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Hope and relationship dynamics among couples faced with their child's cancer: A dyadic phenomenological interpretative analysis

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ABSTRACT

Purpose: The onset of paediatric cancer leads to changes in the functioning of the parental couple. The interactions and interdependence between partners affect their individual and dyadic adjustments. Hope can enable parents to cope with difficulties and alleviate their distress. The aim of this study is to explore how both partners experience their relationship dynamics and hope within the couple.

Method: This qualitative study focused on 7 couples whose child was in remission from cancer; each parent was interviewed separately. The semi-structured interviews were subjected to interpretative phenomenological analysis.

Results: Three themes were found to characterise the experiences of couples faced with their child's cancer. "Captain and first mate" emphasises the gendered and hierarchical distribution of roles based on the analogy of a crew struggling against the threat of cancer. "The emotional compass" focuses on how emotions guide each partner's attempts to meet their own need for emotional expression and that of their partner. "In the same boat, with divergent hope sails" reflects the complex and diverse ways in which hope and forms of hope are expressed, perceived as a resource which is often precious, sometimes viewed as unthinkable because it reflects the violence associated with the despair of the situation and transferred from one parent to the other.

Discussion: These findings highlight the need to focus on the organisation of role, the interaction of emotional needs and the dynamics of hope within parental dyads to optimise the management of couples faced with their child's cancer.

1. Introduction

A child's cancer has an upsetting effect on parents both in their own lives and in the context of their relationship as a couple. Parents face many interrelated difficulties, such as sudden changes in priorities that require the reorganisation of roles; physical, relational and emotional distance; and conflicts or difficulties in communication, especially regarding to their feelings (Arruda-Colli et al., 2018; Hooghe et al., 2020; Silva-Rodrigues et al., 2016; Van Schoors et al., 2017). The gruelling treatment course, which is punctuated by hospitalisations, relapse(s) and negative life events, is particularly stressful with respect to the marital relationship and contributes to impaired adjustment in couples (Lavi et al., 2018; Wiener et al., 2017). Indeed, increased distress and marital dissatisfaction as well as decreased couple adjustment are evident during the first few months following a child's diagnosis (Fladeboe et al., 2018; Katz et al., 2018; Yeh, 2002; Wiener et al., 2017). However, despite the individual and interpersonal difficulties they experience, most parents are still happily married only one year after the diagnosis (Katz et al., 2018; Lavi et al., 2018). Furthermore, most parents whose child has survived leukaemia report that the disease has had positive impacts on relational satisfaction and the quality of partner support 5 years after diagnosis (Burns et al., 2018).

To understand the efforts made by each parent to adapt, it is important to focus on interpersonal marital dynamics. Indeed, coping strategies, psychological distress, and perceptions of changes in the marital relationship are strongly correlated between the two members of the couple, a finding that supports the idea of marital unity and interdependence between partners (Compas et al., 2015; Lavee, 2005; Wilkam et al., 2017). Several studies have investigated how the interaction between partners impacts parental adjustment to their experiences with their child's cancer. One study (N = 59 couples) showed that a partner's perception of positive dyadic management, which is defined an as

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supportive and symmetrical or complementary couple relationship, was associated with increased marital adjustment and satisfaction for both women and men. On the other hand, negative dyadic management, which is characterised by the partner's perception of distance, mocking, sarcasm, or pessimistic discourse concerning cancer, was associated with lower satisfaction in the marital relationship (Van Schoors et al., 2019). Other researchers (N = 44 couples) have reported that fathers' dyadic adaptation strategies predicted a decrease in mothers' fear of cancer progression or relapse (Clever et al., 2020). Qualitative studies have also supported the claim that emotional and practical support, acceptance of the other partner's limitations, unity, expressions of solidarity and feelings, joint problem solving, symmetry, and hope serve to strengthen the marital relationship of parents with a child with cancer (Arruda-Colli et al., 2018; Hooghe et al., 2020; Yi et al., 2021; Silva-Rodrigues et al., 2016; Van Schoors et al., 2017).

Hope is perceived by parents as an inner resource that takes the form of thoughts, expectations, wishes, and religious or spiritual beliefs involving a positive outlook towards the future (Conway et al., 2017; Kylmä and Juvakka, 2007). The majority of parents exhibit very high levels of hope (Conway et al., 2017; Kylmä and Juvakka, 2007; Sisk et al., 2018). Hope helps parents think positively, prepare for the worst and live more serenely despite the challenges of cancer (Bally et al., 2014; degrave et al., 2008; Granek et al., 2013). Several researchers have suggested that the salutogenic function of hope is made possible by its dynamic and fluctuating characteristics among parents. For example, they may switch from hoping for recovery to hoping for minimal suffering depending on their child's situation (deGranek et al., 2013; Granek et al., 2013; Ballyet al., 2014). Within couples, the specific hope that the child's health may improve helps parents rebuild their marital relationship, as highlighted in one of the rare qualitative dyadic studies investigating this topic (Silva-Rodrigues et al., 2016).

The question of relational dynamics and hope within couples appears to be crucial for understanding couples' functioning and adjusting psychological interventions. Studies on parental adjustment in the context of oncopaediatrics have converged on several findings: the interdependence of partners, the influence of the expression of each partner's emotional states on the other's adjustment, and the major role of different forms of hope as a resource. However, research on how each partner experiences these relational dynamics is lacking (Van Schoors et al., 2017), particularly with regard to the diversity, similarities and divergences that characterise the partners' experiences as well as their hope and attempts to adjust to the situation. This study aims to address this knowledge gap by exploring potential complementarities, compensations, or discrepancies between the experiences and reactions of the two partners as well as the existence of different dyadic dynamics in the context of childhood cancer. By conducting semi-structured interviews with each parent separately and analysing these interviews using phenomenological interpretative analysis, we were able to identify the meaning that couples attributed to their experiences, thus generating unique results.

2. Method

2.1. Participants

The inclusion criteria were as follows: couples (I), French-speaking (II), with a child aged between 1 month and 18 years (III), who had been diagnosed with cancer (IV) for at least one month (V), and who were either undergoing treatment or were within five years of the end of treatment (VI).

Regarding research based on interpretative phenomenological analysis (IPA), Antoine and Smith (2017) recommended a modest sample size to explore the diversity of experiences while maintaining sample homogeneity. To understand the experiences of parents in the field of psycho-oncology, most IPAs involve 9 to 13 interviews with only one parent and less frequently with both (Atout et al., 2021; Haylett et al., 2021; McEvoy et Creaner, 2021).

Out of twelve couples identified as meeting the research criteria, five did not proceed due to a lack of time or without justification, while seven heterosexual couples (N = 14) participated in the present study. The average age of the parents was 40 years (SD = 4.6). The average duration of the couple's relationship was 16.42 years (SD = 3.46). The average number of siblings in the household was 2 children (SD = 0.8). The majority of the children with cancer were boys (57.14%). Their average age was 4.15 years (SD = 2.94) at the time of diagnosis and 7.71 years (SD = 3.2) at the time of the study. 71.43% of the children were diagnosed with leukaemia, and 28.57% were diagnosed with solid cancer. All the children were in remission (Table 1).

2.2. Procedure

This study was approved by the University of Lille Behavioural Science Ethics Committee (Reference: 2022-596-S105).

Participants were recruited from Calais Hospital (France) and two paediatric cancer organisations whose names were deliberately not mentioned to avoid providing information that could be used to identify the parents.

In the case of the hospital centre, the psychologist associated with the service selected couples who met the inclusion criteria and provided them with an information document. With the parents' agreement, a doctoral student, who served as the research coordinator, contacted them by telephone. Regarding the paediatric cancer organisations, the document summarising the study was sent directly to the parents by e-mail, and if those parents were interested, they contacted the research coordinator by e-mail or telephone. For all couples, initial telephone contact was made with one of the partners to explain the purpose and process of the study. A detailed information letter was then provided to the couples. After a period of consideration, an appointment was scheduled at the couple's home.

At the beginning of the appointment, the parent was invited to sign the informed consent form.

Then, before the interviews began, the participants completed a questionnaire collecting sociodemographic data and information concerning the characteristics of the child's cancer. The interviews were conducted in turn with each parent separately to investigate each individual's experience, thus allowing for the collection of intimate information, and things left unsaid within the couple could be gathered without raising concerns about causing harm or provoking unpleasant reactions from the other partner. The interview guide, constructed based on existing literature, focused on three main themes: the individual experiences of parents faced with their child's cancer, the history and functioning of the couple, and their perceptions of and the role of hope in their individual and marital experiences. The research coordinator offered participants the freedom to start with the theme of their choice. The semi-structured interviews aimed to elicit the greatest subjective expression from the participants, with the primary goal of allowing each participant to recount their history and experiences in their own words. The interviews lasted an average of 90 min (ranging from 35 to 170 min). The interviews were also recorded using a dictaphone and then transcribed in full.

2.3. Data analysis

The IPA approach (Smith et al., 2009) was used to analyse the couples' experiences based on phenomenological and idiographic principles. The focus was on the subjective experience of each dyad. This study focused on the dyad as a unit of analysis while maintaining a strong *"idiographic orientation and conducting relational analyses in parallel"* (Larkin et al., 2019, p. 7). Hermeneutics is a central principle in IPA for interpreting participants' discourse. Researchers have emphasised the principle of double hermeneutics, i.e. a commitment from each participant to share and make sense of their experiences, and a commitment

Table 1
Characteristics of couples and children with cancer.

Parent[a]	Gender	Age	Duration as a couple	Number of child	Child[a]	Gender	Age	Age at time of diagnosis	Diagnosis	Current stage in the disease trajectory
Aurore	F	40	22	1	Agathe	F	12	8 years	Solid tumour	Remission
Arthur	M	41								
Beatrice	F	39	21	3	Ben	M	7	5 years	Leukaemia	Remission
Bastien	M	39								
Carole	F	36	15	3	Charlotte	F	5	4 months	Leukaemia	Remission
Carl	M	35								
Dorothea	F	35	14	2	Daniel	M	3	9 months	Solid tumour	Remission
David	M	42								
Elise	F	35	13	2	Evan	F	7	5 years	Leukaemia	Remission
Eric	M	36								
Fanny	F	42	16	2	Florent	M	9	3 years	Leukaemia	Remission
Filip	M	41								
Gael	F	49	14	1	Gabby	F	11	7 years	Leukaemia	Remission
Gaitan	M	49								

F: Female; M: Male.
[a] Pseudonyms.

from researchers to interpret participants' meaning-making (Smith et al., 2009). Furthermore, as advocated by Smith et al. (2022), owing to the iterative process of IPA, different levels of interpretation (e.g.: a word, a metaphor, a temporality), always based on the text itself, were carried out to arrive at an increasingly deep and coherent analysis as it progressed.

Following these IPA guidelines, the analyses were conducted as follows. We have schematised the analysis process based on the figure from Manceau et al. (2023) (Appendix 1).

First, after selecting a couple, the research coordinator performed an overall reading of the interviews with both partners. She then began to identify the salient points as well as the individual and dyadic processes underlying the parents' discourse. These initial exploratory annotations, in the margin of the text, were developed by working backwards to highlight the contradictions and developments in each participant's account. The research coordinator then pooled the salient elements of the two individual analyses in order to put the lived experiences of the two partners into perspective, to compare points of convergence and divergence, and to identify dyadic processes. She was particularly interested in the expressions and metaphors used, as well as the emotions that were experienced or emerged during the interview. A schema of dyad functioning was then produced in order to help us structure the data into "*personal experiential themes*" (PETs) (Smith et al., 2022). The elements of analysis and the verbatims were grouped into PETs by PETs defined in the study of Smith et al. To verify the coherence between the schema and its explanation, each schema was presented and explained to an experienced IPA researcher (P. Antoine), including dyadic IPA, in the field of health psychology (Antoine et al., 2013, 2018; Manceau et al., 2023; Wawrziczny et al., 2016, 2021). The experienced researcher helped clarify, deepen and specify the processes underlying the marital dynamic.

Then, this first step was repeated for each interview, revisiting previous interviews if necessary.

Once all 14 interviews had been analysed, the study coordinator and the experienced researcher examined all the schemas to identify similarities and extract the main themes referred to as "*group experiential themes*" (GETs) (Smith et al., 2022). The researchers studied how the schemas were related to each other, overlapped, or diverged, allowing them to identify common or more specific experiences and functioning of certain couples in the context of paediatric cancer.

The results of these final steps were presented to a researcher specialising in psycho-oncology to identify GETs that required further clarification.

Finally, the research coordinator reread the transcripts several times, focusing on the predefined GETs. Thus, the GETs were described based on both the researchers' interpretations and the participants' interviews, systematically contextualising the discourse of each partner. A document similar to the PETs was generated, this time grouping together the quotes from all the dyads.

3. Results

Analysis of the data has shown how the perspectives of each partner, whether similar or contrasting, are linked and coexist to form the dynamics of the couples. These results are illustrated below by quotations from each of the partners presented side by side.

We discovered that couples were organised like a crew featuring a captain and a first mate (1), whose emotional interactions acted as a compass that could guide them on a daily basis (2). Finally, **based on the analogy** of a couple in the same boat with divergent sails of hope, we were able to gain a better understanding of the meaning of hope and its dynamics within couples (3).

3.1. *Captain and first mate*

In response to the risks associated with their child's cancer, the couple organised themselves into a crew, which featured a gendered distribution of roles and hierarchies, thereby accentuating what was sometimes already present before the illness. The mothers, true captains at the helm of the ship, were at the forefront of the couple's efforts to manage the illness and the responsibilities it brought while the fathers played the role of first mate, on deck, essential to daily life, supporting or taking over from the captain and freeing her of certain contingencies. Carole and Carl's words capture this organisation.

I'd take my older to school in the morning, go to the hospital, spend the whole day with Charlotte … and come home at night when she'd gone to bed. In the meantime, my husband had his day job, and in the evening, he picked up the older kids and took care of the older kids until I got home (Carole).	I'd say we're pretty complementary; my wife is a care assistant, so she's already worked in the medical field, so things went well on the purely technical side, and I'd say that in terms of the hospital environment, it was practical (Carl).

Throughout the treatment process, mothers were responsible for managing tasks directly linked to the child's health, such as hospital admissions—which required them to stop work—managing care at home—which involved a heightened sense of vigilance about hygiene—sharing medical information with their partner and communicating with their child about cancer and care or fertility issues. Beatrice explained, *"How do you tell him: 'We have to operate on you to take your cells; you have to choose between fragments, a whole testicle or both, they make beautiful prostheses, I hear.' So, it's you who has to do it, and it's out of* *the question for us to make the decision without informing our child. And it was still me who had to do it for Ben, but it doesn't matter, it's done."* These responsibilities seem to have been imposed on mothers by their status as women, by their profession and by designation by the child. Although the mothers assumed these responsibilities, they emphasised the burden they faced as a result (5/7). They expressed their loneliness (4/7) in this role of captain despite the presence of a husband to take over. On deck, fathers were involved in managing the illness by attending certain medical appointments and making medical decisions jointly with their wives. They also participated in tasks related to the smooth operation of the household, particularly by managing the siblings and communicating with the children about the progression of their sick sibling's illness. The onomatopoeia and vocabulary used by Dorothea reflect her tiredness and loneliness. David, for his part, expresses his presence in the hospital and his gratitude to his partner.

When we go to the hospital, it's Mom. There are times when I feel like saying, 'pffff! Just go for it! At the hospital, take him, do something!'I say to her, 'Just take him!" But in fact, it's Daniel [the sick child] who is asking for Mom. […] It's hard because you think, 'If I give up, Daniel won't have any more follow-up care.' And you're left to fend for yourself, and anything could happen, but nobody cares about you (Dorothea).	It was harder for her because she stayed in the hospital. I used to go home every night, and she stayed asleep. You don't sleep the same in hospital. What's more, Daniel wanted to be with his mother 24 h a day […] I can't complain because my wife didn't sleep through the night, there is worse than me, I slept in my bed every night, our sleep is disrupted, but my wife, when I arrived in the morning, she said to me: 'I slept for 2 h'(David).

In the majority of couples (5/7), mothers anticipated storms and control the itinerary, step-by-step, while fathers allowed themselves to be guided and focused on day-to-day life. Elise explained, *"It didn't take me long to switch to warrior mode. I had a blank sheet, and I had noted down all the weeks. In May, we'll be at this phase, in June, that phase, and he [the doctor] looks at me and says, 'Why did you do that? Because I want to know when we will have won' […]. And they told me, 'but wait, you haven't even started yet,' he hadn't even had his first chemo yet (laughs). And I said to him, 'yes, but I need to project myself.' It's true that in our daily life before, the agenda for the quarter was tac tac tac. […] I said to myself,* 12 months *of protocol, tac tac tac, that's good".* Unlike their wives, the men expressed little anticipation (5/5). This dynamic led to gaps between partners in their experiences of burden, knowledge about the illness, or proximity to their child. To adjust, some men wished to take more initiative to alleviate their wife's burden (4/7), while others engaged in research to address their lack of knowledge and control over their child's illness (3/7).

3.2. The emotional compass

Emotions are omnipresent. Sadness, fear and anger are states that are felt by one individual and observed in the other, and experienced simultaneously or in turn. Anger and the resulting tensions, reported by the majority of couples (5/7), are legitimised by fatigue and stress, feelings of injustice and uncertainty, and their expression by the parents is authorised. Sadness is an indicator of the other partner's morale and a whirlpool that should preferably be avoided or, if necessary, be controlled. Half of the parents reported being vigilant to changes in their partner's mood, and all of them reacted to perceptions of negative or unusual attitudes. Reassurance, guilt relief and positivity were viewed as tools for rectifying, supporting and sometimes shaking up their partner's state (7/7).

These interactions serve to protect the self, the other, the couple and, on the horizon, the child, in a context in which unity and interdependence among members of the crew are essential. However, the dynamics of couples differ based on the attitudes and needs of each partner towards such emotions as well as on the potential presence of symmetry between them.

For two couples, the partners shared the need to be positive without suppressing negative feelings. Each allowed themselves and their partner to be sad, respected this state, and accompanied this negative emotion without immediately trying to diminish it. Gael knew that she could say anything without being judged and felt the need *"to put words to it when things aren't going well rather than internalise everything."* Gaïtan, viewed it as important to *"say things, the good as well as the bad, in the sense that even if we don't agree, we discuss,"* which allowed him to feel safe in his home. Aurore and Arthur explained how each of them sought to adapt to the needs they perceived in the other.

I'm discovering that my husband has more pronounced anxieties than I thought … what he went through last week was very difficult for him […] I respect letting him be, not wanting to push him … if I don't let him handle it like that, it won't go well (Aurore).	Sometimes it's her who doesn't understand things, so I cheer her up as best I can. I don't have any arguments to cheer her up, but being there, having her in my arms, letting her talk (Arthur).

Another symmetry was observed among two couples who struggled intensely to stop and distance themselves from negative feelings such as uncertainty or guilt. Carole explained the urgent need to cheer each other up: *"We don't let ourselves get down for too long because our daughter needed us, and she didn't need a mum and dad at rock bottom."* Carl explained that they took turns helping each other *"pull themselves together"*: *"when there's a problem, you have to stop and say to yourself 'wait, wait,' because you can't be emotional all the time, it's not possible; otherwise, it's a catastrophe."* In response to this need to be positive and avoid negative emotions, each person mobilised to reduce the distress of the other and form a resolutely positive unit, like Fanny and Filip.

When doctors come to see you one day and say 'there's nothing going,' that's when we're at the end of our rope … you leave the professor's office, and we say to ourselves: 'no! we're not going to let ourselves go; it's going to be okay.' You have to be psychologically hard, but you have to say to yourself 'it's okay.' Because if you think for even a moment that you're not going to be okay, I think it's over. And once we really had all the information, we went into a positive mode (Fanny).	We tell ourselves that everything's going to be fine, so we've always moved forward, except at the beginning, for 2 or 3 days, when it was the end of the world and we thought: 'we're going to win, so let's go.' So, no, we were always optimistic … and he [their son] felt it, so it went well (Filip).

A third, asymmetrical organisation was observed among three couples in which the mother needed to express the diversity of her feelings, while the father struggled to be positive and needed to censor negative experiences. This was manifested itself in attempts to suppress their partners' negative feelings and, in the case of Eric and Elise, in an explicit request not to share negative moods.

It's very complicated when both parents are pulling you down. […] Eric has always been more in the mode of 'you can cry, but try to free yourself with your friends, not with me.' He didn't want to know because he said, 'I don't want to sink.'(Elise)	I don't think that's the right solution or the right path … thinking about evil will only attract evil … […] at the beginning, everything's fine, we reassure, we're obliged, we protect and so on … afterwards … there are times when it's annoying because even we're mentally tired (Eric).

This dynamic can restore energy by allowing the partners to focus on the positive side of the situation. However, in the long term, mothers experience loneliness and anger associated with the feeling of being misunderstood. Men feel tired due to their unsuccessful attempts to cheer up their wives. The couple seems stuck in a rigid system when, as in the case of Dorothea and David, the need for support was no longer even expressed as each partner communicated their distress to the interviewer.

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(*continued*)

My husband doesn't feel sorry for himself. I can't speak for him, but I think he's more the type to say to himself that if it's good, it's okay. […] I know that he knows that there are times when I'm not doing well. So, sometimes it irritates me when he says to me, 'What's wrong?' Then I say to myself, 'I'm not going to talk to him about it because he might get angry or feel guilty that it's not going well and he's fine.' I tell myself that if he asks me what's wrong, he hasn't understood, that we haven't experienced it in the same way (Dorothea).	I know that sometimes she has moments of a depressed mood, and maybe that's silly of me, but I've said to myself, 'I must never let her see that I'm sad' […] She's sad, and I say, 'I mustn't let her see that, so that at least one of us is strong.' There were times when it was very hard. I'm a smoker. When I felt I'd had enough, I'd go downstairs and let it out a bit, and then I'd go back upstairs and pretend that nothing had happened (David).

3.3. *In the same boat, with divergent hope sails*

Whereas emotions allow us to assess ourselves and take direction on a day-to-day basis, hope represents an abstract, complex and long-term reference point. Couples shared a common vision regarding how they conceptualised hope (6/7). Partners in a couple associated hope with the energy to fight to overcome the disease. Some partners defined hope as the certainty of a positive future or the belief in a desirable and attainable future (3/7). Other couples agreed that hope represented a way of compensating for their current experience of uncertainty and the risk of losing their child (2/7).

Beyond this conceptualisation, the use of hope as a resource largely seems to have been shared between couples and partners. The majority of couples reported that they were animated by and invested in some form of hope (5/7). However, other parents reported that they were unable or unwilling to hope while their partner continued to cling to this resource (2/7). Beatrice and Bastien each discussed their own unique position in the face of uncertainty.

I wouldn't say I have hope. I want it, but I don't think it's possible (cries). I really want it, but I don't think it's possible for me […] I think, in fact, that hope would be a medical certainty, perhaps, but I don't think that's possible (Beatrice).	We worry, not necessarily just about the disease but also about what the treatments may have induced, about other pathologies, but I'm hopeful, even if it's painful at the time, we're working on the fact that it's going to be okay, we're going to make it. We believe that if we don't, there's no point in fighting (Bastien).

Divergences were also observed between partners in the activation versus avoidance of certain forms of hope. Two couples activated hope without censoring themselves. Within several couples (3/7), one partner refused to activate certain forms of hope, such as Arthur, who, in response to uncertainty, did not allow himself to hope specifically for a cure but nevertheless invested in other aspects of hope. Moreover, women expressed more hopes regarding their child's future quality of life than did their spouses (4/7). Hope thus largely seems to have been shared between partners; however, this discrepancy did not seem to have been fully perceived by the parents (4/7). While Elise noted that *"we have always clung to it because we had nothing else,"* Éric explained that between the present stage and *"total remission, there is still a long way to go, but not hope; hope is not a good word. I think we cling to hope when we really feel that all is lost (…) we cling to the hope that a lucky star will come along and change things."*

As with emotions, in the majority of couples, the parents tried to maintain or increase the other partner's hope by inviting them to project themselves into a reality where "it's going to be okay" (4/7). In two couples, one of the partners expressed a desire to reduce the other's hope when such hope was viewed as unattainable and a likely source of suffering in the long term, as expressed by David and Dorothea (2/7).

My husband says, 'It's fine, he's in remission, it's fine.' He sees things pretty well, so that's more like it. When you're ill, you're always hopeful, and I was like, 'It's going to be okay, we're going to make it.'(Dorothea).	She's still hopeful. I believe we said there was a 95% chance that he would be sterile. She's clinging to that 5%, but I tell her, 'You shouldn't because there's still more chance that he'll be sterile than that he won't be', and as a result she'll be disappointed, I know that very well. If we'd been told, for example, that there was a 99% chance that he would die, she would have clung to the 1%, whereas I would have thought to myself, I would have prepared myself so as to not … maybe I wouldn't want to suffer (David).

These influences respond to some people's need to be positive and to fight at all costs, albeit at the cost of reducing the opportunities for the other parent to express their negative emotions or even their despair.

4. Discussion

The aim of the present study was to understand how each partner within couples faced with their child's cancer experiences their relational dynamics and hopes. Three themes were identified to reveal the dyadic processes put in place by the parents.

The captain and first mate dynamics highlighted the distribution of roles, which was characterised by gender stereotypes. This arrangement implied that some mothers were responsible for managing the child's illness, while some fathers focused on secondary tasks such as managing the siblings, a dynamic that echoes the extant literature (Da Silva et al., 2010; Clever et al., 2020). We can infer that the responsibilities imposed on some mothers contribute to higher levels of emotional distress in terms of anxiety, depression, and stress, as has been indicated by various studies (Lavee, 2005; Van Schoors et al., 2019; Yeh, 2002; Yi et al., 2021). Furthermore, the literature has shown that fathers of children who survive cancer are more dependent on the marital relationships than mothers are (Mader et al., 2019). This finding can be explained both by the responsibilities assumed by mothers and by the fact that some anticipate difficulties and generate proposals, whereas some fathers allow themselves to be guided day by day.

Our analyses also revealed that some fathers were involved in caring to the greatest extent possible and were willing to take more initiative to relieve the burdens on their wives. In a recent study, fathers whose children had cancer explained that they shared the role of caregiver at the hospital and the role of managing the children and running the home equally with their wives (Arbon et al., 2022). The involvement of these fathers seems to reflect a shift from a conceptualisation of the couple based on adherence to gender norms towards a relational dynamic based on equality (Matta and Knudson-Martin, 2006). However, these efforts do not seem to be sufficient to reduce some mothers' feelings of loneliness. Thus, our analyses may reflect the idea that "*new models of father involvement compete with old gender constructions*" (Matta and Knudson-Martin, 2006, p. 32), which does not make it possible to meet mothers' expectations. Moreover, Burns et al. (2018) showed that fathers perceived more gender conflicts, i.e., differences between their role and family expectations, than mothers did at the time of their child's cancer diagnosis.

The second theme we identified was labelled "the emotional compass." It describes how partners interact in response to their own emotions and those of their partner. We observed that partners supported each other through reassurance, the alleviation of guilt, and positivity. Additionally, mothers' use of techniques such as cognitive reappraisal, positive thinking, or positive distractions was associated with a reduction in depressive symptoms in their partners (Compas et al., 2015).

Furthermore, the results showed that in some couples, partners shared similar needs and used identical modes of interaction to support and alleviate each other's distress. Emotional interaction can thus involve respecting the other partner's mood and needs as well as allowing them to express any unpleasant thoughts and emotions. This mode of interaction seems to strengthen the emotional connection that unites couples (Arruda-Colli et al., 2018). In contrast, other couples preferred to avoid negativity with the goal of remaining strong and positive together, at all costs. Indeed, it is often difficult for parents to communicate openly about their emotions due to their desire to protect their partners, a lack of time spent together or because mutual understanding seems to be a given (Hooghe et al., 2020). Surprisingly, this avoidance of negativity was not observed to have a negative impact on the relationship. However, in this context, researchers have shown that the use of emotional suppression by both partners in the general population is associated with greater marital satisfaction (An et al., 2022).

Both types of functioning reveal that these *"couples working together"* towards a common goal strengthened the bond between the partners (Chow et al., 2022; Hooghe et al., 2020, p. 4). Indeed, a marital identity characterised by a shared vision and a collaborative attitude is a factor in marital resilience (Martin et al., 2014). Similarly, satisfaction in the marital relationship has been linked to the perception that both partners contribute symmetrically and complementarily to coping processes (Van Schoors et al., 2019).

Finally, the last mode of functioning was asymmetrical. It was characterised by mothers' need to express their emotions and fathers' need to repress them. Thus, mothers may feel that fathers minimise their perceived stress, use inadequate coping strategies, lack interest in their emotions or are not emotionally supportive (Arruda-colli et al., 2018).

"In the same boat, with divergent hope sails." The findings of this theme are consistent with the literature that has described parents' hope in response to their child's cancer as a complex, multidimensional concept (Sisk et al., 2018).

For some couples, hope was linked to uncertainty. As some researchers have observed, *"uncertainty creates the possibility for hope; the lack of certainty of death keeps hope alive"* (Degrave, 2008, p. 299). For other couples, hope was linked to their certainty or belief in achieving an attainable goal. This conceptualisation is similar to Snyder's (2002) theory, which is predominant in the literature defining hope as the ability (operative and motivational) to achieve a positive, attainable goal. In contrast, other parents seem to have diverged greatly from Snyder's conceptualisation. Strikingly, despite their motivation and willingness to take every possible step to heal their child, some fathers refused to discuss hope. Among these fathers, the notion of hope was viewed as violent and equated with a last resort in a situation of despair where nothing would be left to do but hope.

Furthermore, while hope for a cure was generally a priority, reflecting the extant literature, we noted that some parents nurtured many forms of hope pertaining to their own biopsychosocial well-being and that of their child (Conway et al., 2017; Granek et al., 2013; Kamihara et al., 2015). Our analyses complement these findings by indicating that women seem to be more inclined to consider the different facets of hope, while men focus more on hope for a cure. Notably, our results did not reveal any impact of these divergences in hope between partners on the marital relationship, possibly because most couples do not seem to have perceived this discrepancy.

Finally, at an interpersonal level, the results showed that some parents tried to confer hope on their partner, thereby reinforcing their struggle against hopelessness. This result echoes the findings of Bally et al. (2014), albeit at an intrapersonal level, according to which hope gives parents the strength to combat their negative thoughts, to be realistic and to think positively. Similarly, some parents, who were aware of their child's poor prognosis, made the choice to remain optimistic and nurture the hope for a cure (Kamihara et al., 2015).

Finally, the analyses did not allow us to understand in detail the impact of the partners' different perceptions of hope on the couples' adjustment, conflicts or communication, particularly regarding decision-making. However, the results show that some couples believe they share a common vision of hope, while others try to convey their own way of hoping to each other. We can therefore suppose that these strategies enable parents to have a sense of harmony within the couple and of mutual support, a perception that is necessary for facing, together, the many challenges they have to experience (Lavee et Mey-Dan, 2003; Silva-Rodrigues et al., 2016; Hooghe et al., 2020; Van Schorrs et al., 2017; 2019).

4.1. Strengths and limitations

The present study makes an original contribution to the literature by exploring the experiences of both partners. Indeed, the dyadic IPA allowed us to make sense of couples' experiences as expressed by the couples themselves and to identify in detail the conjugal mechanisms underlying the organisation of roles, emotional interactions and parental hope. Moreover, the exploration of the dynamics of hope that characterise such couples is innovative and enriches our knowledge of this complex concept.

The scope of the results is limited first by the characteristics of the participants, partly as a result of the inclusion criteria. Only heterosexual partners who were currently not separated and who agreed to share their experiences with a child in remission participated, and this group is not representative of all parents in this context. It would be interesting for future studies to explore the dynamics of homosexual couples, separated couples, blended families or family configurations other than the biological parents of the sick child with the goal of identifying other dyadic processes, such as a new organisation of roles, and its impact on the couples' experiences. Additionally, as the children were in remission, it would be interesting to record the experiences of less resilient couples or couples at difficult moments in the care process (such as treatment or relapse), to observe the probable changes in their identification of their needs, perceptions of their hopes and experiences of their conjugal relationship. The challenge associated with this approach would be to recruit parents who would fully volunteer to participate in the study at a time when they were undergoing a painful experience.

The interviews also exhibited certain limitations. First, they were conducted with both parents separately, thus facilitating the free expression of their thoughts and feelings. Nevertheless, it would have been interesting to be able to observe modes of interaction and the ways in which couples coconstruct their thinking based on a common theme. Additionally, in future research, it would be relevant to explore other themes associated with marital adjustment, such as intimacy and sexuality within the couple or the relationship with siblings and family cohesion (Chow et al., 2022; Burn et al., 2018; Van Schoors et al., 2017).

4.2. Research and clinical implications

The present research is a cross-sectional study, which enables us to make sense of couples' experiences at a specific moment in the course of care, during remission, when the child's cancer seems to have stabilised. This work must be furthered by conducting longitudinal explorations of the evolution of conjugal functioning and interactions, which can reflect the different stages of the treatment process. One question in this context pertains to the maintenance of both partners' functioning as they struggle to suppress their negative emotions. In the event of a relapse, how does symmetry evolve within these couples; does it endure or deteriorate? The longitudinal interpretative phenomenological analysis method could be used to investigate these questions (Farr and Nizza, 2019). Furthermore, the hope of couples facing their child's cancer remains a vast area of research. For example, future studies could compare levels of hope between partners and investigate links with dyadic adaptation.

Clinically, the results highlight the necessity of focusing on the needs and functioning of couples. To achieve this goal, it seems to be essential to ensure that parents can find a place in which healthcare professionals, particularly psychologists in the hospital ward, can listen to them and provide them with resources. By taking into account the couple's own dynamics, psychologists could support couples in the organisation of role, becoming aware of their individual and conjugal needs, particularly regarding positive injunctions, and expressing their feelings to enable these couples to adjust as best they can and preserve the well-being of the family.

Nurses also play an important role in pediatric departments. Parents particularly wish for nurses to offer them hope, build a relationship of trust, and be attentive to the needs of each family member (Enskär et al., 2020). We can therefore assume that relationship difficulties and hope within the couple may be shared by parents with nurses. Given the parents' needs, one of the major challenges for nurses is to engage closely with the parents while protecting themselves from burnout (Enskär, 2012). It thus seems relevant to offer voluntary healthcare staff training on the experiences and needs of couples facing their child's cancer, as well as on how to protect themselves from burnout.

To meet these needs, the care of parents, especially couples, who require an increase in personnel, is currently inadequate in paediatric services (Vander Haegen et al., 2022). Additionally, interventions have been developed to foster hope among patients who are hospitalised in oncology and palliative care contexts (Chan et al., 2019; McLouth et al., 2021). Based on Snyder's hope theory, these programmes aim to motivate participants to identify their goals and means of achieving them. In light of the results of the present study, we believe that it is relevant to consider an intervention that could allow couples faced with their child's cancer to express their perceptions and experiences of hope in their full subjectivity.

5. Conclusion

This study identified different dyadic processes that reveal a subtle understanding of how couples faced with their child's cancer cope with this difficult situation. These findings highlight the need to provide psychological support to such couples as well as the need to develop interventions that target parental hope.

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CRediT authorship contribution statement

Laurine Milville: Writing – review & editing, Writing – original draft, Investigation, Formal analysis, Conceptualization. **Sophie Lelorain:** Writing – original draft, Supervision, Project administration, Funding acquisition, Conceptualization. **Pascal Antoine:** Writing – original draft, Supervision, Project administration, Methodology, Formal analysis, Conceptualization.

Declaration of competing interest

No conflicts of interest have been declared by the authors of the article.

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Appendix A. Supplementary data

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