *Developmental Child Welfare*, *1*(1), 41–60. https://doi.org/10.1177/2516103218817550

Pinquart, M., & Teubert, D. (2010). A meta-analytic study of couple interventions during the transition to parenthood. *Family Relations*, *59*(3), 221–231. https://doi.org/10.1111/j.1741-3729.2010.00597.x

Porter, C. L., & Dyer, W. J. (2017). Does marital conflict predict infants' physiological regulation? A short-term prospective study. *Journal of Family Psychology*, *31*(4), 475–484. https://doi.org/10.1037/fam0000295

Randall, A. K., Leon, G., Basili, E., Martos, T., Boiger, M., Baldi, M., Hocker, L., Kline, K., Masturzi, A., Aryeetey, R., Bar-Kalifa, E., Boon, S. D., Botella, L., Burke, T., Carnelley, K. B., Carr, A., Dash, A., Fitriana, M., Gaines, S. O., … Chiarolanza, C. (2022). Coping with global uncertainty: Perceptions of COVID-19 psychological distress, relationship quality, and dyadic coping for romantic partners across 27 countries. *Journal of Social and Personal Relationships*, *39*(1), 3–33. https://doi.org/10.1177/02654075211034236

Rassart, C. A., Paradis, A., Bergeron, S., & Godbout, N. (2022). Cumulative childhood interpersonal trauma and parenting stress: The role of self-capacities disturbances among couples welcoming a newborn. *Child Abuse & Neglect*, *129*, 105638. https://doi.org/10.1016/j.chiabu.2022.105638

Redshaw, M., & Henderson, J. (2013). Fathers' engagement in pregnancy and childbirth: Evidence from a national survey. *BMC Pregnancy Childbirth*, *13*, 1–15. https://doi.org/10.1186/1471-2393-13-70

River, L. M., Narayan, A. J., Atzl, V. M., Rivera, L. M., & Lieberman, A. F. (2020). Past made present: The legacy of childhood maltreatment for romantic relationship quality and psychopathology during pregnancy. *Psychology of Violence*, *10*(3), 324. https://doi.org/10.1037/vio0000273

Sousa-Gomes, V., Lemos, L., Moreira, D., Ribeiro, F. N., & Fávero, M. (2023). Predictive effect of romantic attachment and difficulties in emotional regulation on the dyadic adjustment. *Sexuality Research and Social Policy*, *20*(2), 676–691. https://doi.org/10.1007/s13178-022-00708-9

Stapleton, L. R. T., Schetter, C. D., Westling, E., Rini, C., Glynn, L. M., Hobel, C. J., & Sandman, C. A. (2012). Perceived partner support in pregnancy predicts lower maternal and infant distress. *Journal of Family Psychology*, *26*(3), 453–463. https://doi.org/10.1037/a0028332

Steele, H., Bate, J., Steele, M., Dube, S. R., Danskin, K., Knafo, H., Nikitiades, A., Bonuck, K., Meissner, P., & Murphy, A. (2016). Adverse childhood experiences, poverty, and parenting stress. *Canadian Journal of Behavioural Science*, *48*(1), 32. https://doi.org/10.1037/cbs0000034

Tian, Z., Hazen, N., & Jacobvitz, D. B. (2023). Triadic family interactions at 2 years: The role of prenatal marital quality and infants' attachment configuration with mother and father. *Attachment & Human Development*, 1–20. https://doi.org/10.1080/14616734.2023.2257677

Vaez, E., Indran, R., Abdollahi, A., Juhari, R., & Mansor, M. (2015). How marital relations affect child behavior: review of recent research. *Vulnerable Children and Youth Studies*, *10*(4), 321–336. https://doi.org/10.1080/17450128.2015.1112454

van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Coughlan, B., & Reijman, S. (2020). Annual research review: Umbrella synthesis of meta-analyses on child maltreatment antecedents and interventions: differential susceptibility perspective on risk and resilience. *Journal of Child Psychology and Psychiatry*, *61*(3), 272–290. https://doi.org/10.1111/jcpp.13147

Walker, E. A., Unutzer, J., Rutter, C., Gelfand, A., Saunders, K., Von Korff, M., Koss, M. P., & Katon, W. (1999). Costs of health care use by Women HMO members with a history of childhood abuse and neglect. *Archives of General Psychiatry*, *56*(7), 609. https://doi.org/10.1001/archpsyc.56.7.609

Xue, W. L., Shorey, S., Wang, W., & He, H.-G. (2018). Fathers' involvement during pregnancy and childbirth: An integrative literature review. *Midwifery*, *62*, 135–145. https://doi.org/10.1016/j.midw.2018.04.013

Yargawa, J., & Leonardi-Bee, J. (2015). Male involvement and maternal health outcomes: Systematic review and meta-analysis. *Journal of Epidemiology and Community Health*, *69*(6), 604–612. https://doi.org/10.1136/jech-2014-204784

How to cite this article: Berthelot, N., Larouche, K., Garon-Bissonnette, J., Deschênes, K., Drouin-Maziade, C., & Lemieux, R. (2024). Spillover effects on the relationship with the partner of a mentalization-based intervention for pregnant women. *Infant Mental Health Journal*, 1–13. https://doi.org/10.1002/imhj.22113