Preventing and reducing parental burnout: A clinical trial of three interventions based on cognitive behavioural therapy, second wave positive psychology, and informal mindfulness practices

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Contents

Abstract

Parental burnout is a context-specific syndrome characterised by four clusters of symptoms: (1) emotional and physical exhaustion related to parenting, (2) emotional distancing from the child, (3) decreased sense of self-efficacy and accomplishment in parental role, and (4) the perception of no longer being a good parent (Roskam et al., 2017, 2018). Considering the high prevalence of parental burnout (up to 9% in general population and up to 30% among the parents of chronically ill children) as well as its deleterious consequences for the parent, the couple, and for the child it appears crucial to implement preventive measures and treatment for parental burnout (Lindström et al., 2010; Mikolajczak, Brianda et al., 2018; Roskam et al., 2021). The present doctoral thesis contributes to the field of prevention and treatment of parental burnout and its deleterious consequences through the evaluation of the efficacy of psychological interventions in this context.

The first part of this doctoral thesis focuses on the identification and evaluation of already existing interventions for parental burnout. To this end, we conducted a systematic review and meta-analysis of the interventions addressed to parents of children with chronic diseases and parents from the general population. In the second part of the thesis, we focused on the evaluation of three psychological group interventions. To achieve this objective, we conducted a clinical trial of three interventions based on: (1) cognitive behavioural therapy; (2) second wave positive psychology; and (3) informal mindfulness practices. These three approaches seem to target psychological processes involved in the development and maintenance of parental burnout (e.g., perfectionism, ruminations, poor emotional skills; Kawamoto et al., 2018; Lin et al., 2021; Mikolajczak et al., 2018; Paucsik et al., 2021; Sorkkila & Aunola, 2020), as well as to promote protective factors which may contribute to the reduction of parental burnout severity (e.g., stress-management skills, self-awareness, self-compassion,

self-efficacy, emotional competencies, psychological flexibility; Antoni et al., 2007; Brown & Ryan, 2003; Paucsik et al., 2021; Shankland et al., 2018, 2021). The three programmes, as well as their mechanisms of action, are presented in the sections dedicated respectively to each intervention study. Finally, the last part of the thesis is dedicated to the summary and general discussion of the findings and their implications.

The five studies presented in this doctoral thesis constitute independent articles : (1) *A systematic review and meta-analysis of psychological interventions for parental burnout;* (2) *Cognitive Behavioural Stress Management (CBSM) for parents: prevention and reduction of parental burnout;* (3) *Acceptability of Cognitive Behavioural Stress Management Intervention for parental burnout reduction and prevention: a mixed methods approach;* (4) *Positive psychology in the prevention and reduction of parental burnout: the CARE programme;* (5) *Informal mindfulness practices, a new approach to the prevention and reduction of parental burnout.*

Keywords: Parental burnout; psychological interventions; meta-analysis; Cognitive Behavioural Therapy, Cognitive Behavioural Stress Management, positive psychology; mindfulness.

Résumé

Le burnout parental est un syndrome spécifique au contexte de la parentalité, caractérisé par quatre groupes de symptômes : (1) épuisement émotionnel et physique lié à la parentalité, (2) distance émotionnelle avec l'enfant, (3) diminution du sentiment d'efficacité personnelle et du sens d'accomplissement dans le rôle parental, et (4) la perception de ne plus être un bon parent (Roskam et al., 2017, 2018). Compte tenu de la prévalence élevée du burnout parental (jusqu'à 9% dans la population générale et jusqu'à 30% chez les parents d'enfants atteintes des maladies chroniques) ainsi que de ses conséquences délétères pour le parent, le couple et pour l'enfant, il apparaît crucial de mettre en œuvre les mesures de prévention et de traitement du burnout parental (Lindström et al., 2010; Mikolajczak et al., 2018; Roskam et al., 2021). Cette thèse contribue au domaine de la prévention et du traitement du burnout parental et de ses conséquences délétères par l'évaluation de l'efficacité des interventions psychologiques dans ce contexte.

La première partie de cette thèse porte sur l'identification et l'évaluation des interventions déjà existantes pour le burnout parental. Pour atteindre cet objectif, nous avons effectué une revue systématique et une méta-analyse des interventions adressées aux parents d'enfants atteints de maladies chroniques et aux parents de la population générale. Dans la deuxième partie de la thèse, nous nous sommes focalisés sur l'évaluation de trois interventions psychologiques. Pour atteindre cet objectif, nous avons mené un essai clinique de trois interventions basées sur : (1) la thérapie cognitive et comportementale ; (2) la deuxième vague de psychologie positive ; et (3) des pratiques informelles de pleine conscience. La dernière partie de la thèse est consacrée au résumé et à la discussion générale des résultats et de leurs implications.

Les cinq études présentées dans cette thèse constituent des articles indépendants : (1) *Revue systématique et méta-analyse des interventions psychologiques pour le burnout*

parental ; (2) *Gestion du stress cognitive et comportementale (CBSM) pour les parents : prévention et réduction de l'épuisement parental* ; (3) *Acceptabilité du programme CBSM pour la réduction et la prévention de l'épuisement professionnel des parents : une approche à méthodes mixtes* ; (4) *Psychologie positive dans la prévention et la réduction de l'épuisement parental : le programme CARE* ; (5) *Pratiques informelles de pleine conscience, une nouvelle approche pour la prévention et la réduction du burnout parental.*

Introduction

Parenting is an experience involving both rewarding and distressing experiences. Rewards in the context of parenting reflect the loving bonds between a parent and a child (e.g., behaviours and emotions that child exhibits to a parent, and the parent exhibit to the child, the feeling of love, and affection), feelings of pride, and a sense of a positive change that a child brings to a parent's life (Sheldon et al., 2020). On the other hand, parenting may entail an accumulation of new responsibilities and important changes in parent's lifestyle (e.g., disturbed sleep, decreased social interactions, less time and energy for personal activities) which may disturb the balance between the sense of accomplishment in parental role and stress and exhaustion (Mikolajczak & Roskam, 2018).

Regardless of the cultural and socio-demographic differences among parents, parental role involves a great capacity of adaptation to new situations, often unpredictable or difficult to control. In that sense parenting stress is considered as a normal and necessary phenomenon: all parents experience stress to some extent (Mikolajczak et al., 2019). From an evolutionary perspective the experience of stress propels the growth and development of new skills to adapt to environmental demands (Lexer & Fay, 2005). However, chronic exposure to stress may also become overwhelming and increase the risk of parental burnout: when stress outweighs one's ability to cope and adapt (Lindström et al., 2010; Roskam et al., 2018).

Like professional burnout, parental burnout is a unique and context-specific syndrome which encompasses four dimensions: (1) emotional and physical exhaustion related to parenting, (2) emotional distancing from the child, (3) decreased sense of self-efficacy and accomplishment in parental role, and (4) the contrast in parental self, i.e., the perception of no longer being a good parent (Roskam et al., 2017; Roskam et al., 2018). Parental burnout is different than the ordinary parenting stress which is rather a transitory tension or depression which is characterised by the presence of depressive symptoms in multiple domains of life

(Iacovides et al., 2003; Roskam et al., 2017). Burnt-out parents can still experience the positive emotions in contexts not related to parenting e.g., professional or social (Mikolajczak et al., 2021; Evans et al., 2022). However, parental burnout might lay on the continuum of symptoms between stress and depression: parents exposed to stress may develop parental burnout symptoms, which may further generalise to depressive symptoms if they concern other areas of life (Iacovides et al., 2003; Roskam et al., 2017). The prevalence of parental burnout reaches up to 9 percent in the general population (Roskam et al., 2021), and even 36 percent in the population of parents of children with chronic diseases (Lindström et al., 2010).

Mikolajczak et al., (2018) showed that parental burnout can be a threat to overall family well-being on account of its deleterious consequences on the parent (i.e., suicidal ideation, addictive behaviours, sleeping problems), on the couple (i.e., increased conflicts), and on the child (i.e., increased risk of neglectful and violent behaviours toward children). Contrary to professional burnout, parents cannot quit or take a sick leave from their role as parents. This may lead parents to undertake various maladaptive coping strategies such as physical escape (e.g., suicidal thoughts) and psychological avoidance (e.g., alcohol consumption, excessive working or exercising, binge eating or other distractions through the Internet or social media; Mikolajczak et al., 2018; Mikolajczak et al., 2019). There is evidence that parental burnout contributes to the dysregulation of hypothalamic-pituitary-adrenal axis and increases cortisol levels (Brianda et al., 2020). The high concentration of cortisol may lead to negative consequences for physical health (e.g., insomnia, cardiovascular diseases, diabetes). In addition, a burnt out parent may consider the other parent as being responsible for their situation (e.g., not giving enough support or not sharing the responsibilities) which may contribute to dyadic tensions and conflicts (Mikolajczak et al., 2018). Finally, an emotionally distanced parent may not be able to respond to their child's physical and emotional needs or may even present violent attitudes toward a child as their own needs are not satisfied (Mikolajczak et al.,

2018). The violent behaviours toward the child can be enhanced by the high levels of cortisol (Brianda et al., 2020; Martorell & Bugental, 2006). These deleterious consequences shed the light on the need to prevent and treat parental burnout.

Parental burnout was initially observed among mothers and fathers of chronically ill children as a consequence of long-term stress induced by their child's diagnosis, treatments, and care (Lindahl Norberg, 2007; Lindström et al., 2010; Norberg et al., 2014). These studies showed that the prevalence of parental burnout symptoms was higher among the parents of children with chronic diseases (i.e., brain tumour, Type 1 Diabetes Mellitus, Inflammatory bowel disease) and children undergoing hematopoietic stem cell transplantation compared to parents of healthy children. These findings highlighted the risks of chronic exposure to disease-related stress, its deleterious consequences on parents' mental health, and the need for psychological support in the context of parenting stress. These studies gave strong evidence for the need to provide the parents of chronically ill children with appropriate help.

Later, research suggested that parental burnout may have various origins not only related to the child's chronic disease and can affect the parents of healthy children (Mikolajczak et al., 2018). Indeed, parenting stress derives from multiple sources (Deater-Deckard, 2004; Deater-Deckard & Panneton, 2017). The findings of Mikolajczak et al., (2018) outlined two important aspects. Firstly, the population affected by parental burnout spreads beyond the population of parents of chronically ill children: every parent may be at risk of parental burnout at some point of their parenting experience. Secondly, identifying different risk and protective factors in parental burnout may help to better identify, support, and treat parents at risk or suffering from parental burnout. It appeared fundamental to explore the risk and protective factors in parental burnout, as well as to develop interventions specific for parental burnout (Mikolajczak & Roskam, 2018).

According to the balance between risks and resources model (Mikolajczak & Roskam, 2018), the prevention and reduction of parental burnout can be addressed either by the decrease of risk factors, the increase of parental resources, or both. Several risk factors for parental burnout have been identified. For example, parental perfectionism and over-investment appeared to be associated with parental burnout severity (Kawamoto et al., 2018; Le Vigouroux et al., 2017; Lin et al., 2021; Sorkkila & Aunola, 2020; Le Vigouroux & Scola, 2018). Moreover, parent's traits (e.g., poor emotional competencies, neuroticism, avoiding attachment), parenting style, and family-functioning (e.g., conflicts, co-parental disagreement, poor marital satisfaction) were found explain parental burnout severity to a larger extent than socio-demographic factors (Mikolajczak et al., 2018). In addition, the findings of this study have outlined the protective role of emotional competencies, marital satisfaction, co-parental agreement, positive parenting, and parental self-efficacy (Mikolajczak et al., 2018). Subsequent studies also outlined the protective role of emotional competencies against parental burnout (Bayot et al., 2021; Lin et al., 2021a; Lin et al., 2021b). In addition, Paucsik et al., (2021) showed that mindfulness trait and practice predicted the lower scores of parental burnout, through the increase of self-compassion and concrete ruminations, and the decrease in abstract ruminations. All these findings contributed to identify processes involved in the development and maintenance of parental burnout suggesting the plausible therapeutic courses of action.

The mechanisms through which interventions bring the change have been conceptualised as the mechanisms of action (MoAs; Michie et al., 2013). MoAs can be defined as the processes which mediate the relationship between intervention's behavioural change techniques (BCT) and it's observed outcomes. In other words, MoAs are the theoretical constructs (e.g., beliefs in one's capabilities, motivation, intention, values, social learning) which are targeted by the intervention's BCT (e.g., exposure, self-reward, problem solving) to enhance the change (Connell et al., 2019). Identifying MoAs may help both to develop effective

interventions by selecting appropriate behavioural change techniques and to explain the effects of already existing interventions. Importantly, MoAs can be targeted by the wide range of BCT yet some of them may be more effective than the others (Carey et al., 2018). To illustrate, the self-image MoAs can be targeted by the many different BCT of which problem solving, social comparison, and self-monitoring of the behaviour are more effective than for example emotional social support, habit reversal, or reframing (Carey et al., 2018). In this light, it appears important to identify the most effective way of targeting the MoAs involved in parental burnout development and maintenance.

Considering the high prevalence of parental burnout as well as its deleterious consequences for the parent, the couple, and for the child it appears crucial to implement preventive measures and treatment for parental burnout. The further steps to undertake in the field of parental burnout research should contribute to the identification of risk and protective factors for parental burnout, application of effective screening measures to identify the parents at risk or suffering from parental burnout, and the development of effective interventions for parental burnout prevention and treatment. The present doctoral project addresses the above issues contributing to the prevention of parental burnout and its deleterious consequences through the evaluation of the efficacy of interventions developed to provide parents with adequate help and support.

The aim of this doctoral research project was to determine which psychological interventions are effective for parental burnout treatment and prevention and why. The first objective was to identify all existing interventions for parental burnout. We achieved this objective by conducting a systematic review on parental burnout interventions. The second objective was to compare the effectiveness of these different programmes in terms of parental burnout symptoms reduction via a meta-analysis. The third objective was to propose and assess new programmes for parental burnout prevention and treatment. Indeed, we aimed to compare

whether different evidence-based psychological approaches (i.e., CBT, second wave positive psychology, informal mindfulness practices) are equally effective for parental burnout prevention and treatment as well as to identify MoAs which could be targeted through the BCT of these three psychological approaches. More precisely, we hypothesised that all three programmes would contribute to the reduction of parental burnout severity. However, we aimed to explore whether this reduction would be mediated by the same MoAs or whether active ingredients specific for each programme are more effective in targeting different MoAs. To address this research question, we put forward a secondary hypothesis that the CBT-based programme would contribute to the reduction of parental burnout through the decrease in abstract ruminations and in stress, for the positive psychology programme, through the increase in unconditional self-kindness, and informal mindfulness practices through the development of intra-personal emotion regulation competency.

In summary, the studies presented in this doctoral thesis aimed to achieve following four objectives (see *Figure 1*):

1. To identify already existing psychological programmes for parental burnout.

2. To compare the effectiveness of already existing programmes for parental burnout.

3. To adapt three evidence-based programmes (i.e., CBT, second wave positive psychology, informal mindfulness practices) to the context of parental burnout and to assess their effectiveness.

4. To determine whether these different psychological approaches (i.e., CBT, second wave positive psychology, informal mindfulness) target specific psychological processes involved in parental burnout.

The first part of this doctoral thesis focuses on the identification and evaluation of already existing interventions for parental burnout. To achieve these first two objectives, we conducted a systematic review and meta-analysis of the interventions addressed to the parents

of children with chronic diseases and parents from the general population. In the second part of the thesis, we focused on the evaluation of three psychological group interventions and their mechanisms of action. To achieve these objectives, we conducted a clinical trial of three interventions based on: (1) cognitive behavioural therapy; (2) second wave positive psychology; and (3) informal mindfulness practices. The last part of the thesis is dedicated to the summary and general discussion of findings and its implications.

The studies presented in this doctoral thesis constitute independent articles. Thus, there are several repetitions regarding the presentation of the context across the included studies. A total of 5 manuscripts are presented in the following sections of the thesis:

1.   *A systematic review and meta-analysis of psychological interventions for parental burnout.*

2.   *Cognitive Behavioural Stress Management (CBSM) for parents: prevention and reduction of parental burnout.*

3.   *Acceptability and effectiveness of Cognitive Behavioural Stress Management Intervention for parental burnout reduction and prevention: a mixed methods approach.*

4.   *Positive psychology in the prevention and reduction of parental burnout: the CARE programme.*

5.   *Informal mindfulness practices, a new approach to the prevention and reduction of parental burnout.*

Aim: Evaluation of psychological programmes for parental burnout

Objectives:
- Identification of already existing programmes
- Evaluation of already existing programmes
- Evaluation of CBSM programme
- Evaluation of CARE programme
- Evaluation of FOVEA programme

Studies:
- Systematic review and meta-analysis — **Article 1**
- CBSM clinical trial
  - CBSM quantitative study — **Article 2**
  - CBSM mixed methods study — **Article 3**
- CARE clinical trail — **Article 4**
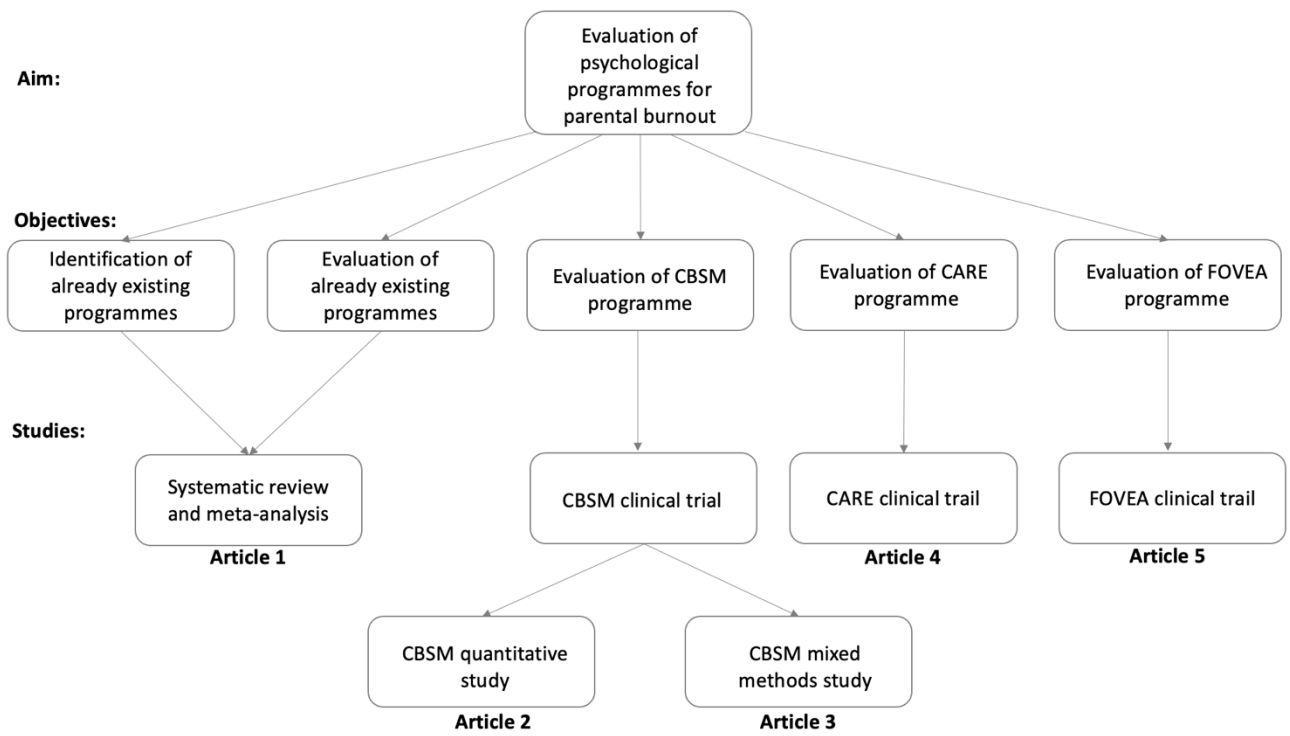- FOVEA clinical trail — **Article 5**

Figure 1. Summary of research objectives and subsequent studies presented in the present doctoral thesis.

Methodology

Science, coming from the Latin word *scientia*, means the knowledge which can be understood as the process of acquisition of the knowledge aiming to explain and predict the phenomena observed in nature but also abstract concepts (e.g., mathematics or logics). Science enables the progress in the understanding of the world. Therefore, a scientific approach aimed at acquiring knowledge should provide valid, reliable, and replicable conclusions about the studied phenomena. In contrast to non-scientific knowledge (i.e., based on subjective opinions, feelings, and intuitions), scientific knowledge is based on the accumulation of empirical and objective evidence coming from carefully designed studies. The empirical approach or, in other words, evidence-based approach, relies on direct, systematic, and careful observation (i.e., making accurate measurements of observed phenomena), and experimentation, which enables observation of interactions or causal effects between the studied variables. Thus, regardless of the domain, scientific progress relies on the contribution delivered by systematic research (Festinger et al., 2013).

Research studies enable the testing of scientific hypotheses aiming to respond to a precisely defined scientific problem. Depending on the objectives, research may aim to describe, explore, or determine a casual nature of observed phenomena. However, the accuracy of the conclusions delivered by the research studies depends on the scientific method chosen to address the research question. In that sense, scientific methods describe the way the research is designed, carried out, and reported to reflect the reality as closely as possible. Hence the importance of careful choice of scientific methods in designing the research. Indeed, researcher should aim to apply the most appropriate methods to respond to their research questions. For instance, the application of irrelevant methods (e.g., lack of rigor, researcher's error) is highly likely to lead to the erroneous conclusions.

Methodology encompasses the range of scientific methods and principals which aim to provide guidelines and theoretical perspective to the choice of the most relevant scientific method to respond to a research question. Whilst research methods aim at answering the research question, or resolving a problem, methodology provides a wider perspective to the understanding of the degree of the adequacy, advantages, disadvantages, and consequences of specific method. Moreover, methodology is supported by both theoretical and philosophical assumptions, i.e., (1) plausibly there is more than one view to the studied phenomena, as ontologically the reality can be observed from different perspectives; (2) scientific knowledge relies on empirical evidence observed within a studied sample; (3) the choice of research question and interpretation of the results are likely to be value-laden and therefore axiological biases may contribute to the researcher's interpretations; (4) and that the research process may be based either on inductive or deductive reasoning or both: either aiming at the development of theories (generalisation) or testing the theory in a specific context, or a combination of both approaches (Festinger et al., 2013).

In that sense, the methodology aims to ensure the reliability of observed results by contributing to the definition of the nature of studied phenomena, the formulation of research questions, study's objectives, and hypothesis, as well as to the modalities of data collection, analyses, and reporting of the results. Therefore, methodology is a discipline which describes and analyses the principles of various scientific methods (Kazadin, 2003). This implies that the methodology is essential for the choice of an adequate research design but also fort the *post-hoc* evaluation of the validity and reliability of already conducted studies.

This methodology chapter aimed at presenting the general research design and the rationale for the choices made in this research project to respond to the research questions highlighted in the introduction chapter. To achieve this objective, we first described the nature of the research problems addressed within this doctoral project (e.g., type of data needed to

respond to the research questions). Second, we justified the choices of the data collection methods (i.e., sampling, tools, procedures, materials, measurements of the variables). Third, we discussed the procedures chosen to process, analyse, and report the collected data. The overarching goal of this chapter was to justify and discuss the methodological choices considering both the contribution of the chosen methods, and the limitations and obstacles related to these methodological choices.

Research questions

This doctoral project aimed at responding to the following research questions: (1) Which interventions have been already proposed for parental burnout prevention and treatment? (2) To what extent do these interventions contribute to the reduction of parental burnout symptoms? (3) To what extent are psychological group interventions based on cognitive and behavioural therapy, second wave positive-psychology, and informal mindfulness practices effective in terms of parental burnout prevention and reduction? (4) Which psychological processes underlie the reduction in parental burnout severity? (5) Which mechanisms of action are specific to each of these three approaches?

The above research questions were addressed within a series of studies presented in the articles of this doctoral thesis (see *Figure 1*). This methodology chapter focuses on the justification of the methodological choices applied in these studies, as they are fundamental to the evaluation of the contribution of this doctoral research to scientific knowledge, and to the proposition of the further directions which could improve the accuracy of these findings.

Research design

A research design provides a framework which determines methods and practices chosen to address a specific research problem. In that sense, a research design specifies the plan

of the way in which the studied phenomena will be observed, measured, and analysed (e.g., whether the research problem have descriptive, exploratory, or a causal nature, and the way scientists decide to respond to the research question). Thus, each scientific study has its own research design which is supposed to be the most appropriate strategy to respond to a given research question, and methodology enable to evaluate the accuracy of a chosen strategy.

Depending on the nature of the studied research questions we can distinguish between descriptive, exploratory, or cause-effect studies. Descriptive or exploratory studies aim to define, explore, or classify the studied phenomenon or relationships between several phenomena while causality-based or explanatory studies aim to predict the relationships between studied variables based on previously conducted descriptive research. In that sense, once the research has described the phenomena of interest, scientist can advance hypotheses regarding the associations between these variables, which would contribute to their better understanding. To illustrate, based on exploratory and descriptive studies, parental burnout syndrome has been defined by the research (Roskam et al., 2018). Subsequently, causality based studies aimed to identify risk and protective factors from parental burnout (Paucsik et al., 2021) as well as the extent to which psychological interventions can contribute to the reduction of parental burnout (Brianda et al., 2020).

The studies presented in this doctoral thesis addressed different research questions and therefore followed different research designs. To start with, the study aiming to identify and evaluate the existing interventions for parental burnout was designed as a systematic review and meta-analysis.

Systematic review and meta-analysis

Systematic reviews aim at aggregating the evidence from prior studies to provide a transparent and exhaustive overview of all relevant literature selected on explicit criteria.

Studies identified through systematic searches are evaluated in terms of inclusion and exclusion criteria (Page et al., 2021). Further, the included studies are also assessed based on the quality and adequacy of their research methods (e.g., type of the control group, presence of the bias). As such, the findings from the systematic reviews are verifiable and reproducible.

In the systematic-review study (see *Article 1*) we aimed to identify all the existing psychological interventions for parental burnout and to document their effectiveness. To achieve this objective, we defined the search strategy and eligibility criteria for the inclusion in the systematic review (for the precise criteria see *Methods* section in the *Article 1*). Further the summary of study descriptions, reviewed outcomes, and the summary of findings was described using GRADE profile tool (Guyatt et al., 2008; The GRADE Working Group et al., 2004). The eligibility of each title, abstract, and keywords identified by the automatic and hand searches, based on the predefined inclusion criteria was independently assessed by two researchers. In addition, full texts of eligible articles were assessed independently by both authors for final inclusion in the study. Further, we extracted the data from the included articles regarding: author(s), year of publication, journal of publication, country, study design, participants, study setting, procedure, intervention type and duration, sample size, measured variables, ethical consent, participation rate, attrition rate, control group comparison, statistical analyses performed, outcomes and results (mean, standard deviation, confidence intervals, effect sizes, and follow-up data points), as well as the study funding and potential sources of conflict of interest. In addition, two authors independently assessed the risk of bias (i.e., selection, performance, detection, and attrition bias) using Cochrane Collaboration risk assessment tools (Higgins et al., 2011). Moreover, the overall quality of evidence of the included studies was assessed using GRADE profile tool (Guyatt et al., 2008; The GRADE Working Group et al., 2004) and the publication bias was estimated with a funnel plot. All above steps ensure the transparency of and the quality of findings.

Further, to respond to the second research question regarding the extent to which the identified interventions contributed to the reduction of parental burnout symptoms we conducted a meta-analysis. A meta-analysis is a statistical analysis which enables the results from many studies addressing the same research question to be combined. In our meta-analysis on parental burnout interventions (see *Article 1*) we assessed the pooled effect of the interventions based on mean scores on parental burnout assessments. The quantitative analyses of the data using standardised mean difference (SMD) were performed following the recommendations from Cochrane Handbook for Systematic Reviews of Interventions (Higgins et al., 2008). This approach enabled us to quantify the extent to which the identified interventions contributed to the reduction of parental burnout severity compared to their relative control groups as well as to compare the effect sizes between the interventions (for the detailed statistical plan see *Methods* section in the *Article 1)*.

The systematic reviews are based on a descriptive approach, while meta-analyses are based on a causal approach. The limitation of descriptive approach is that the obtained results do not permit determination of the causal relationship between studied variables (Kazadin, 2003). For this reason, descriptive studies are not sufficient to explain the causality or interactions between observed phenomena. In contrast, causality research (e.g., meta-analyses, interventional, and experimental studies) enables to make causal inferences, because it is possible to observe time-order relationship between the variables of interest.

Intervention studies

Further, to respond to the third research question regarding the effectiveness of CBT, second wave positive psychology, and informal mindfulness practices in terms of parental burnout reduction we conducted three clinical trials.

The current gold standard for the evaluation of interventions is the randomised controlled trial (RCT) design (Lilienfeld et al., 2018). The RCTs ensure the validity of the studies as they limit the potential sources of bias such as experimenter and participant effects, or inadequate research design. Indeed, the randomisation method helps to minimise the effect of extraneous variables (i.e., confounding factors, selection bias, and observer bias) on a dependent variable. The RCTs aim also to reduce the random error by ensuring large sample sizes. The RCTs consist of a random assignment of participants to the intervention and control groups which are further followed up to observe any potential differences between the outcomes from these groups. This comparison determines the extent to which the intervention had a positive or negative effect on the variable of interest (Kendall, 2003). In that sense, RCTs give the evidence about a cause-effect relation between an intervention and the outcome.

Although RCT are superior to other non-randomised designs in terms of replicability (Lilienfeld et al., 2018) in our studies we decided to not randomly assign participants to the intervention and control groups. This decision was justified by the ethical implications related to the risks associated with parental burnout (i.e., increased risk of suicide, child abuse and neglect; Brianda et al., 2020; Mikolajczak et al., 2018). Indeed, we considered that parents suffering from parental burnout or those at risk of parental burnout who are willing to participate in the intervention should be able to directly join one of the intervention groups. Likewise, the three interventional studies followed a quasi-experimental design as participants were not randomly assigned to the intervention and control groups. However, they were blinded to the type of the intervention they were going to receive. The control group in our studies consisted of the parents who were interested in participating in the intervention but who could not directly assign to one of the intervention groups. As such, they responded to the same pre- and post- intervention measurements as the participants from the intervention groups and they were invited to sign up for one of the newly proposed groups. On the one hand, the quasi-

experimental design enabled us to control for spontaneous remission over time and compare the evolution of parental burnout symptoms between the groups. On the other hand, the risk related to the non-RCT is that the intervention and control groups may not be comparable at baseline. We aimed to address these potential inter-group differences both by the choice of adequate statistical tests and in terms of the discussion of the results.

Quantitative, qualitative, and mixed methods

The three common research methods are: (a) quantitative methods, (b) qualitative methods, and (c) mixed methods. Quantitative methods are based on numeric measurements of studied variables which attempt to quantify the observed phenomena. Likewise, quantitative data can be statistically analysed to deliver the results which enable the researchers to accept or to reject their hypothesis. Quantitative studies aim at providing nomothetic, generalisable information about the average characteristics within a studied population, or universal laws that can be applied beyond the studied sample. The quantitative methods such as experiments, observations recorded as numbers or questionnaires based on close-ended questions are based on a deductive approach as they aim to test or confirm theories and assumptions. This implies that quantitative methods are appropriate to test hypotheses about generalisable assumptions.

In contrast, qualitative methods do not aim at quantifying the observed variables: they cannot provide a generalisable information. Qualitative studies focus mostly on providing idiographic information about person's individual experience of a studied problem. In that sense, qualitative studies are useful to explore and understand concepts or individuals' experiences, e.g., through observations described with words, open-ended questions, or interviews. This implies that qualitative studies can a be source of exhaustive information which can provide an attempt at explanation of a studied problem. Therefore, qualitative methods are based on inductive approach as they focus on specific observations, e.g., individual

experience, to advance hypotheses generalisable beyond the studied sample. However, qualitative studies are usually conducted on small samples, therefore the results of qualitative studies cannot be generalisable above the studied context. Further quantitative or mixed methods studies can attempt to quantify the phenomena identified by exploratory qualitative studies.

Mixed methods use both quantitative and qualitative methods. The mixed methods approach appears to be adequate when the research question cannot be answered using only qualitative or quantitative data, i.e., when two different perspectives are needed to provide a comprehensive view of a problem (Guetterman et al., 2015). Within mixed methods we can distinguish three basic study designs, i.e., convergent parallel design, explanatory sequential design, and exploratory sequential design (Guetterman et al., 2015). However, other variations of mixed methods designs can be applied depending on the research questions. Convergent parallel design consists of the parallel collection of quantitative and qualitative data, then comparison between the quantitative and qualitative data, and finally interpretation and explanation of observed convergence or divergence between the quantitative and qualitative data. The explanatory sequential design consists of first the quantitative data collection and analysis to identify the quantitative results which need explanation, then the collection and analyses of qualitative data, and finally the attempt to interpret the extent to which the qualitative data could explain the quantitative data. The exploratory sequential design aims first at the collection and analysis of qualitative data, then using the result of qualitative observations to introduce the variables or instruments which can be quantified and collection of quantitative data, and finally the interpretation of how quantitative results provide the new perspective to the qualitative observations.

In our studies, we used both quantitative and mixed methods. For instance, the meta-analysis was based on the quantitative method as we statistically analysed the data drawn from

the identified studies. Similarly, the quasi-experimental studies also aimed to statistically analyse the data collected through the questionnaires validated. This quantitative approach enabled us to test our research hypotheses about the effectiveness of psychological interventions for parental burnout. In addition, in one of our studies we used a mixed methods design (see *Article 3*) to assess the acceptability of the *Cognitive Behavioural Stress Management* programme for parents. Acceptability reflects the extent to which different components of an intervention were appropriate and well received by the target population (Ayala & Elder, 2011). As such, to assess the acceptability of the delivered intervention we aimed to identify its satisfying and unsatisfying aspect based on participants' personal experience. To achieve this objective, we used both quantitative data collected from the satisfaction survey and qualitative data form the individual interviews with participants. In that sense, we applied the convergent parallel design: we collected both the quantitative and qualitative data to further compare the findings and explain the observed convergence or divergence between them.

Measures

Meta-analysis

Regarding the measures included in the systematic review and meta-analysis, the key outcome variable was the global parental burnout score characterised by at least three of the following dimensions: (a) physical, emotional, and cognitive exhaustion in parental role; (b) emotional distancing from a child; (c) lack of accomplishment or feeling 'fed up' in parental role; (d) the perception of not being a good parent anymore. Indeed, parental burnout has been measured with different questionnaires across the identified studies (see *Results* section in *Article 1*).

Questionnaires

Regarding the measures included in the intervention studies participants responded to the demographic survey evaluating age, gender, number of children, child's current or past diagnosis of chronic illness or developmental problem, family and professional situation, and the education level. In addition, to evaluate interventions' effectiveness we used questionnaires measuring the severity of parental burnout, depression, anxiety, and stress symptoms, as well as abstract ruminations, emotion regulation, and self-kindness. In this section we briefly present the questionnaires which we used in our studies as not all of them are presented in the articles. Indeed, due to the low statistical power in the pilot studies we were not able to test all of our hypotheses. However, the mean scores for the studied variables at different measurement times for both intervention and control groups are presented in *Appendix*. The examples of questions and the internal reliability of the scales for each sample are presented in the method section of the articles. The questionnaires are also presented in the *Appendix*.

Parental burnout symptoms were measured with the *Parental Burnout Assessment* (PBA, Roskam & Mikolajczak, 2018) measuring four dimensions of parental burnout: (a) physical and emotional exhaustion, (b) emotional distance with a child, (c) feeling of fed-up in parental role, (d) the contrast in perception of how the parent used to be and how they perceive themselves as a parent at the moment. PBA is a 23-item scale assessed on a 7-point Likert scale from 0 (never) to 6 (everyday). Roskam et al., (2018) proposed five cut-off scores to assess the risk and severity of parental burnout: (1) scores below 30 are considered as no risk of parental burnout, (2) scores between 30 and 45 are considered as a low risk of parental burnout, (3) scores between 46 and 60 are considered as a moderate risk, (4) scores between 61 and 75 represents a high risk of parental burnout, and (5) scores above 75 are considered as severe parental burnout.

Depression, anxiety, and stress severity were assessed with the *Depression, Anxiety,*

Stress Scale (DASS-21; Lovibond & Lovibond, 1995). The DASS-21 contains three subscales measuring the affective states of depression, anxiety, and stress over the past week. Each subscale contains 7 items rated on 4-point Likert scale from (0) did not apply to me at all to (3) applied to me very much or most of the time.

The frequency of abstract ruminations was evaluated with the 8-items subscale of *Mini-Cambridge Exeter Repetitive Thought Scale* (Mini-CERTS; Douillez et al., 2014). Mini-CERTS is 16-item questionnaire measuring abstract and concrete ruminations with 8 items for each dimension. The responses are rated on 4-point Likert scale from (1) almost never to (4) always. Abstract ruminations are unconstructive repetitive thoughts which are often overgeneralised to many different topics. Whereas concrete ruminations are considered as constructive repetitive thoughts as they are focused on a specific problem and can enhance the problem-solving strategies.

Self-kindness was assessed with the *Unconditional Self-Kindness scale (USK*; Smith et al., 2018). The USK evaluates one's ability to be kind to oneself in difficult circumstances i.e., in the context of rejection, failure or mistake, awareness of personal flaws and imperfections. The scale comprises 6 items with scores ranging from (0) not at all to (6) a great deal.

Emotion regulation was measured with one dimension of the *Profile of Emotional Competence* questionnaire (PEC, Brasseur et al., 2013). The PEC scale measures five types of emotional competencies, i.e., identification, expression, comprehension, regulation, and utilisation of emotions. These five emotional competencies are measured both on intrapersonal and interpersonal levels. We used the intrapersonal emotion regulation subscale which consisted of 5 items ranging from (1) the statement does not describe me at all to (5) the statement describes me very well. All above questionnaires are presented in *Appendix*.

Physiological measures

Complementary to the questionnaires, we aimed to integrate direct physiological measures of stress and parental burnout as well as of the emotion regulation. Indeed, there are several limitations to the use of a such self-reported questionnaires for parental burnout: they are not appropriate to measure the impact of arousal related to parental burnout but rather the frequency of the symptoms within a defined lap of time (Blanchard et al., 2021; Blanchard & Heeren, 2020). In addition, the subjective perception of parental burnout varies in its intensity in different contexts (Blanchard, et al., 2021). Considering these limitations, physiological measures appeared to be an interesting complement in the context of parental burnout (Bayot et al., under review.; Brianda et al., 2020; Brianda et al., 2020).

Physiological stress can be measured using specific biomarkers such as cortisol levels, heart rate variability, vagal tone, blood pressure, and salivary alpha-amylase (Nater et al., 2005). Indeed, physiological stress reaction triggers the activation of hypothalamic-pituitary-adrenal (HPA) axis and the secretion of cortisol and catecholamines which are measurable in saliva, blood, hair, and urine as the final products of physiological stress reaction. The other biomarkers of HPA activation are corticotropin-releasing factor (CRF) levels measurable in cerebrospinal fluid, and adrenocorticotropin hormone (ACTH) levels which can be sampled only from the blood (Jonsdottir & Sjörs Dahlman, 2019). Considering how the sampling of biomarkers may be invasive, or require skilled personnel and materials, researchers may often want to turn towards the use of non-invasive techniques such as cortisol sampled in saliva or hair. Contrary to the measure of the cortisol in saliva, which is prone to important diurnal variability, the hair cortisol measure appears to be a more reliable to measure as the cortisol levels accumulate in hair over time. In addition, while the cortisol in the blood or saliva may give a reliable measure of the cortisol level only at the moment of the sample collection, the cortisol in the hair can indicate the level of chronic stress as the cortisol accumulates in hair

over time while the hair grows. For instance, the hair grows 1 cm per month, the sample of 3 cm indicate the retrospective exposure to stress within the last three months. Brianda et al., (2020) showed that hair cortisol levels may be not only a reliable biomarker of stress but also of parental burnout. Therefore, hair cortisol is a reliable and non-invasive indicator of chronic stress and parental burnout.

In our intervention studies, we aimed to compare the levels of hair cortisol between the T1 (pre-test) and T3 (3-month follow up). This, enabled to objectively assess the effects of the interventions on the physiological markers of stress.

Another direct measure of stress and emotion regulation used in our intervention studies was heart rate variability (HRV; Thayer et al., 2012). HRV is an index of physiological vagal tone which is involved in the physiological regulation of stress and recovery capabilities (Holzman & Bridgett, 2017). We attempted to use the HRV measure in an experimental task before and directly after the end of each programme. The task consisted of performing an electrocardiogram to measure heart rate and heart rate variability (Meyer et al., 1996) at 3 successive times: (1) at rest during 10 minutes as an indicator of the vagal tone activity; (2) when faced with a stressful situation i.e., watching a video of a 2-minute scene showing an interaction between a parent and a child who "casts a tantrum" as a measurement of physiological reactivity to stress; and (3) during a 10 min recovery period as the index of the recovery capabilities (Laborde et al., 2017). In total, the preparation and measurement time was of 30 minutes. The measurement was carried out using two surface sensors (i.e., electrodes): one placed on the right forearm and the second placed on the left ankle. The acquisition of electrocardiographic signals was carried out using an acquisition and storage unit type MP36, BIOPAC. This experimental study aimed to evaluate whether the interventions contributed to the improvement of emotion regulation in the context of induced stress.

Semi-structured interviews

To assess the interventions' acceptability, we used both individual semi-structured interviews and a satisfaction survey. The semi-structured interview included questions regarding participants' satisfaction with the delivered intervention, the format, content, and organisation of the sessions (e.g., frequency, duration, schedules), as well as the questions regarding the observed changes in daily life. The interviews also aimed to outline the unsatisfying aspect of the interventions to identify the areas for the improvement. The detailed interview chart is presented in the *Methods* section of the *Article 3*.

Satisfaction survey

The satisfaction survey included both closed-ended questions regarding the satisfaction with the delivered intervention and observed benefits as well as open-ended questions regarding the most and the least appreciated aspects of the programme (i.e., the most and the least appreciated sessions developing one's opinion). The satisfaction survey also included an open-ended question regarding the aspects which could be improved in the future programmes. The questions from the satisfaction survey are presented in the *Methods* section of the *Article 3*.

Sample

All the studies presented in this doctoral thesis were conducted on the population of parents. The systematic-review and meta-analysis included the studies carried out among the parents (biological, adoptive, stepparents) both from the general population and the parents of children suffering from chronic diseases. The studies carried out among professional caregivers (e.g., teachers, social workers, or volunteer caregivers) were excluded as they may be better considered under the professional burnout rubric. Socio-demographic characteristics of participants from the included articles are presents in the *Results* section of the *Article 1*.

Regarding the three intervention studies presented in the *Articles 1, 2, 3*, and *4*, we targeted the general population of parents. The inclusion criteria for the participation in the

study were: (a) to be a parent of at least one child living in the same household, (b) being over 18 years old, and (c) having accepted an informed consent for participation in the study. The diagnosis of parental burnout was not considered as the inclusion criterion. Indeed, we aimed to assess the interventions' effectiveness in terms of parental burnout reduction both as a preventive measure among the parents at risk of parental burnout as well as the treatment for the parents with severe symptoms. Participants did not receive any financial reward for their participation in the study and they participated in the interventions group for free. Socio-demographic characteristics of the samples of each study are presented in the respective articles. In addition, the three interventional studies did not include enough participants to test all preregistered hypotheses. Based on a power analysis calculated with G* Power software the required sample size for each interventional study was of 122 participants (i.e., 66 participants for both intervention and control groups). We have determined a medium effect size ($f = .25$) with 95% power for repeated measures ANOVA based on previous interventional studies for parental burnout (Bayot et al., under review; Brianda et al., 2020)

Ethics and preregistration

The interventional studies received the approval from the national ethical board in France (Comité de Protection des Personnes EST-III; National number: 2019-100359-48; N°: 19.02.06.44810). The study was also pre-registered on the Open Science Framework: https://osf.io/f5c7b/?view_only=22472fb65a344e7cb52e948d2b39e0ff. Similarly, the systematic review and meta-analysis was preregistered on the International prospective register of systematic reviews PROSPERO (registration ID: CRD42021231247) and Open Science Framework : https://osf.io/3g67n/?view_only=8db62532d857478baef1a27ed916e0e6.

Data collection process and timeline

Regarding the systematic review, systematic searches in online data bases were carried out in January 2021. Further, the screening of the articles and analyses were executed until May 2021. All the data was collected online.

Regarding the interventional studies, first, we contacted the community-based organisations working with parents and children to present our applied research project. We aimed to raise awareness of social workers about the parental burnout and its risks. This enabled us to create collaborations with the local institutions and organisation which agreed to host the intervention groups. In addition, we aimed to reach a wide range of neighbourhoods to propose the programmes to the parents from different socio-demographic environments. Following this first approach, we started the recruitment of participants and first information meetings. Further, we proposed the schedules for the first groups: parents had a choice of a wide range of schedules at different times of the week both in the morning and in the afternoon. We regularly proposed the new schedules after the end of each previous cycle. As such, participants from the waiting list-control group could join one of the intervention groups.

The data for the intervention studies was collected both through online questionnaires and interviews, as well as offline for the satisfaction survey, hair cortisol, and HRV experimental study. The hair cortisol samples were collected before the first intervention session and after the second follow up session (three months after the end of the programme). The hair samples were analysed in bio-medical laboratory using liquid-chromatography tandem-mass spectrometry. In addition, the HRV experimental measures were carried out before and after the end of the programmes in the experimentation booth at the Grenoble-Alpes University.

Regarding the research protocol for the interventional studies, it consisted of 3 measurement times: (T1) before, (T2) just after, and (T3) three months after the end of the

cycle. At each measurement time, participants received a link for the online questionnaire. The measurement of hair cortisol took place only at T1 and T3. Whilst the HRV study took place solely et T1 and T2.
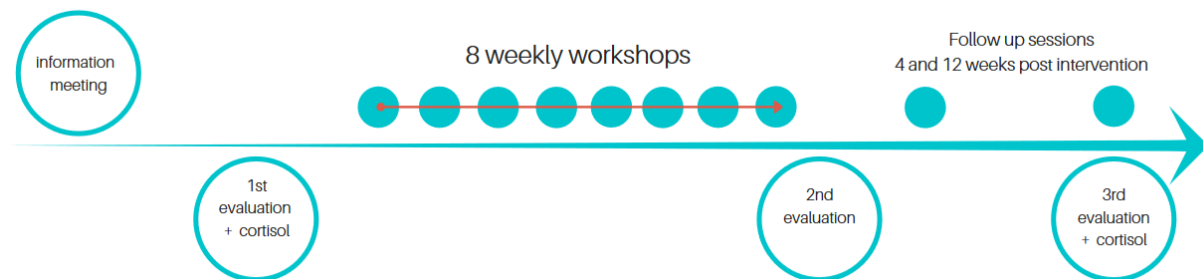
Taking into consideration the high time and financial cost of hair cortisol and HRV measurements we decided to propose these measures only to the parents from the intervention groups. Indeed, we did not have a sufficient budget to propose these measurements to the parents form the control group. In addition, we planned to further evaluate hair cortisol and HRV in subsequent studies including more parents on the national level in France. Thus, in this doctoral research project we wanted to pre-test these measures on a smaller sample of parents who participated in the intervention.

The interventions were delivered by trained psychologist having previous experience in working with parents and groups. The CBSM training for psychologists consisted of a three days (24 hours) traineeship, the CARE training consisted of 6 days (48 hours) traineeship, and the FOVEA training consisted of 12 days (180 hours) of traineeship. The differences in training duration are based on the need to experience positive psychology and mindfulness practices for oneself and to learn how to teach such practices, while classical CBT practices do not require extensive personal experience of each practice and specific skills to teach the practices proposed in the program. Furthermore, the FOVEA programme training also includes a training for children and teenagers programmes, which explains why the training is much longer than for the two other programs.

This methodology chapter aimed to overview the scientific methods applied in the studies presented in following articles as well as presented the rationale for the choices made in this research project (e.g., type of data needed to respond to the research questions, studies' designs, sampling, procedures, materials). We aimed to justify and discuss the methodological choices considering both the contribution of the chosen methods, and the limitations and obstacles related to these methodological choices.

The first article of this doctoral thesis presented in the following chapter is the systematic review and meta-analysis of the psychological interventions for parental burnout proposed to the parents form the general population and the parents of children suffering from chronic diseases.

Article 1: A systematic review and meta-analysis of psychological interventions for parental burnout

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Highlights

- First systematic review and meta-analysis of psychological interventions for parental burnout.

- Meta-analysis included the interventions among the parents of chronically ill children and the parents from general population.

- Interventions favour parental burnout severity reduction comparing to control groups.

Abstract

This systematic review and meta-analysis aimed to evaluate the effectiveness of existing psychological interventions for parental burnout prevention and reduction. Across 11 interventions included in this review there were a total of 632 participants. The results of the meta-analysis supported the effectiveness of psychological interventions for parental burnout reduction compared to a control group. Standardised mean differences showed a statistically significant large effect size favouring a reduction of parental burnout symptoms (Z = -4.86, SMD = -.858, 95% CI [-1.204, -.512], p < .001). Follow-up comparisons showed that these interventions significantly reduced parental burnout severity up to at least three months after the intervention. This meta-analysis suggested that psychological interventions can be helpful in reducing parental burnout among the parents of chronically ill children as well as those from the general population. Further research, including more participants and different types of interventions, is needed to establish the interventions' efficacy in specific groups of parents.

Keywords: systematic review, meta-analysis, parental burnout interventions, parental burnout treatment

Introduction

The present systematic review and meta-analysis aimed to identify and evaluate the effectiveness of existing psychological interventions for parental burnout reduction and prevention.

Parental burnout develops as a consequence of a chronic imbalance between parenting stress and resources, or rewards related to the parenting role (Mikolajczak & Roskam, 2018). Importantly, parental burnout is not the same as parental stress: it is a context specific syndrome occurring in the aftermath of chronic and overwhelming experience of parental stress (Mikolajczak et al., 2019a). It encompasses four clusters of symptoms: (a) emotional and physical exhaustion, (b) emotional distancing from a child, (c) loss of the sense of accomplishment in the parental role, (d) and the feeling of not being a good parent anymore (Roskam et al., 2018). In contrast to ordinary parenting stress, which is an adaptive response that wanes in the absence of a stressor or when the person can cope with the stressor (Lazarus & Folkman, 1984), parental burnout symptoms are sustained for a prolonged period of time and carry a risk of deleterious consequences for the parent, couple, and child (Mikolajczak et al., 2018).

Parents suffering from parental burnout are at higher risk of suicidal ideation, sleeping disorders, and substance abuse than their non-distressed peers (Mikolajczak et al., 2018). Moreover, parental burnout is likely to increase the risk of marital conflicts and partner estrangement (Mikolajczak et al., 2018). In addition, there is evidence that parental burnout increases the risk of neglectful and violent behaviours toward a child, constituting a threat to the child's physical and psychological development and well-being (Mikolajczak et al., 2018).

The phenomenon of parental burnout was first observed and studied among the parents of chronically ill children exposed to the long-term parental stress related to their child's illness and treatment (Lindström et al., 2010). Parents from this population were identified at risk of

emotional and physical exhaustion and cognitive fatigue (Lindström et al., 2011; Norberg et al., 2014). However, subsequent research has shown that parental burnout is a multifactor syndrome which is not specific to the population of parents of chronically ill children but also concerns parents from general population (Mikolajczak et al., 2018). In the general population, the prevalence of parental burnout varies across countries from 0% (in Cuba) up to 9.8% (in Belgium; Roskam et al., 2021). Whereas, among the parents of children with chronic diseases the prevalence of parental burnout can reach up to 36% (Lindström et al., 2010).

A range of interventions targeting parental practices have been developed including those based on positive parenting and parent-child communication (e.g., Joussemet et al., 2018; Sanders, 2003). However, their efficacy in terms of parental burnout prevention is not clear. In the clinical context, some interventions have been designed to support parents of chronically ill children (Izadi- Mazidi et al., 2015; Lindström et al., 2016; Masoumi et al., 2020). Others have targeted parents from the general population (Bayot et al., under review; Brianda et al., 2020). Yet, comparative effectiveness of these interventions has never been established and there is no consensus about which intervention may have the best potential for parental burnout prevention and reduction.

In the present systematic review and meta-analysis, we aimed to identify all interventional research in the context of parental burnout, as well as to evaluate the efficacy of identified interventions in terms of parental burnout reduction. Our main objective was to estimate the immediate effectiveness of existing psychological interventions on parents' levels of parental burnout. Our secondary objective was to assess the interventions' effectiveness over time at varying levels of follow-up.

<center>**Methods**</center>

The current systematic review and meta-analyses was conducted following the PRISMA 2020 guidelines (Page et al., 2021) and was preregistered on the International prospective register of systematic reviews PROSPERO (registration ID: CRD42021231247) and Open Science Framework: https://osf.io/3g67n/?view_only=8db62532d857478baef1a27ed916e0e6.

The search strategy and eligibility criteria

This review included studies carried out among parents (biological, adoptive, stepparents) from the general population and parents of children suffering from chronic diseases or developmental disorders. We excluded studies carried out among professional caregivers (e.g., teachers, social workers, or volunteer caregivers) as these may be better considered under the professional burnout rubric.

The interventions included in this review were psychological and education interventions aiming at preventing or reducing parental burnout. We included group-based, individual, and online interventions for parental burnout where the parents were actively involved. No studies were excluded on the basis of the duration and format of the intervention, the mode of delivery, or the length of follow-up. We included studies comparing the effects of intervention with a passive or active control group, or with an alternative intervention group. We also included studies without a control group including multiple base-line measures, enabling comparison with the evolution of parental burnout before the intervention, during the period equal to the intervention duration, and the pre- post- intervention measures of parental burnout.

The key outcome variable was a global parental burnout score characterised by at least three of following dimensions: (a) physical, emotional, and cognitive exhaustion in parental role; (b) emotional distancing from a child; (c) lack of accomplishment or feeling 'fed up' in

<center>40</center>

parental role; (d) the perception of not being a good parent any more or the contrast between the type of parent they would like to be and the way they perceived themselves as a parent.

Regarding the inclusion and exclusion criteria, we included pilot studies, randomised controlled trials (RCT), quasi-RCT, and studies with multiple baseline designs reporting pre/post scores among the population of parents (i.e., biological, adoptive, or stepparents). We excluded cross-sectional studies, qualitative studies, and case studies. Finally, we excluded quantitative studies which did not use a validated measurement scale of parental burnout with good reliability and validity.

Systematic searches of electronic data bases included: Scopus, ProQuest Dissertation, PsycINFO, MEDLINE, Web of Science, and PubMed from January 1, 2000 (the first scientific publications on parental exhaustion, e.g., (Duygun & Sezgin, 2003) to January 31, 2021 (when the work on this review started). In addition, search methods included review of reference lists and citation searching of eligible studies, conference proceedings, grey literature search in Open Grey, and hand searching through the first 200 articles in Google Scholar. The search strategy was restricted to studies published in peer-reviewed journals in English and French languages. Search terms followed the PICO standards and included the following key-words: (1) population: parent* OR care-givers OR care-giver OR father* OR dad* OR mother* OR mum* OR matern* OR patern* OR care* AND (2) intervention: (interven* OR program*OR train* OR therap* OR treat* OR skills OR competenc* OR manip* OR experi* OR trial OR condition OR course OR pilot OR test OR asses* OR RCT OR randomi?ed) AND (3) control: "waiting list" OR "no intervention" OR "treatment as usual" OR TAU OR "active control" AND (4) outcome: "parental burnout" OR burnout OR exhaustion OR fatigue.

Study records

RefWorks software was used to store the identified articles, and the removal of duplicates. A digital spreadsheet using GRADE profile tool (Guyatt et al., 2008; The GRADE

Working Group et al., 2004) was used to provide a summary of study descriptions, reviewed outcomes, and the summary of findings. The PRISMA 2020 chart-flow (Page et al., 2021) was used to conduct the study selection process. Records were identified through database searching and other sources (see above). Duplicate articles were removed from the review. Two authors (A.U; N.V) independently assessed the eligibility of each title, abstract, and keywords identified by the automatic and hand searches, based on the predefined inclusion criteria. Full-text articles were examined when it was not possible to assess the eligibility of articles based on the abstract alone. In addition, full texts of eligible articles were assessed independently by both authors for final inclusion in the study. Corresponding authors of eligible studies were contacted to inform them of the review process and to inquire about their knowledge of any ongoing or unpublished studies on parental burnout interventions.

Data extracted included the following: author(s), year of publication, journal of publication, country, study design, population sampled, participants' characteristics such as: mean age, gender, ethnicity, mental health condition, family status, family income, number of children, and child's developmental disabilities. We also extracted the information regarding study setting, procedure, intervention type and duration, sample size, measured variables, ethical consent, participation rate, attrition rate, control group comparison, statistical analyses performed, outcomes and results (mean, standard deviation, confidence intervals, effect sizes, and follow-up data points), study funding and potential sources of conflict of interest.

Risk of bias was assessed by two authors (A.U; N.V) using Cochrane Collaboration risk assessment tools (Higgins et al., 2011). This tool allowed reviewers to assess selection bias (i.e., random sequence generation and allocation concealment), performance bias (i.e., blinding of participants and personnel), detection bias (i.e., blinding of outcomes and assessment), attrition bias (i.e., incomplete outcome data), and reporting bias (i.e., selective reporting). In addition, the GRADE profile tool (Guyatt et al., 2008; The GRADE Working Group et al.,

2004) was used to assess the overall quality of evidence of the included studies. Publication bias was estimated with a funnel plot to address the likelihood of existence of unpublished data which was not identified by this review.

Data analysis procedure for the meta-analysis

We conducted quantitative analyses of the data following the Cochrane Handbook for Systematic Reviews of Interventions (Higgins et al., 2008). The effect of the intervention was assessed based on mean scores on parental burnout assessments. Because studies used different measurement scales, we computed effect sizes using standardised mean difference (SMD) rather than mean differences. We computed standardised mean differences in R statistical software using the *metafor* and *meta* packages using means and standard deviations reported in original studies (Viechtbauer, 2010). In the event of missing data from the published articles, we contacted the studies' authors for additional information. We calculated pooled standardised mean differences using random-effect models with 95% confidence interval. We selected a random-effect model because we assumed that the true effect of burnout intervention varied across studies as the results of clinical and methodological heterogeneity. Indeed, there currently exists no standardised intervention for treatment of parental burnout. As such, it seemed more relevant to assume that SMDs reflected random sampling from a pool of multiple distributions of various effect sizes, rather than assuming that SMDs reflected sampling from one fixed distribution of effect sizes, as is the case in fixed effect modelling (Field & Gillett, 2010; Hunter & Schmidt, 2000). Impact of heterogeneity was measured using I^2 statistics, visual inspection of forest plots, and χ^2 statistic relative to its degree of freedom.

Results

Study selection

In total, we identified 898 records through databases registers searching. After the removal of duplicates, 528 studies remained for eligibility assessment. We excluded 523 studies

after screening titles and abstracts. In addition, we identified 24 records through other sources: reference searches (n = 14); citation searches (n = 7); and conference proceedings (n = 3). We further assessed the total of 29 articles based on their full text. The excluded studies: (a) did not measure parental burnout; (b) and/or were not carried out on the population of parents; (c) and/or were not interventional studies; (d) and/or were written in other languages than English or French. The final sample included 7 published articles and one manuscript under review provided by a contacted author. Figure 1 presents a PRISMA 2020 flow diagram of the study selection process.

Among the 8 studies which met the eligibility criteria, 7 studies were RCTs, and one study was a single group study with multiple baseline design. The included studies were published between 2009 and 2020 across 5 different countries including international collaborations: Sweden (n = 3), Finland (n = 2), Belgium (n = 2), Iran (n = 2), Turkey (n = 1).

Participant characteristics

Table 1 presents the summary of demographic characteristics of participants from included studies. For 6 of the 8 studies that allowed the relevant computation, there was a total of 632 participants, with mean age 39.13, (SD = 6.82). The two remaining studies reported age ranges only. The 8 studies included a majority of mothers with the total proportion being 83.5 percent of mothers (n = 528) and 16.5 percent of fathers (n = 104).

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources

Identification of studies via databases and registers

Identification

Records identified from:
  Medline (n=46)
  PsycINFO (n=87)
  PubMed (n=255)
  Scopus (n=173)
  Web of Science (n=127)
  ProQuest theses & dissertations (n=7)
  Grey Source (n=3)
  Google Scholar (n=200)

Records removed *before screening*:
  Duplicate records removed (n=367)
  Records marked as ineligible by automation tools (n=0)
  Records removed for other reasons (n=0)

Identification of studies via other methods

Records identified from:
  Websites (n=0)
  Organisations (n=0)
  Citation searching (n=7)
  Conference proceedings (n=3)
  Reference searching (n=14)

Screening

Records screened (n= 528)

Records excluded (n=523)
  Population other than parents (n=186)
  No parental burnout measure (n=134)
  No intervention (n=202)
  Article in a language different than English or French (n=1)

Reports sought for retrieval (n =5)

Reports not retrieved (n=0)

Reports sought for retrieval (n=24)

Reports not retrieved (n=0)

Reports assessed for eligibility(n=5)

Reports excluded:
  No parental burnout measure (n=2)

Reports assessed for eligibility (n=24)

Reports excluded:
  Studies already identified via databases (n=3)
  No parental burnout measure (n=14)
  No psychological intervention (n=2)

Included

Studies included in review (n = 8)

Figure 1. PRISMA 2020 flow diagram

Table 1. Demographic summary

ID	Authors	Date	Total sample size	Attrition rate (%)	Female	Male	Average Age M (SD)	Children's age M (SD)	Child's characteristics
1	Anclair, Lappalainen, Muotka, Hiltunen	2018	28	6.7 %	26	2	41 (6.1)	9.8 (4.6)	Chronic disease and/or functional disability
2	Bayot, Brianda, van der Straten, Shankland, Roskam	under review	77	9.1%	66	11			General population
3	Beheshtipour, Nasirpour, Yektatalab, Karimi, Zare	2016	135	7.15%	76	59	34.5 (9)		Cancer disease
4	Bilgin & Gozum	2009	90	18.2%	90	0	34.06 (7.08)	8.43 (4.95)	Intellectual disorders
5	Brianda,, Roskam., Gross, Franssen, Kapala, Gérard, Mikolajczak	2020	142	4.92%	127	15			General population
6	Lindström, Åman, Anderzén-Carlsson, Lindahl Norberg	2016	16	10%	13	3	43 (3.3)		Type 1 diabetes mellitus
7	Masoumi, Abdoli, Esmaeilzadeh, Sadeghi	2020	70	8.6%	70	0	39.22 (7.22)	9.72 (2.99)	Functional disabilities
8	Sairanen, Lappalainen, Lappalainen, Kaipainen, Carlstedt, Anclair, Hiltunen	2019	74	27%	60	14	43 (8.2)	11 (4.6)	Chronic conditions: diabetes, genetic disorder, hypoxic-ischemic brain damage, ASD, motor disorders, developmental disability, or unknown aetiology

Note. Standard deviations are presented in brackets

Intervention characteristics

The identified interventions were based on the following intervention methods: mindfulness (n = 1), cognitive behavioural therapy (CBT; n = 2), psycho-education groups (n = 3), online Acceptance and Commitment Therapy (ACT; n = 1), non-directive active listening (n = 1), programme aiming at decreasing parental stressors and enhancing parental resources (n = 1), mindfulness and compassion-focused (n = 1), and a hybrid intervention combining both active listening and exercises aiming at decreasing parental stressors (n = 1). The duration of the interventions varied between 2 (daily one-hour sessions, n = 1) and 12 weeks (two-hours sessions once a week or every two weeks, n = 1). Most interventions consisted of 8 sessions once a week for 2 hours (n = 6). The interventions were delivered by trained psychologists (n = 4), nurses (n = 1), both psychologists and spiritual counsellors (n= 2), and undergraduate psychology students with previous training and experience with ACT interventions (n = 1). The individual study characteristics are presented in Table 2.

Table 2. Study characteristics

ID	Authors	Date	Country	Design	Number of conditions	Intervension's characteristics	Settings	Duration of intervention	Frequency of intervention	Parental burnout Measurement	Control group procedure
1	Anclair, Lappalainen, Muotka,Hiltunen	2018	Sweden, Finland	RCT	2	Two interventions: (1) cognitive behavioural therapy-based intervention; (2) Mindfulness-based intervention	Group intervention	8 weeks	Once a week for 2 hours	Shirom-Melamed Burnout Questionnaire (SMBQ)	6 months baseline
2	Bayot, Brianda, van der Straten, Shankland, Roskam	Under review	Belgium	RCT	2	Two interventions: (1) intervention based on parental risks and ressources fators; (2) Mindfulness and Compassion-based intervention	Group intervention	8 weeks + follow up sessions after 3 months	Once a week for 2 hours	Parental Burnout Assessment (PBA)	Comparaison between two interventions
3	Beheshtipour, Nasirpour, Yektatalab, Karimi, Zare	2016	Iran	RCT	2	Education intervention about cancer disease and treatment, control, daily activities, diet, spritual and phylosophical teaching	Group intervention	6 weeks	Once a week for 45 minutes	Shirom-Melamed Burnout Questionnaire (SMBQ)	Passive control group (no intervention)
4	Bilgin & Gozum	2009	Turkey	RCT	2	Education intervention about intellectual disabilities, care and education of intellectually diabled children, coping with stress	Group intervention	2 weeks	Daily for one hour	Maslach Burnout Inventory adapted to Parental Burnout	Passive control group (no intervention)
5	Brianda, Roskam, Gross, Franssen, Kapala, Gérard, Mikolajczak	2020	Belgium	RCT	2	Two interventions: (1) directive intervention based on parental burnout risks and ressources including psychoeducation and role plays; (2) non-directive intervention based on active listening	Group intervention	8 weeks	Once a week for 2 hours	Parental Burnout Assessment (PBA)	2 months baseline comparaison
6	Lindström, Åman, Anderzén-Carlsson, Lindahl Norberg	2016	Sweden	non-RCT	1	Intervention focused on coping strategies using CBT methods ans systemic theory, family roles, communication patterns and interaction between family members	Group intervention	12 weeks: 8 sessions	First four sessions once a week and final 4 session every two weeks	Shirom-Melamed Burnout Questionnaire (SMBQ)	17 months and 9 months baseline comparaison
7	Masoumi, Abdoli, Esmaeilzadeh, Sadeghi	2020	Iran	RCT	2	Education intervention including the discussion about characteristics and care of disabled children, skills on establishing an appropriate relationship with the child, discussions about the role of pain and suffering in life and its constructive effect on the growth and development of moral virtues, trust and resort, patience, prayer, thanksgiving, psychoeducation on adaptation mechanisms, identification of personnal ressources	Group intervention	6 weeks	Once a week for 45 minutes	Shirom-Melamed Burnout Questionnaire (SMBQ)	No itervention, educationaal materials were given to the control group after the study was completed
8	Sairanen, Lappalainen, Lappalainen, Kaipainen, Carlstedt, Anclair, Hiltunen	2019	Finland, Sweden	RCT	2	ACT based intervention including 5 modules: life values, present moment, defusion, acceptance, and self-compassion.	Online individual training with forum discussions	5 modules: 1 or 2 weeks each	Participants completed all 5 module sat theior own rythm	Shirom-Melamed Burnout Questionnaire (SMBQ)	Waiting list control group receiving the treatment after a 4-month follow-up measure

Risk of bias within studies

We observed an important bias related to the blinding and selection: many studies failed to assure the blinding of outcome assessment and to report the information about blinding of participants and personnel. Two studies did not apply the randomisation (Bayot et al., s. d.; Lindström et al., 2016) and one study did not clearly state whether participants were randomly assigned to the intervention and experimental groups (Anclair et al., 2018). The risk of bias assessment is presented in Supplementary material 1. Further, we assessed risks of bias of publication using the *metafor* package in *R* (R Core Team, 2013; Viechtbauer, 2010a). The results displayed a seemingly symmetric funnel plot showing no direct evidence for publication bias in this meta-analysis (see Supplementary material 2). We also conducted the PET-PEESE test using the regression test for funnel plot asymmetry from the *metafor* package in *R* (Viechtbauer, 2010b). This meta-regression did not reject the null hypothesis, further indicating no evidence of risk of publication bias in this meta-analysis (z = -.3586, b = -.415, 95%CI [-2.8509, 2.0214], *p* = .72).

Effects of psychological interventions on parental burnout

Standardised mean differences showed a statistically significant large effect size across 9 comparisons of interventions favouring a reduction of parental burnout symptoms (Z = -4.86, SMD = -.858, 95% CI [-1.204, -.512], *p* < .001). However, there was evidence of substantial statistical heterogeneity across studies (I = 74.3%, τ^2 = .198, $Q(8)$ = 31.10, *p* < .01). One study conducted by Bayot et al., (under review) was not included in this general meta-analysis due to its lack of a control group: the study compared two active interventions without a control group measure. However, we included the Bayot's et al., (under review) study in the subsequent follow-up meta-analysis which was applied only to the experimental groups. Thus, the meta-analysis was computed including 7 studies which evaluated overall 9 comparisons. Figure 2

presents the summary of effect sizes for each intervention as well as the total effect size of the meta-analysis using the *metafor* package for *R* statistical software (Schwarzer et al., 2015).
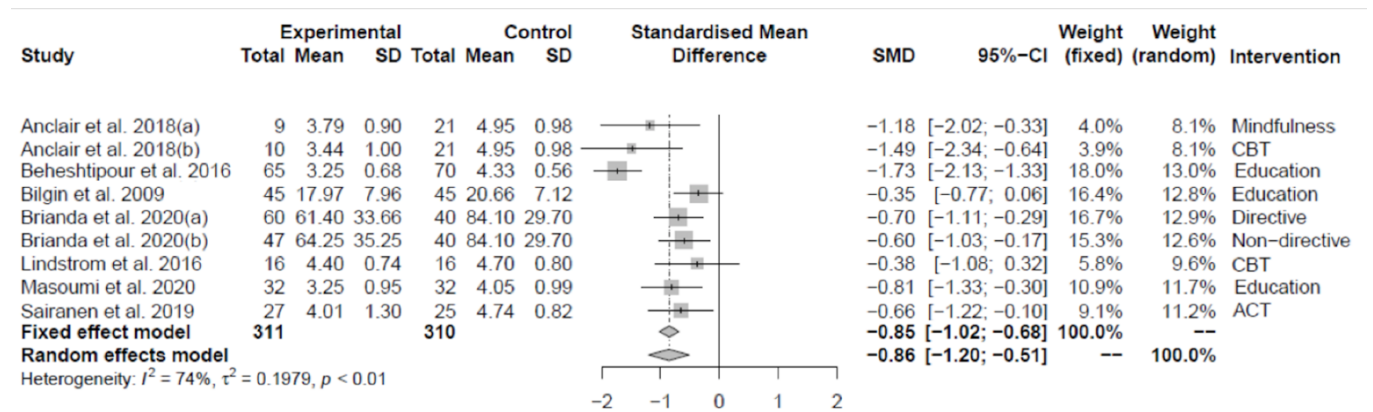

Study	Experimental Total	Mean	SD	Control Total	Mean	SD	Standardised Mean Difference	SMD	95%–CI	Weight (fixed)	Weight (random)	Intervention
Anclair et al. 2018(a)	9	3.79	0.90	21	4.95	0.98		−1.18	[−2.02; −0.33]	4.0%	8.1%	Mindfulness
Anclair et al. 2018(b)	10	3.44	1.00	21	4.95	0.98		−1.49	[−2.34; −0.64]	3.9%	8.1%	CBT
Beheshtipour et al. 2016	65	3.25	0.68	70	4.33	0.56		−1.73	[−2.13; −1.33]	18.0%	13.0%	Education
Bilgin et al. 2009	45	17.97	7.96	45	20.66	7.12		−0.35	[−0.77; 0.06]	16.4%	12.8%	Education
Brianda et al. 2020(a)	60	61.40	33.66	40	84.10	29.70		−0.70	[−1.11; −0.29]	16.7%	12.9%	Directive
Brianda et al. 2020(b)	47	64.25	35.25	40	84.10	29.70		−0.60	[−1.03; −0.17]	15.3%	12.6%	Non−directive
Lindstrom et al. 2016	16	4.40	0.74	16	4.70	0.80		−0.38	[−1.08; 0.32]	5.8%	9.6%	CBT
Masoumi et al. 2020	32	3.25	0.95	32	4.05	0.99		−0.81	[−1.33; −0.30]	10.9%	11.7%	Education
Sairanen et al. 2019	27	4.01	1.30	25	4.74	0.82		−0.66	[−1.22; −0.10]	9.1%	11.2%	ACT
Fixed effect model	311			310				−0.85	[−1.02; −0.68]	100.0%	−−	
Random effects model								−0.86	[−1.20; −0.51]	−−	100.0%	

Heterogeneity: $I^2 = 74\%$, $\tau^2 = 0.1979$, $p < 0.01$

Figure 2. Overall meta-analysis of interventions for parental burnout

Follow-up assessments of parental burnout interventions effectiveness

In a complementary meta-analysis, we compared the evolution of parental burnout severity over time for the studies which reported follow-up measures. Such follow-up measures were reported for 5 individual studies and a total of 7 comparisons of different interventions. The follow-up period varied between one month (n = 1) and 6 months (n = 1), with one intervention reporting the follow-up at 4 months, and 4 interventions at 3 months. To statistically evaluate the effect size between T2 and follow-up measurements, we conducted a sub-group meta-analysis using a fixed-effect model. We chose the fixed-effect model as we expected less clinical heterogeneity across the studies following the interventions. The choice of the fixed-effect model was further supported by the absence of significant statistical heterogeneity across all of the included follow-up measures ($I^2 = 25\%$, $\tau^2 = .0202$, $Q(6) = 7.98$, $p = .24$). As displayed in Figure 3, results of this meta-analysis showed a statistically significant small effect size favouring follow-up measurements as compared to T2 measurement in terms

of reduction of parental burnout scores (Z = -2.16, SMD = -.217, 95% CI [-.414, -.020], *p* = .031).

To refine these general analyses, we aimed to conduct sensitivity analyses to address any difference that may exist in terms of effect sizes which could be accounted for by different follow-up durations. However, most studies reported different follow-up durations and it was only possible to compute sensitivity analysis with the inclusion of the two studies which reported 3-months follow-up across four different comparisons (i.e., Bayot et al., s. d.; Brianda et al., 2020). After adjustment of data to a fixed-effect model (I^2 = 0%, τ^2 = .0, $Q(3)$ = .70, *p* = .873), this intra-study comparison showed a small-to-medium effect size favouring follow-up measurement versus immediately post-intervention measurement (z = -2.28, SMD = -.270 [-.502, -.037], *p* = .02).
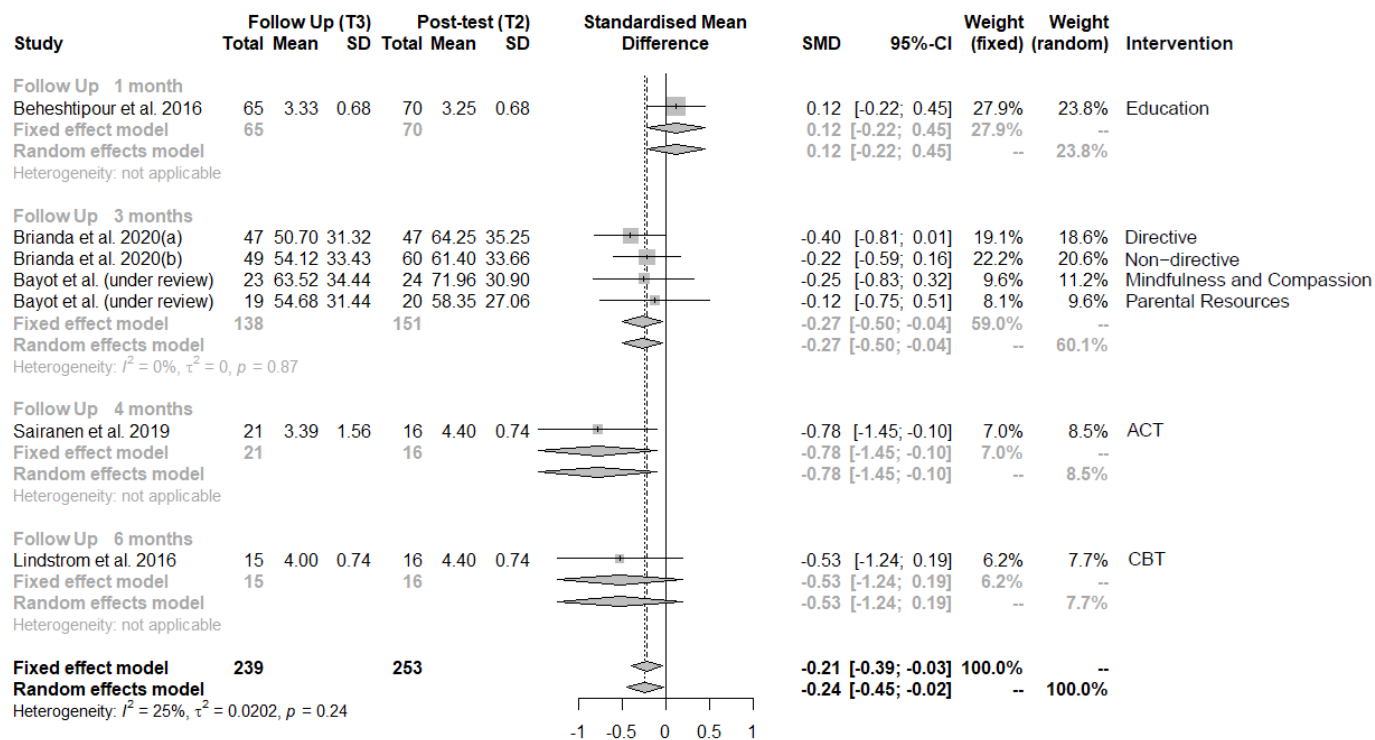
Figure 3. Follow-up meta-analysis of interventions for parental burnout

Discussion

This systematic review and meta-analysis aimed to identify all available evidence-based interventional research on parental burnout and to evaluate their effectiveness in terms of parental burnout reduction. We identified 8 studies which included a total of 11 interventions for parental burnout. These interventions involved both the parents of chronically ill children and parents from the general population. Most interventions were group-based programmes including: mindfulness-based programme (Anclair et al., 2018); cognitive behavioural therapy (Anclair et al., 2018; Lindström et al., 2016); education-groups (Beheshtipour et al., 2016; Bilgin & Gozum, 2009; Masoumi et al., 2020); ACT (Sairanen et al., 2019); non-directive and active listening (Brianda, Roskam, Gross, et al., 2020); psycho-education and targeted exercises aiming at decreasing parental stressors and enhancing parental resources (Brianda et al., 2020); mindfulness and compassion-focused intervention (Bayot et al., under review), and a hybrid intervention combining both directive and non-directive approaches (Bayot et al., under review). We conducted a meta-analysis which included 7 out of 8 of these studies with a total of 9 interventions. One study, carried out by Bayot et al. (under review) was not included in the general meta-analysis as it lacked a control group comparison, which constituted an inclusion criterion for our meta-analysis. However, this study was included in the sub-group follow-up meta-analysis as these analyses did specifically summarise intra-individual effects of parental burnout interventions and do not rely upon comparisons with a control group.

This meta-analysis draws several conclusions regarding the efficacy of parental burnout interventions. The first general finding is that there is evidence of effectiveness of designed interventions that have aimed to reduce parental burnout symptoms. This suggests that, independently from cultural and socio-demographic context, standardised interventions provided by health care practitioners and psychologists seem beneficial for parents suffering from parental burnout.

More specifically, the results of this meta-analysis suggest that identified psychological interventions show, on average, large effect sizes favouring reduction in parental burnout symptoms. Overall, the standardised mean difference of the interventions which were included in the meta-analysis was large (Z = -4.86, SMD = -.86, 95% CI [-1.20, -.51]) and tended to favour parental burnout interventions over control groups. The interventions showing the largest effect sizes were psychoeducation (Beheshtipour et al., 2016), CBT-based (Anclair et al., 2018), and Mindfulness-based (Anclair et al., 2018) programmes. As displayed in Figure 3, results from the inclusion of all follow-up durations in the analyses (ranging from 1 to 6 months follow-up) showed a statistically significant and small estimate favouring reduction of parental burnout even after the end of the interventions. Complementary sub-groups analyses, which included only 3 months follow-up across 4 interventions, found that the severity of parental burnout symptoms continued to decrease to small effect sizes up to three months after the end of the interventions.

A potential explanation of the observed efficacy of follow-up over post-tests measures could lay in the fact that, after the end of the intervention, parents may continue to develop the resources which may help them decreasing their parental burnout symptoms (Mikolajczak & Roskam, 2018). Indeed, the effects of tailored psychological interventions, as may be the case with parental burnout interventions, are likely to unfold over time if they succeed in appropriately promoting psychological processes which account for a reduction of psychopathology, and are likely to compound over time (Blanchard et al., 2021; Dalgleish et al., 2020; Newby et al., 2015; Walton, 2014).

Research has identified several protective factors against parental burnout: emotional competencies (Bayot et al., 2021; Lin et al., 2021a; Lin et al., 2021b); mindfulness, self-compassion, concrete ruminations (Paucsik et al., 2021); and low levels of perfectionism (Kawamoto et al., 2018; Sorkkila & Aunola, 2020). The studies included in the present meta-

analyses address some of these competencies. For instance, CBT, ACT, and mindfulness interventions are likely to enhance the reduction of abstract ruminations and the development of stress management and emotional competencies (Anclair et al., 2018; Lindström et al., 2016; Sairanen et al., 2019). Mindfulness, compassion, and education interventions are also likely to promote self-compassion and reduce parental perfectionism (Anclair et al., 2018; Bayot et al., under review.; Brianda et al., 2020). Furthermore, group therapeutic settings are also likely to promote social support, which has been shown to foster positive outcomes such as health and wellbeing (Kemp et al., 2017). Because these competencies promote positive mental health and reduction in psychopathology, it is possible that they may also account for positive outcomes in the context of parental burnout.

The strength of the present meta-analysis is the inclusion of studies which have been conducted both among parents of chronically ill children and those from the general population across 5 different countries yielding a total sample of 632 participants. This sample, which can be considered as medium-to-large, allows computation of the general effectiveness of the included interventions against parental burnout. Based on these findings, all the included interventions showed evidence of effectiveness to a significant large-to-moderate degree following the intervention compared to no intervention control groups.

However, several cautions must be made before drawing definitive conclusions as this meta-analysis has several limitations. First, the results are restricted by the number of included studies (a total of 8 studies for an aggregate of 632 participants), which remains relatively small in comparison to other meta-analyses, including those on mindfulness interventions for overall psychiatric disorders (n = 12005; Goldberg et al., 2018), meta-analyses on interventions for physician burnout (n = 2914 ; West et al., 2016), or meta-analyses on intervention for student burnout (n = 35166; Erschens et al., 2019). Although systematic searches identified 528 records most of them did not match the inclusion criteria as they did not evaluate any intervention

and/or were not focused on parental burnout. Research on parental burnout and parental burnout interventions is still in its infancy which might explain the relatively small number of studies identified in this meta-analysis. More studies are required to draw firm conclusions about comparative effectiveness of parental burnout interventions across different populations of parents.

Second, we observed large statistical heterogeneity which could be explained by methodological and interventional differences. For example, three studies using similar group education protocols achieved varying effect sizes including both the largest (SMD = -1.73; Beheshtipour et al., 2016) and lowest (SMD= -.35; Bilgin & Gozum, 2009) effect sizes reported in different target populations: parents of children with cancer disease and parents of intellectually disabled children, respectively. Examination of these studies' methods and designs suggest several differences in the procedures which were implemented along with the targeted population, and inclusion, and exclusion criteria. It remains important to evaluate other factors which may impact the interventions' effectiveness.

In the light of these limitations, future research may want to focus on the following key aspects: (i) the psychological mechanisms of action, (ii) the most effective treatment components, and (iii) cultural and contextual influences on outcome. It seems necessary to further evaluate the interventions for parental burnout across different populations and cultures. Increasing the number of studies along with the number of participants would improve statistical power and potentially reduce the heterogeneity across the studies. While it is possible that the observed discrepancies across effects sizes may be explained by both methodological and clinical heterogeneity (i.e., in the implemented procedures, intervention protocols, and in the targeted population, respectively), there is another likely explanation to these results. Indeed, it could be that these studies would have targeted different mechanisms of action. In that sense, it remains unclear what psychological processes the included interventions could

have successfully addressed in the reduction of parental burnout symptoms. Several studies have identified the psychological processes associated with parental burnout. For instance, perfectionism and abstract ruminations have been shown to predict higher levels of parental burnout (Kawamoto et al., 2018; Meeussen & Van Laar, 2018; Sorkkila & Aunola, 2020). On the other hand, trait-mindfulness, self-compassion, concrete ruminations, and emotional competencies seem to play a protective role against parental burnout (Bayot et al., 2021; Lin et al., 2021a; Paucsik et al., 2021). It is, therefore, necessary to understand to what extent these factors are responsible for the observed reduction in parental burnout symptoms.

The complexity of the processes that might underpin parental burnout suggests that both the active ingredients of interventions and the evolution in emotional and cognitive processes following intervention should be explored. This can be addressed through use of instruments including the behavioural change taxonomy (BCT) and its mechanisms of action (Carey et al., 2018; Michie et al., 2011), intervention manuals, or precise descriptions of the intervention protocols. The lack of such detailed information may preclude understanding of why some interventions included in our systematic review seemed to be more effective than others and whether they are equally beneficial in different contexts. Finally, further implementation of standardised methods and clarification of reporting of these methods in interventional studies may reduce the risks of potential biases.

In conclusion, the present systematic review and meta-analysis suggested that parental burnout interventions are effective in terms of reducing parental burnout symptoms with small to large effect sizes, with on average, large effect sizes favouring reduction in parental burnout symptoms. Yet, future studies are needed to further confirm and explain these findings.

Rationale from Article 1 to Article 2: A step further in parental burnout prevention and treatment. Evidence-based practices.

The treatment and prevention of parental burnout can be addressed through either reduction of risk factors, or enhancement of protective factors, or the combination of both (Mikolajczak & Roskam, 2018). According to the meta-analysis presented in the previous chapter (Urbanowicz et al., under review), to date only a small number of studies aimed to evaluate tailored psychological interventions for parental burnout in the general population: Bayot et al., under review; Brianda et al., 2020. Although, the existing interventions showed their efficacy in terms of burnout reduction, it remains important to identify interventions' active ingredients (or behavioural change techniques) which target the mechanisms of action involved in parental burnout (Carey et al., 2018). This would contribute to the better understanding of interventions' effectiveness.

Brianda et al., (2020) compared two interventions for parental burnout (active listening vs tailored intervention targeting risk factors of parental burnout) showing no significant difference between the two interventions in terms of their effectiveness. These findings led the authors to the conclusion about common factors predicting intervention's effectiveness: "a framework of active listening, empathy, and comprehension, along with an invitation to consider selected topics relevant to PB [parental burnout], seems sufficient to achieve positive and lasting effects on parental well-being" (Brianda et al., 2020, p.2). These findings echo discussion in existing literature about common factors and evidence-based interventions (Cuijpers et al., 2019; Hofmann & Barlow, 2014; Laska & Wampold, 2014).

The common factor hypothesis aims to explain the lack of comparative therapeutic effects across different psychological approaches. Luborsky (1975) compared this phenomenon to the *dodo bird's verdict* from Lewis Carol's Alice in Wonderland: "All have won, and all

must have prizes". In that sense, the interventions' effectiveness would rely on common factors shared across different psychological approaches. These common factors could be for instance variables related to therapist-patient relationship (e.g., therapeutic alliance, empathy), but also reassurance, patient's motivation, exposure to affective experiences, and cognitive processing. This implies that potentially all therapies are beneficial under the condition of positive therapeutic alliance between the patient and therapist (Horvath & Luborsky, 1993; Martin et al., 2000). In their meta-analysis Ahn et Wampold (2001) showed that specific techniques of evidence based approaches did not explain the therapeutic results. This perspective undermines the scientific foundations of evidence-based therapies suggesting that specific techniques are not responsible for the change in patient outcomes.

Yet, Lambert et Ogles (2014) proposed that although common factors play an important role in the interventions' outcomes (e.g., they seem necessary to install and maintain involvement and motivation in the therapeutic process) evidence-based practices further contribute to the success of the psychotherapy. The evidence-based practices use specific therapeutic techniques based on theoretical models, targeting specific mechanisms of action, and having proved to be effective (Hofmann & Barlow, 2014). In that sense, different evidence-based interventions can show similar effectiveness despite theoretical differences as they lead to a change through different mechanisms of action or through the same mechanisms of action but activated by different behavioural change techniques (Carey et al., 2018).

Based on the conclusions from the meta-analysis (Urbanowicz et al., under review) that research should further evaluate the psychological interventions for parental burnout prevention and reduction as well as identify the underpinning mechanisms of action, the following studies presented in this doctoral thesis aimed to respond to this need. The following two chapters are dedicated to the quantitative and qualitative assessment of the Cognitive Behavioural Stress Management (CBSM) intervention.

The CBSM programme (Antoni et al., 1991) is based on cognitive behavioural therapy (CBT) which is considered as gold standard in the field of psychotherapy (David et al., 2018). CBT interventions use empirically supported techniques and standardised treatment protocols for specific disorders. The CBT approach is currently the most researched therapeutic approach which has been shown to be highly effective across multiple clinical trials, among children, teenagers, adults, and elderly adults (David et al., 2018). Evidence showed its effectiveness across populations suffering from: substance use disorder, psychotic disorders, depressive disorders, bipolar disorder, anxiety, somatoform disorders, eating disorders, insomnia, chronic pain and fatigue, personality disorders, anger management (for pool meta-analysis see: Hofmann et al., 2012). In the context of parenting, the CBSM programme showed its effectiveness in terms of anxiety reduction among pregnant women (Karamoozian et al., 2015). However, its effectiveness in terms parental burnout reduction has never been established. In the study presented in the following article, we adapted the CBSM original programme to the context of parental burnout using the psychoeducation elements on risk and protective factors of parental burnout based on Roskam and Mikolajczak (2018) recommendations for parental burnout treatment. The CBSM programme manual is available under request.

The cognitive and behavioural techniques included in the CBSM programme (e.g., cognitive reframing, coping skills training, optimising of social support, anger management, assertiveness) are likely to target risk factors of parental burnout (e.g., perfectionism, ruminations, stress, poor emotional competencies) and protective factors such as cognitive reframing and coping skills, emotional competencies, self-compassion, and communication skills. In addition, it is highly likely that the CBSM programme promotes other psychosocial competencies which may also prevent parental burnout. As noted by the World Health Organisation (WHO), psychological competencies underly the optimal adjustment to everyday life (World Health Organization, 2003) and therefore may buffer against parental burnout.

Psychosocial competencies were introduced in 1993 by the World Health Organisation (WHO), and were described as the capacity of a person to respond effectively to the demands and challenges of daily life (World Health Organization, 1994). Psychosocial competencies enable the individual to maintain a state of mental well-being and to adapt successfully to the situations they encounter, while interacting with others in a constructive way. For instance, Urbanowicz et al., (in preparation) showed that in the context of lockdowns during the COVID-19 pandemic psychosocial competencies played a protective role against parental burnout and explained up 26 % of the variance in parental burnout severity.

WHO first identified ten psychosocial competences in terms of five skill pairs: (1) problem solving / decision making; (2) creative thinking / critical thinking; (3) effective communication skills / interpersonal relationships skills; (4) self-awareness / empathy; (5) stress management / emotion management. A more recent taxonomy suggested classifying these psychosocial competencies as cognitive, emotional, and social skills (Lamboy & Guillemont, 2014). According, to this classification, the cognitive competences comprise problem solving, decision making, critical thinking, and self-awareness (ability to identify internal cues and resources). The emotional skills comprise emotion regulation, and stress management. The social skills are related to interpersonal communication (i.e., active listening, expressing emotions, giving and receiving information and feedback), negotiation, assertiveness, conflict management, empathy, and cooperation. All above competencies seem to be promoted by the CBSM programme (see *Figure 2*). Thus, it appears that the CBSM programme could be beneficial for parents suffering from parental burnout or at risk of parental burnout. The following article, *Cognitive Behavioural Stress Management (CBSM) for parents: prevention and reduction of parental* burnout, aimed to evaluate the extent to which the CBSM programme contributes to parental burnout severity reduction compared to a waiting-list control group as well as to identify mediating factors underlying this change.
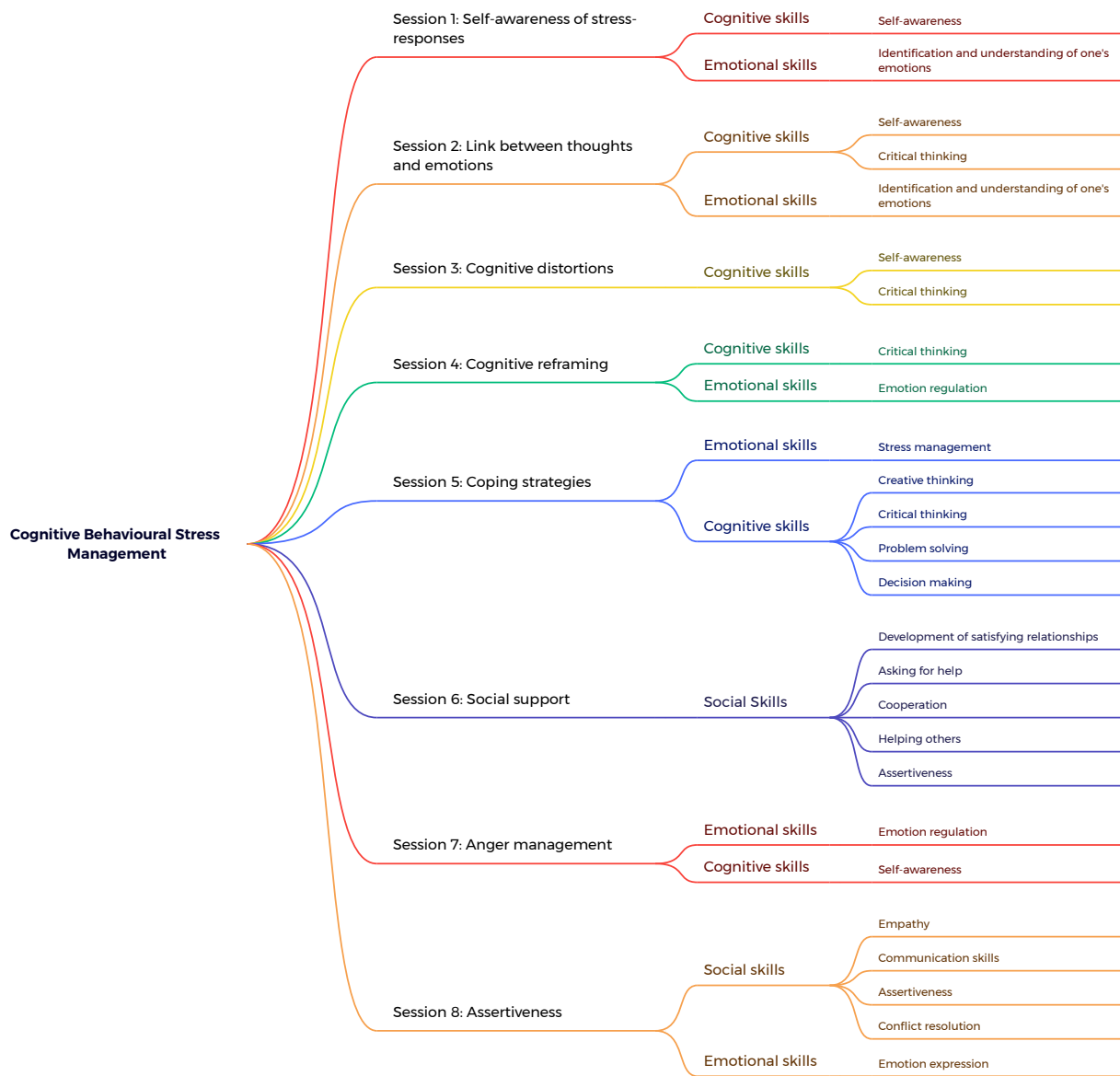
Figure 2. Psychosocial competencies targeted by CBSM programme.

Article 2: Cognitive Behavioural Stress Management (CBSM) for parents: prevention and reduction of parental burnout

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Highlights

- Compared to the control group the CBSM intervention contributed to a significant reduction in parental burnout.

- The lower parental burnout scores were maintained at three-month follow-up.

- The reduction in parental burnout was mediated by a decrease in stress and an increase in unconditional self-kindness.

Abstract

Parental burnout increases the risk of deleterious consequences on parents', couples', and children's physical and mental health. The current study ($N = 197$) aimed to assess the effectiveness of a Cognitive Behavioural Stress Management (CBSM) group programme in terms of parental burnout reduction. In total 67 parents attended the 8-week CBSM intervention groups, and another 67 parents were assigned to the waiting-list control group. We compared the effectiveness of the CBSM intervention with a waiting-list control group directly after the end of the programme and at three-months follow-up. The results showed that compared to the control group the CBSM programme contributed to the reduction of parental burnout symptoms with statistically significant effect of time*group: $F(1, 132) = 7.41$, $p = .01$, $\eta^2_p = .05$. Moreover, the contrast analyses showed that the reduction in parental burnout severity was maintained at 3 month-follow-up. The reduction in parental burnout scores was mediated by the decrease in stress and the increase in unconditional self-kindness. These results highlight the potential benefits of the CBSM programme for parental burnout prevention and reduction.

Keywords: parental burnout, CBSM, CBT, intervention, parental stress

Introduction

Being a parent presents both challenging and rewarding experiences (Deater-Deckard, 1998). In that sense, all parents are exposed to parenting stress to a different degree and with various consequences on family functioning and well-being (Crnic & Greenberg, 1990). Parenting stress is a dynamic process involving an interaction between parent, child, and environment (Berry & Jones, 1995). The experience of parenting strain relates to the multiple demands, constraints, and opportunity costs entailed by parental role (e.g., mental load, limited time for oneself, sense of responsibility) which can be balanced by the rewards of parenting, such as the sense of fulfilment and personal growth (Sheldon et al., 2020), and an individual's ability to cope with stress (Lazarus, 1993). Yet, chronic imbalance between parenting stress and rewards increases the risk of parental burnout (Mikolajczak & Roskam, 2018).

Parental burnout is a context specific syndrome characterised by emotional and physical exhaustion, decreased sense of accomplishment in parental role, emotional distancing from a child, and a contrast in parental self, that is, an impression of not being a good parent anymore (Roskam et al., 2018). In the general population, the prevalence of parental burnout varies across countries from 0% in Cuba, 3.3% in United Kingdom, 6.2 % in France, 8.9% in USA and up to 9.8% in Belgium (Roskam et al., 2021). However, the prevalence of parental burnout can reach even 36% among the parents of children with chronic diseases (Lindström et al., 2010). The consequences of parental burnout can lead to multiple impacts on parents' physical and mental health, couple functioning, and the child's development (Mikolajczak et al., 2018). More specifically, at the parental level, burnout severity increases the incidence of suicidal ideation, sleep disorders, and addictive behaviours (Mikolajczak et al., 2018). Moreover, the emotional distancing symptoms of parental burnout are likely to contribute to couple conflicts, and neglectful and violent behaviours toward the child (Mikolajczak et al., 2018). Given that parental burnout could "constitute direct threat to children's psychological and physical safety"

as well as parents' health (Mikolajczak et al., 2018, p. 143), it appears crucial to prevent and treat parental burnout in order to limit its negative consequences on parents' and children's well-being.

A recent meta-analysis identified currently used interventions for parental burnout among the parents of chronically ill children and parents from the general population (Urbanowicz et al., under review). The results of this meta-analysis suggested that psychological group interventions significantly contributed to the reduction of parental burnout symptoms compared to a control group. Among the interventions which showed their effectiveness were mindfulness, cognitive-behavioural therapy (CBT), acceptance and commitment therapy (ACT), psychoeducation, active-listening, and interventions targeting the development of parenting resources and the reduction of stress (Urbanowicz et al., under review). Although these findings are very promising, existing evidence is still limited: the meta-analysis only identified 8 studies evaluating 11 interventions for parental burnout treatment. In addition, all identified studies focused on the parents presenting severe parental burnout symptoms: there is no evidence of these programmes playing a preventative role among the parents at risk. Therefore, there is a need to further evaluate these types of interventions both for parental burnout prevention and treatment.

The present study assessed the effectiveness of an 8-session Cognitive Behavioural Stress Management (CBSM) programme among parents from general population. The CBSM is a group intervention based on cognitive-behavioural therapy (CBT) and relaxation techniques aiming to develop appropriate stress management skills for affective, behavioural, cognitive, physiological, and social stress responses (see Figure 1; Antoni et al., 2000; Gauchet et al., 2012).
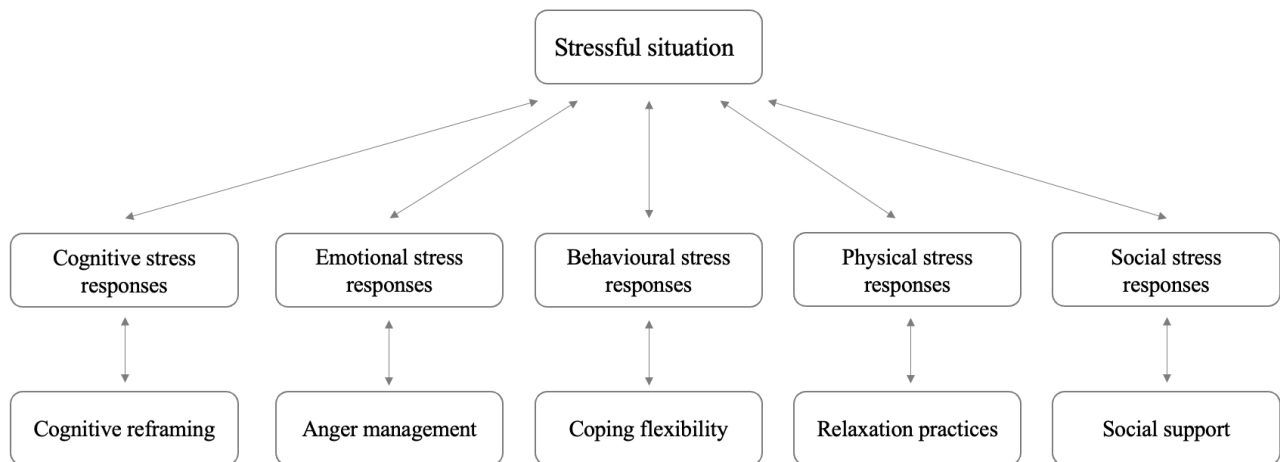
Figure 1. Cognitive Behavioural Stress Management (CBSM) Model (adapted from Antoni et al., 1998).

During the CBSM programme participants learn to identify different sources of stress in their daily life and to increase their self-awareness of stress responses. The CBSM programme uses cognitive and behavioural techniques aiming to modify maladaptive cognitive and emotional regulation strategies (e.g., cognitive reframing, anger management, coping strategies, assertiveness techniques), as well as relaxation and meditation techniques to reduce physical stress and enhance self-awareness and psychological flexibility. In addition, a group format of the intervention favours social ties between participants which in turn may contribute to well-being and health (Kemp et al., 2017). Moreover, during the sessions participants learn to distinguish controllable and uncontrollable aspects of their difficulties, how to mobilise coping resources and social support, and how to identify, express, understand, regulate, and use overwhelming difficult emotions in a constructive way. Both during sessions and in between the sessions, participants practice self-monitoring of their responses to stress, relaxations, and cognitive reframing exercises based on their daily life situations. All these practices aim to develop stress management resources and help to choose the behaviour rather than responding automatically.

The CBSM programme has shown its effectiveness in many stress-related disorders, including among patients suffering from chronic illnesses, in the reduction of depressive, anxious, and stress-related symptoms (Antoni et al., 2000; Phillips et al., 2011). In the context of parenting, the efficacy of CBSM interventions has been evaluated in one study among Iranian mothers (Karamoozian et al., 2015). The study measured the efficacy of a CBSM programme on anxiety and depression levels during pregnancy ($N = 30$). Compared to the control group, the results suggested the effectiveness of CBSM both in terms of mothers' anxiety and depression reduction during pregnancy, as well as on the new-born babies' physical health. However, the study design lacked a follow-up evaluation, and did not evaluate the mothers' burnout, or depressive and anxiety symptoms following childbirth. Despite the promising results of this study, we cannot conclude on the effectiveness of the CBSM programme in terms of parental burnout reduction. To our knowledge no other study adapted the content of the CBSM programme to the context of parental burnout and evaluated its effectiveness in terms of parental burnout prevention and reduction.

Present study

The aim of the present study was to assess the effectiveness of the CBSM parenting programme in terms of parental burnout severity following an 8-week programme at three-months follow-up compared to a waiting-list control group. We hypothesised that compared to the control group, the programme would contribute to a reduction in parental burnout scores. Our second hypothesis was that the decrease in parental burnout would be maintained up to three-months post-intervention. We further hypothesised that the reduction in parental burnout would be mediated by the decrease in stress and abstract ruminations as well as the increase in unconditional self-kindness and intra-personal emotion regulation competences.

Methods

Participants

In total, 196 parents participated in the study, out of which 134 (130 females and 4 males) were included in the analyses as they responded to at least T1 and T2 measures. The mean age of participants was 37.3 years ($SD = 5.23$), and the median number of children living in the same household was 2 ($M = 1.88$, $SD = .876$). The inclusion criteria for participating in the study were: (a) to be a parent of at least one child living in the same household, (b) being over 18 years old, and (c) having accepted an informed consent for participation in the study. Participants did not receive any financial reward for their participation in the study and they participated in the CBSM group for free.

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                    Assessed for eligibility
                          (n = 197)

  Intervention group                    Waiting-list control group

  Responded to T1 measures              Responded to T1 measures
        (n = 86)                              (n = 110)

  Responded to T2 measures              Responded to T2 measures
        (n = 67)                              (n = 67)

  Responded to the follow-up
     measures (n = 35)

  Eligible for T1-T2 analyses (n = 67)  Eligible for T1-T2 analyses
  Eligible for T2-T3 analyses (n = 35)        (n = 67)
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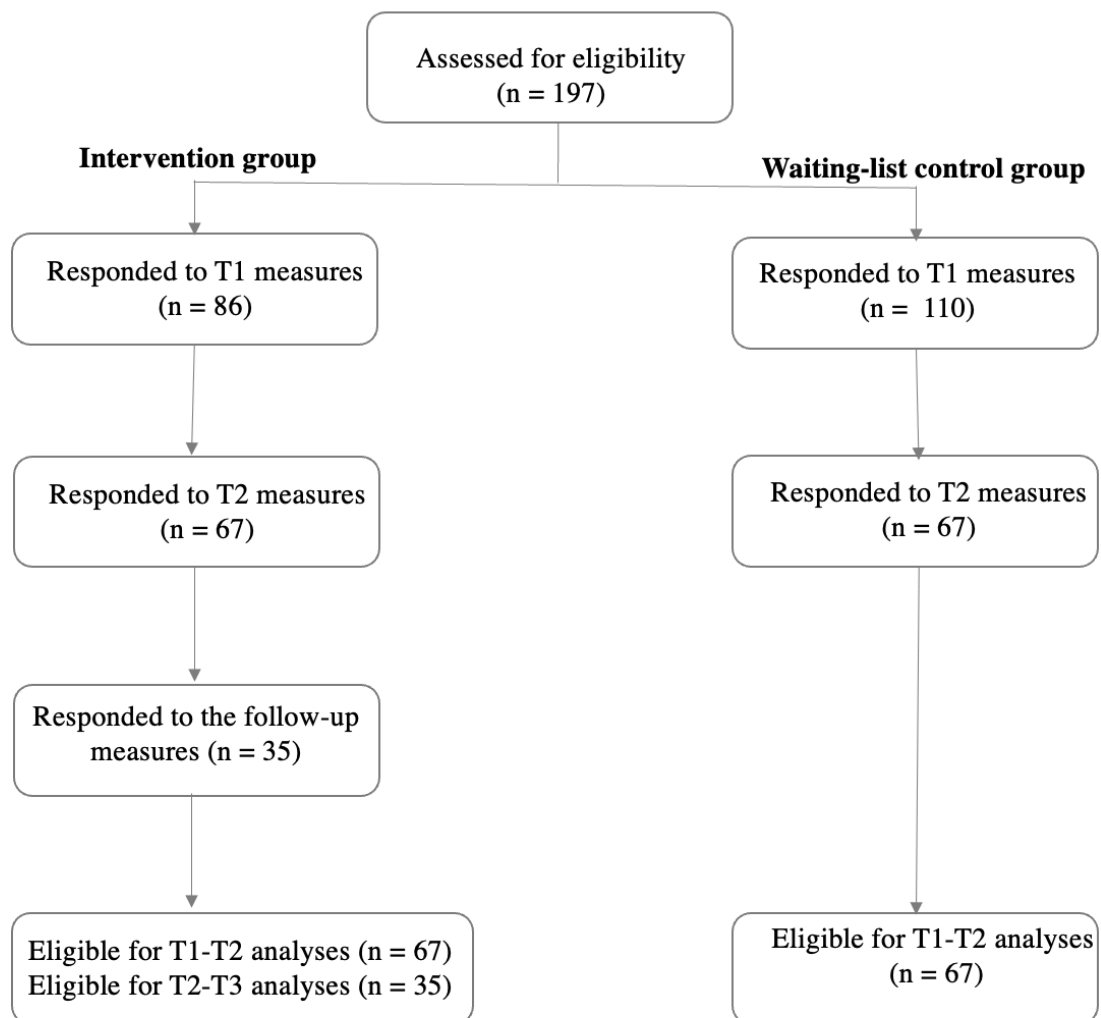
Figure 2. Flowchart diagram of participation rate at pre-, post-, and follow-up measures.

Procedure

The study received approval from the national ethical committee board (N°: 19.02.06.44810) and was preregistered on the Open Science Framework: https://osf.io/f5c7b/?view_only=22472fb65a344e7cb52e948d2b39e0ff.

Regarding the allocation procedure, we did not implement a randomised controlled trial procedure because of the ethical implications related to the risks associated with parental burnout (i.e., increased risk of suicide, child abuse and neglect; Brianda et al., 2020; Mikolajczak et al., 2018). Consequently, parents willing to participate in the intervention could immediately attend to the intervention group. The control group comprised parents who could not participate in a group at a given time (waiting-list), and who expressed their interest to participate in subsequent intervention groups.

Prior to the assignment to an intervention group, participants were informed about the purpose and protocol of the study during an information meeting. All participants received a written information sheet and signed the informed consent. Participants were informed about their right to withdraw from the study at any moment. Participants signed-up to an intervention group depending on their availabilities: different time slots were proposed every 10 weeks. Participants who could not participate in the intervention were assigned to the waiting-list control group and invited sign up to one of the newly proposed groups.

The CBSM parenting intervention groups consisted of eight sessions delivered by two trained psychologists once a week over an 8-week period. The psychologists delivering the intervention had previous experience in group therapy and completed a three-day CBSM training course, they also had previous experience of working with parents. Participants from the intervention group were asked to respond to an online questionnaire via a Qualtrics™ online software before (T1) and after (T2) the intervention as well as at three-month follow-up (T3).

Participants from the control group responded only to the T1 and T2 questionnaires and were invited to participate in the CBSM intervention directly after the T2 measure.

The intervention sessions were video recorded to enable fidelity checks conducted by the developer of the French intervention, focusing on adherence to the treatment manual. Any deviations were discussed and corrected in subsequent sessions.

Intervention

We translated the CBSM protocol (Antoni et al., 2007) to the French language and adapted the psycho-educative content of each session and proposed practices to the context of parenting stress and parental burnout based on recommendations of Roskam and Mikolajczak (2018). The final intervention protocol consisted of eight weekly sessions, see *Table 1*. Each session focused on a different stress management competency and followed a structured plan, see *Figure 3*. Each CBSM session started with a roundtable exchange between participants and therapist about participants' experiences during the week, as well as their achievements and difficulties in the application of relaxation and other newly learned skills in the family context. Following this, participants were invited to a guided relaxation exercise and to share their experience of whether the practice was perceived as enjoyable or difficult. The third part of each session consisted of a psycho-education training during which participants were introduced to a series of stress management skills (e.g., cognitive distortions, cognitive reframing, coping strategies, anger management, assertiveness). The psycho-education part consisted also of structured exercises based on participants' individual experiences to put the theory into practice using real life situations. The last part of each weekly meeting was the summary of the session's content and planning self-monitoring and relaxation exercises to practice at home in between the sessions. Each session ended with a roundtable exchange about the experience that each person had during the session. The additional two follow-up sessions

were proposed: one month and three months after the end of the intervention. The follow-up sessions consisted of round table exchanges between participants and the therapist and the guided relaxation.

Roundtable	Relaxation	Theory and practice	Summary and roundtable
50 minutes	25 minutes	60 minutes	15 minutes

Figure 3. Cognitive Behavioural Stress Management sessions plan.

Table 1. *Overview of the CBSM programme protocol.*

	Session 1	**Session 2**	**Session 3**	**Session 4**	**Session 5**	**Session 6**	**Session 7**	**Session 8**
Theme	**Stress-reactions and self-awareness**	**The link between stress and emotions**	**Cognitive distortions**	**Cognitive reframing**	**Coping strategies**	**Social support**	**Anger management**	**Assertiveness**
Practices	-Presentation of CBSM programme -Round table -Progressive muscular relaxation -Parenting stress: identifying daily stress factors -Auto-observation of stress responses	-Round table exchanges -Deep breathing relaxation -Self-awareness of automatic thoughts -Psychoeducation on emotions and their role -The link between the thought and affective states	-Round table exchanges -Guided visualisation relaxation (colourful garden) -Psychoeducation on different types of cognitive distortions -Identification of one's cognitive distortions patterns	-Round table exchanges - Schultz's autogenic training relaxation -Psychoeducation on finding alternative thoughts -Taking perspective on stressful situations -Cognitive reframing exercises	-Round table exchanges -Cardiac coherence relaxation -Psychoeducation on problem-focused and emotion-focused cooing strategies -Identifying controllable and uncontrollable aspects of situation -Active and passive coping strategies	-Round table exchanges -Wave breathing relaxation -Psychoeducation of emotional, informational, and material social support -Identifying social support network -Asking for help -Taking care of one's social support	-Round table exchanges -Body scan mediation -Psychoeducation on ager expression styles -Self-awareness of anger -Identification of internal and external factors amplifying the anger -STOP technique and anger management	-Round table exchanges -Mindfulness meditation -Psychoeducation on communication styles, non-violent communication, and assertiveness -Formulation of assertive message -Active listening
Objectives	Enhancing self-awareness of stress factors and stress responses	Enhancing intra-personal emotional competencies: identification and understanding of emotions.	Enhancing auto-observation of one's thought and emotions	Enhancing one's psychological flexibility through cognitive reframing skills	Enhancing coping flexibility and awareness of one's behavioural stress-responses.	Enhancing meaningful relationships and the sense of belonging. Enlarging social support network.	Enhancing better understanding of the anger (its source and triggers) and emotion regulation skills	Enhancing constructive communication. Development of assertiveness skills.

Measures

To assess the intervention's effectiveness, we used self-administrated questionnaires measuring severity of parental burnout and stress symptoms, abstract ruminations, self-kindness, and emotion regulation before, after, and at 3-month follow up. We also measured socio-demographic characteristics (i.e., age, gender, number and age of children, family and professional situation, level of education) and the motivation to participate in the programme.

Parental burnout

The severity of parental burnout was measured using the *Parental Burnout Assessment* (PBA, Roskam et al., 2018). PBA is 23- item scale measuring four dimensions of parental burnout: (a) physical and emotional exhaustion (e.g., Item 3: "I feel completely run down by my role as a parent"), (b) emotional distancing from the child (e.g., Item 20: "I'm no longer able to show my children how much I love them"), (c) the loss of fulfilment and pleasure in parental role (e.g., Item 11: "I don't enjoy being with my children"), and (d) contrast in the perception of parental self (e.g., Item 17: "I'm ashamed of the parent that I've become"). The responses are assessed on a 7-point Likert scale: never (0), a few times per year or less (1), a few times per month (2), once per month or less (3), once per week (4), a few times per week (5), every day (6). The scale enables the assessment of the risk and severity of parental burnout using five cut-off scores (Roskam et al., 2018). The total score below 30 is considered as no risk of parental burnout. Scores between 30 and 45 are considered as a low risk to parental burnout, those between 46 and 60 are considered as a moderate risk to the parental burnout, those between 61 and 75- the high risk of parental burnout, and scores above 75 are considered to indicate severe parental burnout. In the present study, the total scale had an excellent internal consistency with a Cronbach's $\alpha = .97$ at T1, $\alpha = .98$ at T2, and $\alpha = .97$ at T3.

Stress

The severity of stress symptoms was measured with one dimension of Depression, Anxiety, Stress Scale (DASS-21; Lovibond & Lovibond, 1995). The DASS-21 contains three 7-items subscales measuring the emotional states of depression, anxiety, and stress over the past week. The items are rated on 4-point Likert scale from 0 ("Did not apply to me at all") to 3 ("Applied to me very much or most of the time"). The stress subscale assesses the difficulty to relax (e.g., Item 12: "I found it difficult to relax"), agitation and over-reactivity (e.g., Item 14: "I was intolerant to anything that kept me from getting on with what I was doing"). In the present study, the stress sub-scale showed a good internal consistency with a Cronbach's α = .86 at T1 and α = .89 at T2.

Abstract ruminations

The frequency of abstract ruminations was evaluated with 8-items subscale of *Mini-Cambridge Exeter Repetitive Thought Scale* (Mini-CERTS; Douillez et al., 2014). Mini-CERTS is 16-item questionnaire measuring abstract and concrete ruminations with 8 items for each dimension. The responses are rated on 4-point Likert scale from (1) almost never to (4) always. Abstract ruminations are unconstructive repetitive thoughts which are often overgeneralised to many different topics. Whereas concrete ruminations are considered as constructive repetitive thoughts as they are focused on a specific problem and can enhance the problem solving strategies. In this study, the subscale showed satisfying internal consistency with Cronbach's α = .66 at T1 and α = .72 at T2.

Self-Kindness

Self-kindness was measured with the *Unconditional Self-Kindness scale (USK*; Smith et al., 2018). The USK is a 6-item scale assessed using a series of 7-point Likert items, with

scores ranging from 0 (not at all) to 6 (a great deal) measuring the ability to be kind to oneself in challenging situations e.g., in the context of rejection, failure or mistake, awareness of personal flaws and imperfections. The examples of items are: Item 1: "How much are you patient and tolerant with yourself when you are criticized or rejected by another person"? Item 6: "How much are you loving and kind to yourself when you fail or make a mistake"? The higher scores show the higher levels of unconditional self-kindness. The scale showed excellent internal consistency with a Cronbach's $\alpha = .92$ at T1, $\alpha = .94$ at T2.

Emotion regulation

Emotion regulation was measured with intrapersonal emotion regulation dimension of The *Profile of Emotional Competence* scale (PEC, Brasseur et al., 2013). The PEC scale measures five dimensions of emotional competencies, i.e., identification, expression, comprehension, regulation, and utilisation of emotions both on intrapersonal and interpersonal levels. The intrapersonal emotion regulation subscale consisted of 5 items assessed on a five-point Likert scale from 1 (the statement does not describe me at all) to 5 (the statement describes me very well). The examples of items are, Item 12: "I easily manage to calm myself down after a difficult experience"; Item 15: "When I am sad, I find it easy to cheer myself up"; Item 37: "I find it difficult to handle my emotions". In this study, the scale showed a suboptimal internal consistency at time 2 with a Cronbach's $\alpha = .69$ at T1 and $\alpha = .65$ at T2.

Data analyses

All collected data were processed using the Jamovi statistical software (The jamovi project, 2020). We applied one-way ANOVA to examine the differences in age between participants from the intervention and the control groups. We also applied χ^2 tests for independence on categorical and discrete variables: gender, family situation, professional

occupation, education level, and number of children. The prevalence of parental burnout in intervention and control groups was calculated using five cut-off scores following Roskam et al., (2018) recommendation.

To test our main hypothesis that compared to the control group the CBSM intervention reduces the severity of parental burnout at T2 we applied mixed ANOVA with group (CBSM versus control) as a between-subject fixed-factor. To test our second hypothesis that the results of the intervention are maintained at 3-month follow up we applied one sample t-tests applying Helmert contrast within the intervention group. The first contrast compared unilaterally the baseline measure (T1) with the post intervention (T2) and 3-month follow-up measures (T3). The second contrast compared unilaterally the 3 month-follow up (T3) with the post intervention measure (T2). To test our third hypothesis that within the intervention group the decrease of parental burnout between T1 and T2 would be mediated by the increase of unconditional self-kindness and emotion regulation as well as the decrease of stress and abstract ruminations we conducted linear regressions using centered variables.

<div align="center">

Results

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Descriptive analyses

The socio-demographic characteristics of the participants are presented in Table 2. The results of one-way ANOVA - $F(1, 131) = 6.93$, $p = .01$, $\eta^2_p = .05$ - showed that participants from the intervention group ($M = 38.45$, $SD = 5.35$) were on average older then participants from the control group ($M = 36.12$, $SD = 4.89$). There was also a statistically significant difference between the groups in gender - $\chi^2(1) = 4.12$, $p = .04$, $V = .18$, and professional occupation - $\chi^2(2) = 9.45$, $p = .01$, $V = .27$. There was no statistically significant difference between the groups in terms of family situation - $\chi^2(2) = 2.67$, $p = .26$, $V = .14$, education level - $\chi^2(5) = 3.32$, $p = .66$, $V = .16$, and number of children - $\chi^2(5) = 4.40$, $p = .49$, $V = .18$. A total of 35.8% of the participants had one child under 18 years old (N = 48), 46.3% of the participants

had two children (N = 62), 14.2% had three children (N = 19), 3.62% had more than three children (N = 5). In addition, 15.7% of the participants reported a current diagnosis of a child's chronic illness or developmental problems, while 3.7% of the parents reported a past problem.

Table 2. *Demographic Characteristics of Participants*

	CBSM group		Control group		p value [a]
	N	%	N	%	
Gender					$p = .04$
Female	63	94	67	100	
Male	4	6	0	0	
Education					$p = .66$
Less than a high school diploma	1	1.5	3	4.4	
High school degree or equivalent	5	7.5	6	9	
Bachelor's degree	17	25.4	20	29.9	
Master's degree	39	58.2	30	44.8	
Above Master's degree	5	7.4	8	11.9	
Family situation					$p = .26$
Single (never married)	4	6.0	2	3.0	
Living in couple (married, domestic partnership)	59	88.1	64	95.5	
Divorced	4	5.9	1	1.5	
Widowed	0	0	0	0	
Professional situation					$p = .01$
Full time professional activity	25	37.3	33	49.3	
Part time professional activity	19	28.4	26	38.8	
Unemployed	23	34.3	8	11.9	
Retired	0	0	0	0	

Note. [a] X^2 test

Regarding the prevalence of parental burnout in the experimental (CBSM) group, 22.4% of the participants did not present symptoms of parental burnout (total BPA score below 30), 22.4 % were at low risk of parental burnout (total PBA score between 30 and 45), 19.4 % of parents were at moderate risk of burnout (total PBA score between 46 and 60), and 35.8% of participants presented severe symptoms of parental burnout (total PBA score above 61). In the control group, 47.8% of participants did not present the symptoms of parental burnout (total BPA score below 30), a total of 13.4 % were at low risk of parental burnout (total PBA score

between 30 and 45), 11.9 % of parents were at moderate risk of burnout (total PBA score between 46 and 60), and 26.9% of participants presented severe symptoms of parental burnout (total PBA score above 61). Parents from the intervention group (M = 53.9, SD = 28.6) presented on average a higher score of parental burnout at T1 then participants from the control group (M = 45.3, SD = 33.6). However, this difference was not statistically significant - F(1, 129) = 2.53, p = .11, η^2_p = .02. Table 3 presents the mean scores, standard deviations of the studied variables in the intervention and control groups.

Table 3. *Means, standard deviations of studied variables*

	CBSM			Control Group	
	T1 (*N* = 67)	T2 (*N* = 67)	T3 (*N* = 35)	T1 (*N* = 67)	T2 (*N* = 67)
Parental Burnout	53.9 (28.62)	42.9 (27.57)	44.5 (24.99)	45.3(33.58)	45.4 (37.96)
Stress	17.1 (4.24)	14.8 (3.91)	14.1 (4.39)	16.4 (4.59)	15.3 (5.06)
Abstract Ruminations	21.6 (3.68)	20.0 (4.00)	16.6 (3.4)	19.7 (3.48)	20.1 (4.87
Unconditional Self-Kindness	12.6 (6.83)	15.4 (7.12)	17.6 (3.95)	14.2 (7.08)	13.9 (7.61)
Emotion Regulation	13.0 (3.76)	14.2 (2.99)	14.6 (3.95)	13.04 (3.45)	13.5 (4.08)

Note. Standard deviations are presented in brackets. T1, T2, and T3 correspond to pre-, post-, and follow-up measures.

Effectiveness analyses

To test our first hypothesis that compared to the control group, the CBSM programme would reduce the severity of parental burnout symptoms, we applied mixed ANOVA with group (CBSM versus control) as a between-subject fixed-factor. The results of ANOVA showed that there was a statistically significant within-group effect of time on parental burnout severity - $F(1, 132) = 7.29$, $p = .01$, $\eta^2_p = .05$ - and a statistically significant effect of time*group -$F(1, 132) = 7.41$, $p = .01$, $\eta^2_p = .05$. The between-group effect was not statistically significant - $F(1, 132) = .35$, $p = .56$, $\eta^2_p = .003$. The post-hoc analyses showed no statistically significant mean differences between groups at T1 - $t(132) = -1.59$, $M_{diff} = -8.57$, $SE_{diff} = 5.39$, $p = .39$, and T2 - $t(132) = .43$, $M_{diff} = 2.48$, $SE_{diff} = 5.73$, $p = .97$. The analyses indicated a significant decrease in parental burnout symptoms between T1 and T2 only within the experimental group - $t(132) = 3.83$, $M_{diff} = 11.00$, $SE_{diff} = 2.87$, $p < .001$. There was no significant change in parental burnout symptoms among the participants from the control group: $t(132) = - .02$, $M_{diff} = - .04$, $SE_{diff} = 2.87$, $p = 1.0$. These findings supported our first hypothesis.

To test our second hypothesis that the reduction in parental burnout scores was maintained within the intervention group at 3-month follow-up, we applied a one-sample t-test with Helmert contrast. The first contrast, testing our hypothesis, compared unilaterally the baseline measure (T1) with the post intervention (T2) and 3-month follow-up measures (C1 = 2*T1-T2-T3). The second contrast, supposed to be non-significant, compared (therefore bilaterally) the 3 month-follow up with the post intervention measure (C2 = T3-T2). The analysis showed a significant mean difference in PBA scores between T1 and T2, and T3 ($M_{diff} = 15.66$, $t(34) = 1.89$, $d = .32$, 95%CI [-.02, .66], $p = .03$), and statistically non-significant mean difference between T2 and T3 measures ($M_{diff} = -1.83$, $t(34) = .76$, $d = - .13$, 95%CI [-.45, .206], $p = .23$) which confirmed our second hypothesis.

To test our third hypothesis that within the intervention group the decrease in parental burnout between T1 and T2 would be mediated by the decrease in stress, and the increase in unconditional self-kindness and emotion regulation we conducted linear regressions with centered predictor variables (see *Figure 4*). The linear regressions showed that the difference in stress levels between T2 and T1 (ΔT2-T1) explained 37% of the variance in parental burnout difference between T2 and T1(ΔT2-T1) - $F(1, 65) = 40.20$, $p < .001$, $R^2 = .38$. When the difference in unconditional self-kindness scores between T2 and T1 (ΔT2-T1) was added to the regression model, the model explained 41% of the variance in parental burnout between T2 and T1 - $F(2, 64) = 24.3$, $p < .001$, $R^2 = .43$. Further, when the difference in emotion regulation (ΔT2-T1) was added to the regression model, the effect of the difference in emotion regulation was not statistically significant ($p = .38$) and did not explain the variance in the model - $F(3, 63) = 16.4$, $p < .001$, $R^2 = .44$. Similarly, the difference in abstract ruminations (ΔT2-T1) did not significantly explain the variance in parental burnout between T2 and T1- $F(4, 62) = 12.2$, $p < .001$, $R^2 = .40$. These findings partially supported our third hypothesis suggesting the double mediation effect of the difference in stress and in unconditional self-kindness.
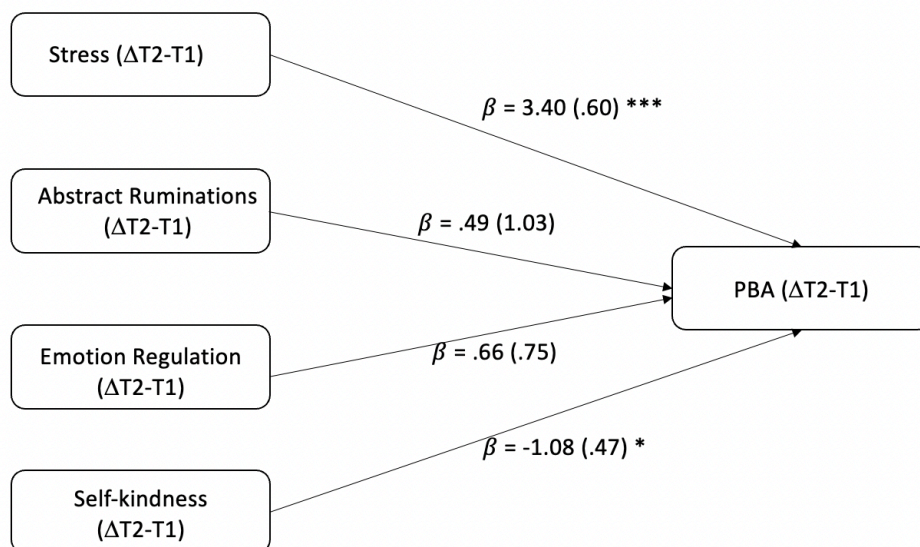
Figure 4. Linear regressions model

Discussion

This study aimed to evaluate the effectiveness of CBSM intervention for parental burnout reduction compared to a control (no treatment) group. We evaluated the evolution of parental burnout symptoms before and after 8 weeks of the intervention. In addition, we compared the mean scores in parental burnout between T2 and the 3-month follow-up within the CBSM group. We also assessed the potential mediation effects of the decrease in stress and abstract ruminations between T1 and T2, as well as the increase in unconditional self-kindness and emotion regulation between T1 and T2. The results of our study showed that CBSM intervention contributed to the reduction in parental burnout and that the decrease in parental burnout can be partially explained by the decrease in stress and the increase in unconditional self-kindness.

Regarding the effectiveness of the CBSM intervention in terms of parental burnout severity reduction, we observed that compared to the control group the scores of PBA significantly decreased in the CBSM group following the intervention. The comparison with a waiting-list control group showed that the decrease in parental burnout was due to the intervention's effects and not the spontaneous remission over time. Indeed, the CBSM intervention provides a complex range of tools for the management of cognitive, emotional, behavioural, physical, and social stress responses (see *Table 1 and Figure 3*) which seem to contribute to the reduction of parental burnout and stress symptoms. Parental burnout is considered as a consequence of a chronic imbalance between stress factors and parental resources (Mikolajczak & Roskam, 2018) and the CBSM intervention significantly reduced parental burnout severity. These findings are also in line with previous research showing that CBSM intervention reduces stress symptoms across different populations including patients suffering from chronic illnesses (Antoni et al., 2000; Phillips et al., 2011) and pregnant women (Karamoozian et al., 2015). Beyond the previous research, the present study revealed the

beneficial effects of the CBSM intervention also in terms of parental burnout severity reduction in parents from the general population. These findings give empirical evidence for the application of CBSM for parental burnout reduction and prevention.

Moreover, the contrast analyses within the intervention group showed that whilst the parental burnout severity before the intervention at T1 significantly differed from post intervention (T2) and 3-month follow- (T3), there was no statistically significant difference between T3 and T2. This confirmed our second hypothesis that the effects of the intervention maintained at 3-month follow up. These findings can be explained by the fact that parents may continue to develop their stress management skills after the end of the intervention (Walton, 2014). This can be possible when the intervention targets psychological processes underlying parental burnout symptoms. The CBSM programme may have acted on numerous mechanisms of action such as negativity bias, repetitive negative thinking, self-critical thinking, perfectionism, or avoidance of expressing one's emotions and/or needs. In addition, during the 8 weeks of the intervention, parents developed their self-awareness skills, emotional competencies, and social support network which can also contribute to better stress management over time. It is possible that a person who found it difficult to express their needs or ask for help, for example, may find it easier with every positive experience (i.e., positive reinforcement). Therefore, the person's stress management skills may continue to increase following the intervention. This observation is in line with the results of the meta-analysis on parental burnout psychological interventions which showed that parental burnout severity continued to decrease even after the end of the interventions (Urbanowicz et al., under review).

Regarding our third hypothesis, that the decrease of parental burnout at T2 would be mediated by the decrease in stress and abstract ruminations, as well as by the increase in unconditional self-kindness and emotion regulation, the linear regression model revealed a double mediation effect of the reduction of stress and the increase in unconditional self-

kindness. These findings are in line with previous research suggesting that self-compassion plays a protective role in parental burnout development (Paucsik et al., 2021). Indeed, self-compassion is likely to buffer against perfectionism (Mehr & Adams, 2016) which was identified in the literature as a risk factor for parental burnout (Kawamoto et al., 2018; Lin et al., 2021; Sorkkila & Aunola, 2020). Similarly, self-compassion has been shown to contribute to parental well-being (Neff & Faso, 2015), lower levels of parental burnout (Paucsik et al., 2021), and self-efficacy (Liao et al., 2021). Unconditional self-kindness is likely to play a similar protective role as self-compassion, as it reflects the capacity to be kind to oneself in challenging situations (e.g., in the context of rejection, failure, awareness of personal imperfections; Smith et al., 2018).

In contrast to previous findings on the protective role of emotional competencies and emotional intelligence in the context of parental burnout (Bayot et al., 2021; Linet al., 2021; Mikolajczak et al., 2018), the findings of our study did not confirm our last hypothesis that reduction of parental burnout would be mediated by increases in emotion regulation competencies. There are two possible explanations for the discrepancy between the findings of our study and previous research. First, emotion regulation as a trait is one's ability to apply an adaptive emotion regulation strategy in emotional demanding situations (Brasseur et al., 2013). The 8-week period of time may not be long enough to achieve a significant change in participants' emotion regulation capacity. Second, in our study we focused on intrapersonal emotion regulation traits which constitute only one dimension of emotional competencies (Brasseur et al., 2013). This may suggest that other emotional competencies (i.e., emotion identification, expression, comprehension, and utilisation) could be involved in parental burnout to a larger extent than intrapersonal emotion regulation skill alone. Indeed, emotional competencies describe a wide range of intra- and inter-personal skills which may buffer against or predict parental burnout on different levels (Lin et al., 2021). According to Lin et al., (2021)

research should evaluate the independent effects of each dimension of emotional competencies while systematically controlling for the effects of others. Further studies are necessary to identify which emotional competencies should be targeted by psychological interventions.

In addition, the results of our study are not consistent with previous findings regarding the role of abstract ruminations in the development and maintain of parental burnout. Indeed, (Paucsik et al., 2021) identified abstract ruminations as a risk factor for parental burnout. Whereas in our study the decrease in parental burnout did not seem to contribute to the decrease in parental burnout. This discrepancy can be potentially explained by the fact that the decrease in abstract ruminations between T1 and T2 within the intervention group was not sufficiently important to significantly contribute to the reduction of parental burnout. As illustrated in *Table 3* the scores of abstract ruminations continued to decrease at T3 (at three-month follow up). Therefore, the role of abstract ruminations can be potentially more important in the long-term perspective.

The findings of this study should be interpreted with caution, as the study presents several limitations. First, the sample comprised mostly mothers (97%). A similar issue was identified in other studies on parental burnout, in which the participation of mothers was significantly higher compared to fathers (Brianda et al., 2020; Paucsik et al., 2021; Sorkkila & Aunola, 2020). Future research should assess to what extent the findings of this study can be generalised to the population of fathers.

Second, regarding the design of this study, we did not implement a randomised controlled trial procedure because of the ethical implications related to the risks associated with parental burnout (i.e., increased risk of suicide, child abuse and neglect; Brianda et al., 2020; Mikolajczak et al., 2018). Parents willing to participate in the intervention could immediately attend the group of their choice according to their availabilities (i.e., multiple schedules were proposed) and those who could not were assigned to the waiting-list control group. In our study,

we aimed to assess the effectiveness of the CBSM intervention controlling for a potential natural remission over time in a control group. Based on previous evidence, randomly assigning participants to control and experimental groups was not necessary to meet this objective (Kowalski & Mrdjenovich, 2013). Indeed, assigning parents willing to immediately participate in the intervention group to the passive control group would rise both ethical and methodological problems (i.e., delaying the treatment and possibly losing the participants). However, given that in our sample participants were not randomly assigned to the intervention and control groups, there is a risk of a self-selection bias which can explain the significant difference in parental burnout severity levels at T1 between the CBSM and control group (Higgins et al., 2008). Indeed, the participants from the CBSM group presented significantly higher scores for parental burnout before the intervention compared to the parents from the control group. The distress related to the higher levels of parental burnout could underlie the motivation to seek help and participate in the intervention group. Parents with lower scores of parental burnout possibly felt less urgency to attend to the intervention group although they expressed their interest in the participation in the study. Future research should investigate the factors underlying the motivation to participate in the intervention.

In addition, we observed a significant drop-out in the number of responses to the online questionnaire at 3-month follow up. At T3 the response rate dropped from 67 to 35. Drop out in post- intervention measurements has also been observed in other interventional studies on parental burnout (e.g., Anclair et al., 2018; Brianda et al., 2020; Masoumi et al., 2020). The loss of participants in the follow up measure can be explained by the fact that participants had already responded to the same online survey at T1 and T2 and it could be monotonous for them to respond for the third time. Moreover, participants did not receive any financial reward for their participation in the study. Potentially a financial compensation could increase the response rate as participants would receive a reward for investing their time. However, a financial reward

could possibly bias the results of the study by increasing the self-selection bias (Hsieh & Kocielnik, 2016) and the external motivation to participate in the study (Sharp et al., 2006).

In conclusion, compared to the control group the CBSM intervention contributed to the significant reduction of parental burnout symptoms which was maintained at 3-moth follow-up. The findings of our study suggested that the decrease in parental burnout following the intervention was mediated by the decrease in stress and the increase in unconditional self-kindness.

Rationale from Article 2 to Article 3: The acceptability of CBSM programme

The previous article showed that the CBSM intervention contributed to the significant reduction of parental burnout symptoms up to 3-month follow up and this change was partially explained by the decrease in stress and the increase in unconditional self-kindness. The following study further evaluates the CBSM intervention in terms of acceptability and perceived long-term effects using a mixed-methods approach.

Acceptability reflects the extent to which different components of an intervention were appropriate and well received by the target population (Ayala & Elder, 2011). Therefore, regardless of objective results on intervention's effectiveness it is important to further explore the experiences of parents who took part in the programme and understand satisfaction with the received programme. Indeed, acceptability is an important component of intervention's social validity (Wolf, 1978) and determines how well an intervention satisfied participants' needs and expectations. In that sense, assessment of acceptability is an important stage in the development of an intervention. Acceptability refers both to the satisfying and unsatisfying aspects of the conditions of implementation of the intervention and the magnitude of observed outcomes (e.g., it enables identification of the areas for the improvement; Silva et al., 2020). Acceptability can be measured using qualitative methods (e.g., questionnaires), qualitative methods (e.g., focus groups or interviews) or mixed methods. Yet, there are no broadly agreed or systematised guidelines on how to define and assess acceptability.

The following article presents findings of the study evaluating acceptability of the CBSM programme using both satisfaction surveys and individual semi-structures interviews. We decided to use a mixed-method approach to obtain the general responses from the larger sample of participants through the satisfaction surveys as well as more detailed information from individual interviews. Given that the study was conducted during the COVID-19 pandemics we made a choice of individual interviews over the focus groups.

Article 3: Acceptability of Cognitive Behavioural Stress Management Intervention for parental burnout reduction and prevention: a mixed methods approach

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Highlights

- The first study to assess the acceptability and perceived effectiveness of the CBSM intervention for parental burnout reduction.

- Mixed methods approach: findings based both on satisfaction survey and individual semi-structured interviews.

- Identification of the areas for the improvement of the CBSM intervention.

Abstract

The present study aimed to assess the acceptability of the CBSM intervention for parental burnout prevention and reduction using both quantitative and qualitative measures. The sample of the present study consisted of 46 parents. Data was collected through a satisfaction survey and individual semi-structured interviews. The findings showed positive outcomes in terms of both satisfaction and perceived benefits of the program. Participants expressed their satisfaction with the duration, frequency, group format, and content and delivery of the sessions. Regarding the perceived effectiveness and long-term benefits, participants found particularly useful the cognitive reframing technique, and reported the improvement in emotional competencies, well-being, self-efficacy, and relationship with a child and partner. Areas of improvement were also reported to advance future research and clinical practice in this field. In conclusion, the study contributed to a better understanding of parents' experience with the CBSM programme and outlined possible improvements to increase acceptability and potential benefits.

Keywords: CBSM, Cognitive Behavioural Stress Management, Parental Burnout, Acceptability

Introduction

Parental burnout is a state of a chronic emotional and physical exhaustion which generates an emotional distance with the child, unsatisfaction and lack of accomplishment, as well as decreased self-efficacy in one's parental role (Roskam et al., 2021). Burnt-out parents are at higher risk of presenting suicidal thoughts, sleep disorders, and substance abuse (Mikolajczak et al., 2018). In addition, it increases risks of marital conflicts and partner estrangement as well as neglectful and violent behaviours towards children (Mikolajczak et al., 2018). The prevalence of parental burnout varies across countries up to 9% in the general population (Roskam et al., 2021), and can reach 36% in the population of parents of chronically ill children (Lindström et al., 2010). The deleterious consequences related to parental burnout as well as its prevalence constitute a threat to family well-being and calls for the development of tailored psychological interventions for the prevention and treatment of parental burnout.

The Cognitive Behavioural Stress Management (CBSM) programme is a group intervention using techniques from cognitive behavioural therapy combined with relaxation (Antoni et al., 1991). The programme comprises both psychoeducation and practical exercises for better awareness of stress responses, cognitive reframing, coping skills training, anger management, optimising social support, and assertiveness. Past research has underlined the effectiveness of the CBSM programme in terms of psychological adjustment and increased immune functioning among patients suffering from AIDS (Antoni et al., 1991; Carrico et al., 2005), and in terms of positive affect and decreases in serum cortisol, anxiety, depression, thought avoidance, thought intrusion, and negative mood among breast cancer patients (Tang et al., 2020). It has also been shown to be effective in terms of increased quality of life and stress management skills among prostate cancer patients (Penedo et al., 2004, 2007), as well as patients suffering from chronic fatigue syndrome (Hall et al., 2017; Lattie et al., 2012).

The effectiveness of the CBSM programme across various populations can be explained by the usefulness of cognitive behavioural therapy and relaxation techniques across a wide range of symptoms and disorders. Given the cognitive, behavioural, and emotional nature of the risk factors identified in parental burnout such as perfectionism (Kawamoto et al., 2018; Sorkkila & Aunola, 2020b), abstract ruminations (Paucsik et al., 2021), poor emotional competencies (Bayot et al., 2021; Lin et al., 2021; Mikolajczak et al., 2018), and low levels of self-compassion (Paucsik et al., 2021), we adapted the CBSM programme to the context of parental burnout to assess its effectiveness.

The present study is a part of a larger clinical trial which aimed at evaluating the effectiveness of the CBSM programme in terms of parental burnout reduction (N = 197; see *Article 2*). The main study revealed significant reductions in parental burnout and stress symptoms as well as increased levels of emotion regulation and self-kindness in comparison to no-intervention control group (Urbanowicz et al., under review). However, the experimental approach to effectiveness is not sufficient to determine the acceptability and adaptability of a programme to different profiles of parents, and it requires that the intervention be studied in context (Craig et al., 2008). According to Michie et al. (2017), other factors such as the conditions of delivery, implementation, or appropriation of the intervention by professionals in the field should also be evaluated in order to determine the relevance of such an intervention in existing parenting support contexts. The contribution of qualitative and mixed methods is necessary to this end (Pawson, 2013).

In this article we aimed to document the acceptability of the CBSM programme for parents using both a quantitative and a qualitative approach.

<p style="text-align:center">Methods</p>

We followed the international COREQ guidelines (Tong et al., 2007) for writing and reporting qualitative studies (see COREQ checklist in Appendix for greater transparency and reproducibility of the conclusions from our qualitative study).

Participants

The sample reported in the present study consisted of 46 parents having participated in the CBSM parenting intervention. Participants' mean age was 39.6 years ($SD = 5.59$), with the median number of children of 2 ($M = 2.04$, $SD = .99$). The inclusion criteria for participating in the study were: (a) to be a parent of at least one child living in the same household, (b) being over 18 years old, and (c) having accepted an informed consent for participation in the study. Participants did not receive any financial reward for their participation in the study and they participated in the CBSM programme for free.

Procedure

The present study was a part of a larger clinical trial and received approval from the national ethical committee board in France (N°: 19.02.06.44810). For the purpose of the present study, we recruited a sample of 46 parents having participated in the CBSM programme. Immediately after the end of the programme, we invited participants to respond to the satisfaction survey. Among 67 parents who attended to the CBSM programme 46 parents agreed to participate in the study and responded to the survey. Further, we recontacted the participants one year following the programme and we invited them to participate in individual semi-structured interviews to provide additional information regarding their experience and perceived long-term effects. Eleven parents accepted to participate in the interviews. The interviews were conducted online. The interviews were audio-recorded, transcribed, and translated from French to English.

Intervention

The CBSM programme consisted of eight 2-hour sessions delivered once a week over an 8-week period, and of two follow-up sessions: one month and three months after the end of the intervention. Two psychologists delivering the intervention completed a three-day CBSM training course and were weekly supervised.

The CBSM sessions started with roundtable exchanges between participants and the therapist about the personal experience in the application of the stress management tools in between the sessions. During these roundtable exchanges participants could share both their difficult experiences and satisfying situations which occurred during the week. Then, the therapist proposed a guided relaxation using different relaxation techniques every week (e.g., based on deep breathing, imaginary, or muscular relaxation). The third part of each session consisted of psychoeducation introducing participants to the different stress management techniques (e.g., awareness of cognitive distortions, cognitive reframing, coping strategies, anger management, assertiveness) during which participants could put the theory into practice using their real-life examples. Each session ended with a roundtable exchange about the experience for each parent, a brief summary of the session's content, and the proposition of self-monitoring and relaxation exercises to practice in between the sessions. The topics of all 8 sessions are presented in *Figure 1* (for the detailed intervention protocol see *Article 2*).
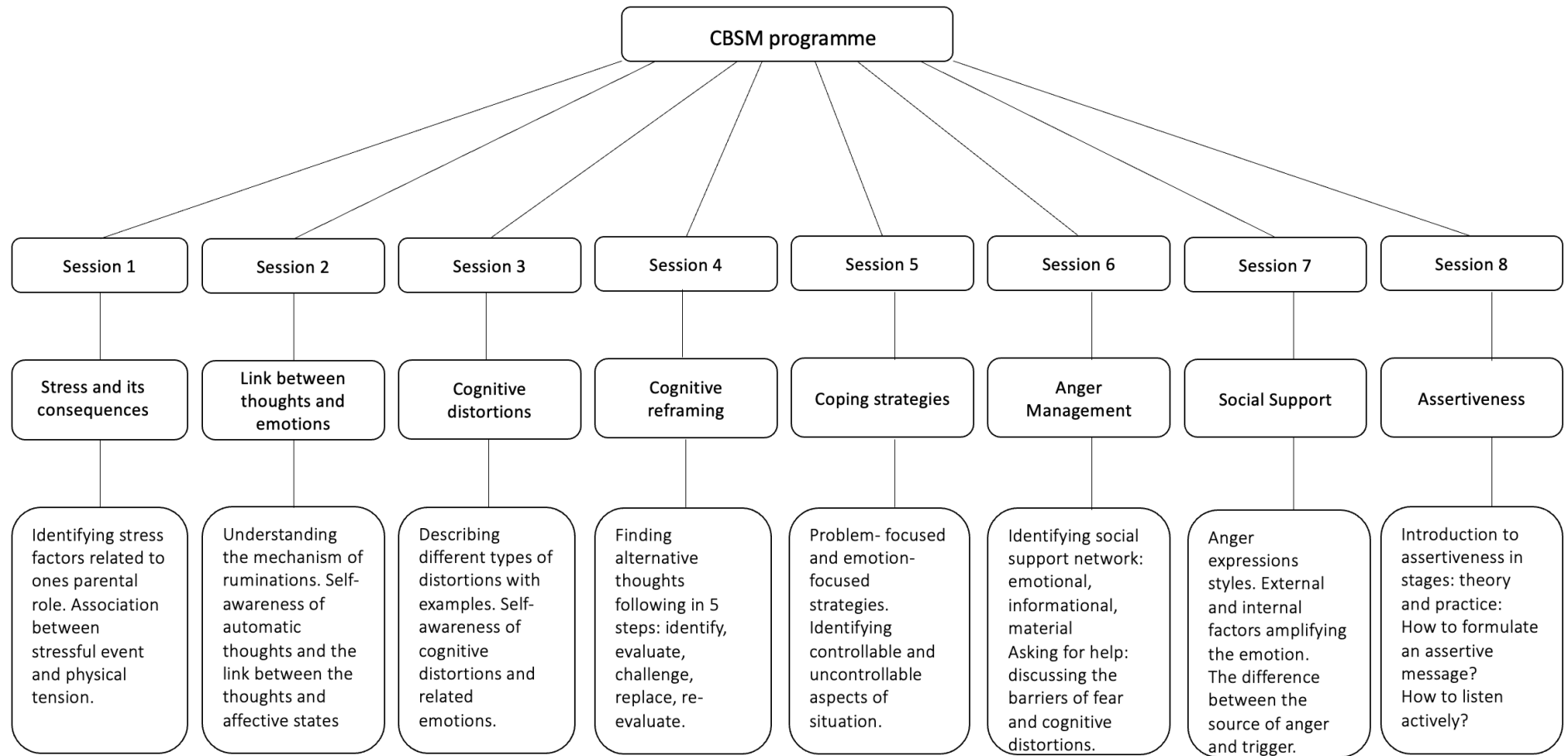
Figure 1. The topics of the eight CBSM sessions.

Material

We assessed the acceptability of the study both using satisfaction questionnaire and semi-structured interviews. The acceptability of the intervention refers to the appropriateness and suitability of the study procedures and intervention protocol from the perspective of participants and professionals delivering the intervention (Feeley et al., 2009). Acceptability of an intervention can be evaluated through the assessment of the satisfaction, comprehension of the content, and the degree of perceived benefit and interest.

The satisfaction questionnaire proposed to the parents after the last session of the CBSM programme comprised two questions measured on a 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4) and fifteen questions measured on a 5-point Likert scale from strongly agree (1) to strongly disagree (5). The survey included also the three open-ended questions about the most appreciated and the least appreciated sessions as well as about the suggestions for the improvement of the intervention. The content of the satisfaction survey is presented in *Figure 2*.

Figure 2. Questions from the satisfaction survey

Responses evaluated on 4-point Likert scale from strongly agree (1) to strongly disagree (4)

Are you satisfied with your participation in this group?

Before starting this workshop, did you have the feeling you needed to learn to manage your stress?

Responses evaluated on 5-point Likert scale from strongly agree (1) to strongly disagree (5)

Did you find at least one relaxation technique that suits you?

Did you manage to practice relaxation regularly outside of the sessions?

Do you feel like you manage your stress better daily?

Do you feel like you manage your anger better daily?

Do you feel like you have improved your relationships with others?

Are you sleeping better than before?

Do you have fewer anxious thoughts related to your responsibilities?

Do you ruminate less when a situation is unpleasant to you?

Do you take more time for to take care of yourself?

Do you feel like your quality of life has improved?

Do you feel less often overwhelmed by your responsibilities?

Do you have more desire to live?

Do you think that things can get better for you?

Do you have confidence in the future?

Do you have the impression that you are more successful in communicating with those around you?

Do you feel like things have changed for the better in your life?

Open-ended questions

Which sessions did you find the most useful and interesting? Why these ones?

Which sessions did you find the least useful and interesting? Why these ones?

If you were to improve this programme for the next few years, what would you suggest as an adaptation?

The semi-structured interviews followed the grid presented in *Figure 3* and included the questions regarding the acceptability of the delivered intervention as well as the perceived effects and usefulness of the proposed tools. The interviews also aimed to outline the unsatisfying aspects of the intervention and suggestions for improvement. The duration of interviews varied between 30 minutes and 1 hour. Participants also responded to socio-demographic questions regarding gender, age, number of children, education level, family situation, and professional situation.

Figure 3. The interview questions

Acceptability of the intervention

1. How did you experience participating in the workshops?

2. What do you think about the duration of the workshops, its format, proposed hours?

3. How did you experience the organisation and functioning of the group?

4. In your opinion, how clear and understandable was the information given in these workshops?

5. Did you manage to practice proposed exercises in between the sessions?

6. Do you think that information and tools given in the workshops were accessible? Can you give an example?

Satisfaction:

7. What were your expectations before starting the workshops?

8. Do you think that the workshops met your expectations?

9. What do you think about the content of the CBSM programme?

29. How satisfied you are with the CBSM programme (on the scale from 0 not at all to 10 completely)?

30. Would you recommend the CBSM programme to a friend (on the scale from 0 not at all to 10 completely)?

Usefulness and effectiveness of the intervention

10. Which information was useful to you?

11. Following the CBSM intervention, what was the impact of the programme on your general well-being?

12.What differences did you observe in daily life after the end of the programme?

13. Following the programme, which tools do you continue to use, practice? Can you give an example?

14. In which contexts do you use the information learned during the CBSM programme?

15. Did you observe any differences in the relationship with your children and/or with your partner?

16. Following the programme, what are your needs in terms of parental support today?

Long-term effects

17. Do you perceive any long-term effects of the CBSM programme?

18. In your opinion, how this programme helped you managing stressful situations and/or strong emotions?

19. For example, if your child experiences an overwhelming emotion, how do you handle the situation? Do you notice any difference in your attitude or in the way you express your own emotions?

20. For example, when you feel angry, how did you express it before the programme and how do you express it today?

21. Do you think that the intervention helped you to better understand your emotions? Can you give an example?

22. What do you usually do to regulate your emotions?

23. Following the intervention, do you feel that you better understand your children's emotions and reactions?

24. Do you observe the difference in the expression of your needs compared to before the programme?

25. For example, when you need to take time for yourself, how did you express it before the programme and how do you express it today?

26. Do you think that the intervention helped you to better identify your needs? Can you give an example?

27. Did you participate in the workshops before the first lockdown in March 2020? Do you think that the programme helped you in managing this period? Can you give an example?

28. Do you have any other comments to share about the workshops, their organisation, content, usefulness?

Both the satisfaction survey and semi-structured interviews intended to respond to the following research questions: (1) To what extent the format, frequency, duration, and schedules of the CBSM programme were convenient for the parents? (2) To what extent participants were satisfied with the delivered intervention? (3) Which aspects of the CBSM programme were satisfying and why? (4) Which aspects of the CBSM programme were not satisfying and why? (5) What were the long-term perceived effects of the CBSM programme? (6) How the CBSM programme could be improved? (7) What are participants' further needs in terms of parenting support?

Analyses

The quantitative data were analysed using the Jamovi statistical software (The jamovi project, 2020), and the qualitative thematic analyses were conducted using NVivo Qualitative Data Analysis Software (QSR International, 1999). First, the socio-demographic information was analysed. Second, we computed the mean scores and standard deviations for all 15 closed-ended questions from the satisfaction survey. Third, the two open-ended questions from the satisfaction survey regarding the most appreciated and the least appreciated sessions were qualitatively analysed to identify the emergent themes and the number of its occurrences among 46 participants. Further, the transcribed interviews were analysed to identify the themes and the number of occurrences of each theme related to the acceptability and satisfaction with the intervention as well as its effectiveness and usefulness across the 11 interviews. Content analysis was carried out through reflexive coding (Braun & Clarke, 2006). The content of each discourse or commentary has been coded into categories of meaning that are enlightening elements to answer the research questions. These inductive nodes were then gradually refined and organised until obtaining a thematic tree summarizing the issue in its full complexity (Miles & Huberman, 2017). Regarding the areas of improvement of the CBSM parenting programme

we qualitatively analysed both the responses from the satisfaction survey and from the interviews.

Validity procedures

To assure the validity of procedures we followed the recommendations proposed by Lincoln & Guba (1985). Indeed, we triangulated the methods using both quantitative and qualitative data which enables verification of the consistency of findings. We also triangulated the sources (i.e., 46 participants were invited to share their personal experience with the programme) and perspectives (i.e., study design and findings were reflected and interpreted by the researchers with different backgrounds). The research protocol and findings were debriefed with colleagues external to the study. In addition, although we observed the content saturation in the emergence of new themes, we attempted to broaden the patterns emerging from data analyses by outlining contradictory elements in participants' discourses.

Results

The sociodemographic characteristics of participants are presented in *Table 1*. Most participants were the mothers (93.5%) living in couple (84.8%) and having a full-time professional activity. Regarding the acceptability of the intervention all participants expressed their satisfaction with the intervention with the mean score of 3.80 (*SD* = .40) out of 4. The results of the acceptability questionnaire are presented in *Table 2*.

Table 1. Participants' demographic characteristics

	Satisfaction Survey		Interviews	
	N	%	N	%
Gender				
Female	43	93.5	11	100
Male	3	6.5	0	0
Education				
Less than a high school diploma	1	2.2	0	0
High school degree or equivalent	3	6.5	2	18.2
Bachelor's degree	10	21.7	3	27.3
Master's degree	28	60.9	5	45.4
Above Master's degree	4	8.6	1	9.1
Family situation				
Single (never married)	3	6.5	0	0
Living in couple (married, domestic partnership)	39	84.8	10	90.9
Divorced	4	8.7	1	9.1
Widowed	0	0	0	0
Professional situation				
Full time professional activity	20	43.5	5	45.4
Part time professional activity	12	26.1	4	36.4
Unemployed	14	30.4	2	18.2
Retired	0	0	0	0

Table 2. *Acceptability and satisfaction with the CBSM program*	n	M	SD
Responses evaluated on 4-point Likert scale ranging from strongly disagree (1) to strongly agree (4)			
Are you satisfied with your participation in this group?	46	3.80	0.40
Before starting this workshop, did you have the feeling you needed to learn to manage your stress?	46	3.50	0.66
Responses evaluated on 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5)			
Did you find at least one relaxation technique that suits you?	46	4.50	0.62
Did you manage to practice relaxation regularly outside of the sessions?	46	3.22	1.18
Do you feel that you manage your stress better daily?	46	4.02	0.61
Do you feel that you manage your anger better daily?	46	3.80	0.72
Do you feel that you have improved your relationships with others?	46	3.28	0.91
Are you sleeping better than before?	46	3.78	0.87
Do you have fewer anxious thoughts related to your responsibilities?	46	3.91	0.67
Do you ruminate less when a situation is unpleasant to you?	46	3.89	0.67
Do you take more time to take care of yourself?	46	3.72	0.89
Do you feel that your quality of life has improved?	46	3.70	0.84
Do you feel less often overwhelmed by your responsibilities?	46	4.60	0.50
Do you have more desire to live?	46	4.39	0.66
Do you think that things can get better for you?	46	3.89	0.71
Do you have confidence in the future?	46	4.00	0.82
Do you have the impression that you are more successful in communicating with those around you?	46	3.50	0.66
Do you feel that things have changed for the better in your life?	46	3.78	0.55

Note. Data collected from the 46 participants from the intervention group.

In addition, the analysis of the open-ended questionnaire showed that the topics of the sessions that were particularly appreciated by participants were: (1) the cognitive reframing (n = 25), (2) anger management (n = 25), and (2) the awareness of cognitive distortions (n = 20). For instance, cognitive reframing session helped participants to reduce ruminations (n = 10) and managing stressful situations (n = 10) through re-evaluation of the importance of the event (n = 3) and taking perspective from the situation (n = 4). Participants reported also that this session changed their way of thinking (n = 5) and helped them to be more positive (n = 1) and to find alternative thoughts and reactions (n = 4). The anger management session was found useful in terms of the regulation of strong emotions (n = 8) through the better understanding of one's needs, emotions, and automatic reactions (n = 6). Participants reported that this session had a direct impact on their anger expressions (n = 4). The themes of the sessions which were the least appreciated by the participants were: (1) stress responses (n = 10) and (2) social support (n = 7). The first session was the least appreciated by participants because for some this topic was already well-known (n = 2). Indeed, one participant expressed their impatience to go further and discover new tools (n = 1). Regarding the session on social support two participants reported already having a good social network, and one person expressed a disappointment with not identifying enough social support in their environment. All identified themes regarding the satisfaction with the content of the sessions and the number of their occurrences are presented in *Figure 4 and Figure 5*.
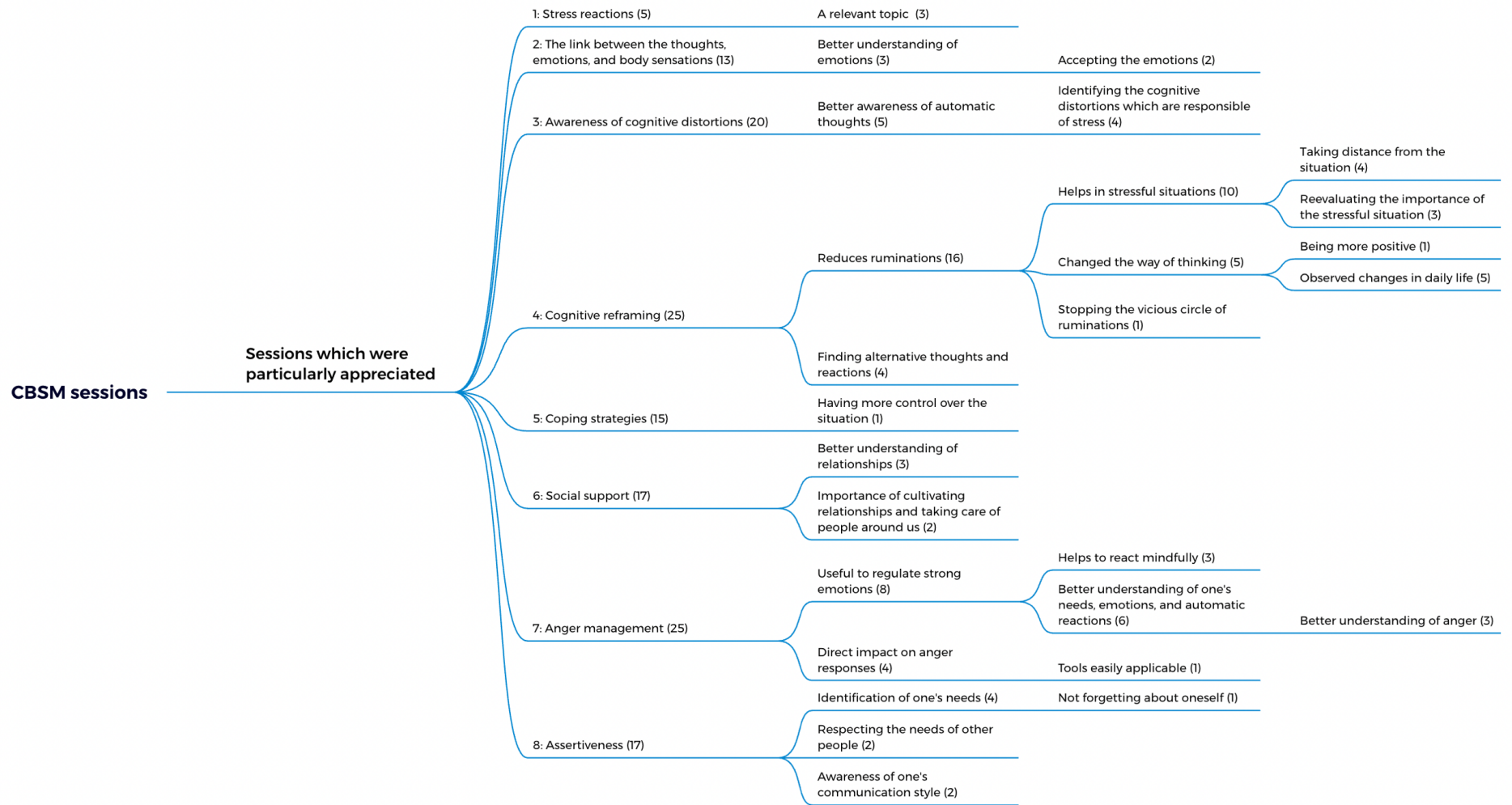
Figure 4. The most appreciated sessions of the CBSM programme based on the 46 responses to the satisfaction survey.
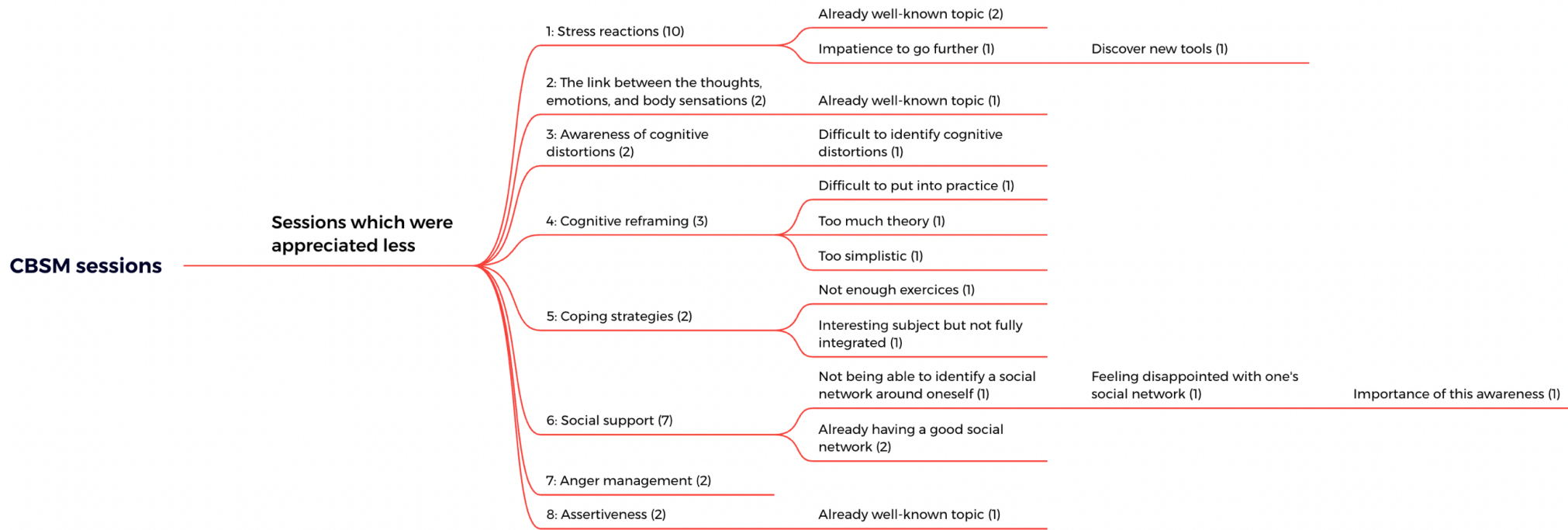
Figure 5. The least appreciated sessions as well as the suggestions for the improvement based on the 46 responses to the satisfaction survey.

Further, the thematic analysis of the interviews revealed both satisfying and unsatisfying aspects of the intervention. The satisfying aspects of the CBSM programme referred to the acceptability and satisfaction with the delivered intervention (e.g., duration, frequency, schedules, format, the content) as well as to the perceived effectiveness, usefulness, and long-terms effects.

Regarding the acceptability and satisfaction most participants ($n = 10$) expressed their satisfaction with the duration and frequency of the sessions (e.g., P1: *"In terms of rhythm it was good, 2 hours was good"*; P3: *"Two hours was good: less would be a little fair and more would perhaps be a little too long"*; P2: *"I found that the duration was appropriate and the number of workshops too. Two hours sometimes even wasn't enough, but it was fine"*; P9:*" The duration was good"*) as well as with the proposed choice of schedules (e.g., P8: *"The schedule suited me well"*; P7: *"The range of schedules offered was very wide, from memory I believe that there were workshops in the evening, in the morning, in the afternoon, almost every day or almost. At least 3 or 4 different days per week"*; P6: *"It was from 9.30 a.m., and it suited me well it made it possible not to speed too much in the morning, and not to get stuck in traffic. It was good"*).

All participants ($n = 11$) appreciated the group format for the richness of the exchanges within the group (e.g., P10:*"The exchanges were very rich"*; P9:*"The idea of being in the group brought a lot of richness"*; P8:*"The tools were interesting but I think that the strength of the workshops were the exchanges with other parents"*; P7:*"The support from the group, the exchanges, it's what I found the most important"*; P5: *"The exchanges with other mothers were very rich"*; P3:*"Meeting people from all completely different universes, that is to say people that we wouldn't meet outside this programme. That brings the richness in exchanges, the experiences of each other, the stories of each other's"*), contact with other parents (e.g., P2: "*It*

was nice to come over on Monday afternoon and see everyone"; P8: *"We really share similar experiences. Something that seemed like a mountain to us, everyone encountered it, and there are solutions"*; P1: *"We are all super different and it's nice because we still have things that brings us together"*), and the possibility to share and discuss personal experience (e.g., P11: *"It was really great to be able to talk to other mums"*; P9: *"There were beautiful exchanges"*). The group was also perceived as a resource place where participants felt the kindness and non-judgement from each other (e.g., P1: "*Even if we were not necessarily giving each other advice we still supported each other, trying to find solutions, appeasement, or whatever. The sense of being considered and cared by others was very precious"*; P11: *"For me these few sessions were a resource place"*; P2: *"The group really allowed me to take a step back and be for two hours without children in a quiet place"*; P3: *"There was a lot of kindness. It allows to find a support without judgement, without falling into self-criticizing"*; P7: *"It was a time that we give ourselves in the week"*; P9: *"These were moments that were zen. It was kind of break for me"*).

Participants also expressed their satisfaction with the psychologists providing the intervention. Participants appreciated the richness of the exchanges and new perspectives given by the psychologists (e.g., P10: *"It was very interesting, the different perspectives she brought in*") as well as the psychologists' attitude (e.g., P3: "*She always had an appropriate response to each situation"*; P3: *"There was a lot of kindness in her attitude"*; P11: *"I liked her a lot, she was gentle and calm. There was no judgement, and it was good for the mums to let go"*). Indeed, participants felt supported and welcomed by the psychologist e.g., P7: *"I had an impression that she welcomed each story"*; P3: *"She welcomed our emotions and then afterwards we could move on to the tools"*; P9: *"I think that it was really felt her support and energy"*; P1: *"I found her very competent"*.

In addition, all participants were satisfied with the content of the sessions and were eager to recommend the CBSM to other parents e.g., P1: "*It went beyond my expectations. I*

would really recommend this workshop"; P7: *"I can only recommend these workshops";* P2*"I think it's great that it exists;* P9: *I have already recommended it to friends. I said go for it, because it allows you to manage stress differently. It really allows to take care of yourself. It's a real help";* P3: *"All parents should go through it, it's super important. I think it's beneficial for a parent to do that";* P3*"This workshop should be given to everyone. everyone should do this at least once in their life, and early enough to learn how to manage emotions and stress";* *"I will recommend it to everyone";* P5: *"I recommended it to a lot of parents. Really whatever happens we will all find something positive by going there";* P6: *"I even think it's a pity that we don't see it at school, we don't talk about it enough. There is yoga, childbirth preparation classes, a lot of things but nothing on parental stress";* P4: *"I recommend it completely*".

Three participants outlined that the free access to the intervention made it easier to participate in the programme, e.g., P2: *"I think it's very good that it was offered like that for free to parents. I think it's great that it exists";* P6: *"In addition, it's free";* P4: *"I appreciated the free access because financially at that time I would not have been able to participate. Very clearly it would have been difficult".* All identified themes related to the satisfying aspects of CBSM intervention in terms of acceptability and satisfaction are presented in *Figure 6.*
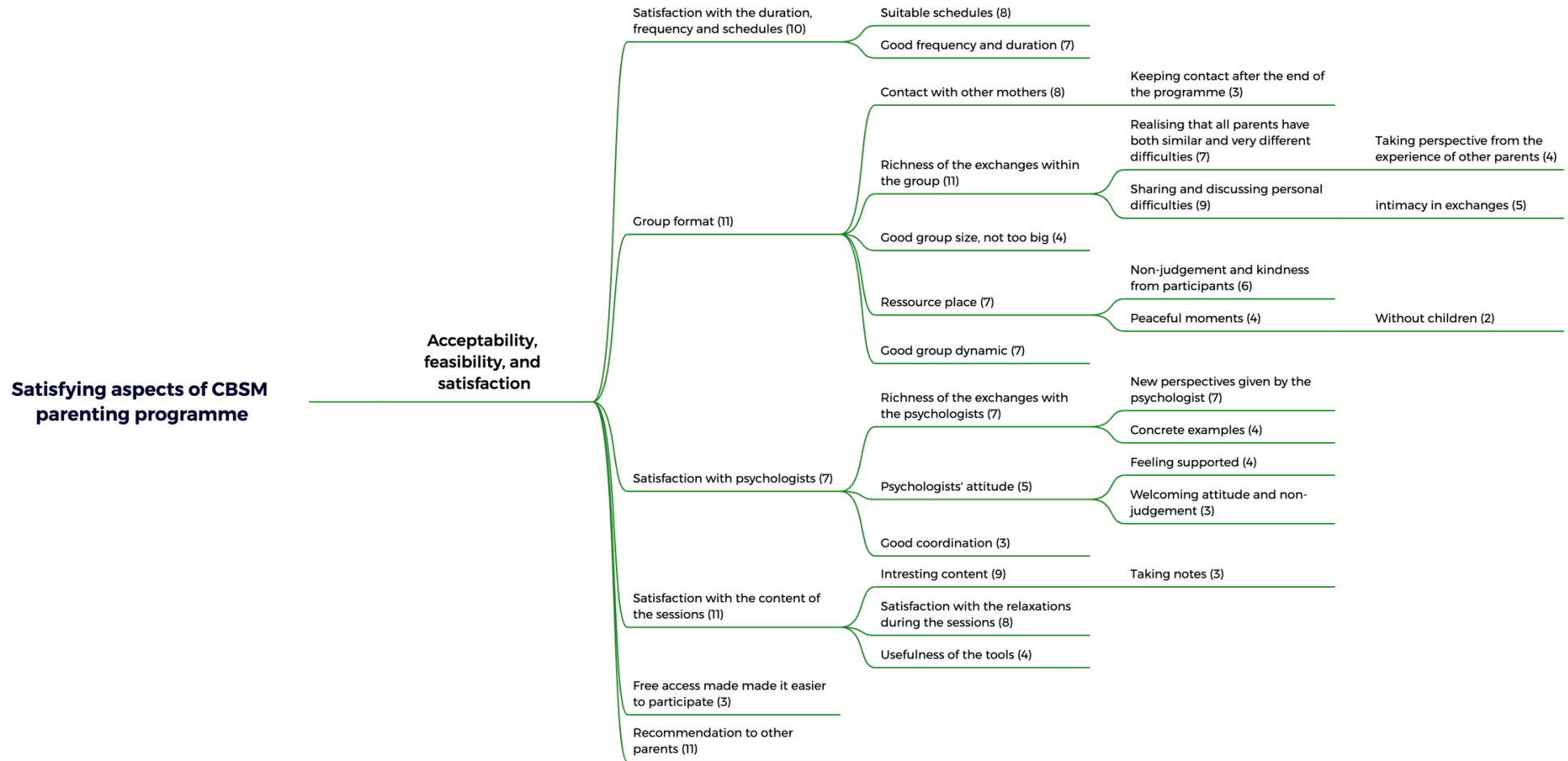
Figure 6. The satisfying aspects of the CBSM parenting programme regarding the acceptability, feasibility, and the satisfaction with the delivered intervention based on 11 individual interviews.

In terms of perceived effectiveness, usefulness, and long-term perceived benefits of the CBSM programme thematic analyses showed that all participants found the application of cognitive reframing useful and effective e.g., P11: *"I learnt to de-dramatize";* P3: *"Being aware of the stress symptoms, the distorted thoughts, all that, trying to rebalance and trying to see what was causing it in me";* P7: *"Simply having understood my mode of thinking gives me more serenity, it allows me to step back. I can see that my thoughts do not certainly correspond to reality").* Indeed, it helped that to take perspective and react better (e.g., P6: *"I know how to defuse with my automatic thoughts and take a step back";* P3: *"I analyse the situation, my emotions to react better"*) which contribute to better stress management (e.g., P4: *"I'm breathing deeply and tell myself: it's not my fault, it's not his fault. I manage to take this necessary step back";* P1: *"I've been able to step back and put things in perspective";* P9: *"I take time to breathe to relieve stress then I'm going to resume more calmly. I'm much less quickly in stress and I manage to this necessary step back"*) as well as to feel more present (e.g., P2: *"Instead of projecting myself into a horrible future, I'm more attentive to what I'm doing right now"*) and ruminate less (e.g., P6: *"There were things I was ruminating about before, like, what if one day my daughter is kidnapped, and what if this and that. I was thinking about this when I was going to bed at night, and I couldn't sleep. And now I don't do it anymore"*).

All participants reported the development of better emotional competencies in terms of better anger management (e.g., P11: *"I ask myself what I need, why do I feel the anger, what is that meaning, how I want to act?";* P10: *"I ask myself what made me angry? I try to make a kind of pause when the emotion comes and find out what triggered the emotion"*), better understanding and expression of one's emotions (e.g., P9: *"When I'm angry I tell my son that now I'm a little angry so at least it's expressed and I feel good after";* P5: *"I take time to introspect, to think about what's going on, what I feel, to welcome the emotion, and don't get*

overwhelmed. I think that I'm more attuned to myself"; P6: *"I manage to welcome the emotions, to take a closer look at them"*; P8: *"I explain calmly to my spouse why I'm tired, or nervous, or sad, or stressed"*; P2:*"I'm able to better understand, better regulate, and react to my emotions"*; P7:*"I'm a little more relaxed, and simply express my emotions rather than internalising them. I understand them better and I'm able to express them"*), as well as better understanding of child's emotions (e.g., P10: *"I take time to understand better their emotions"*; P9: *"If she needs to scream, well we let her scream. I can see that it's difficult for her too"*; P3: *"I try to verbalise his emotions to him. I verbalise mine too"*). In addition, four participants expressed that accepting difficult emotions and giving them place was a helpful skill developed during the programme, e.g., P1: *"When you realise that you have emotions and that you have to face them it's a bit trying"*; P3: *"It brought me an awareness of the emotions that arise and it's not always easy"*.

Participants expressed also that intervention contributed to their well-being (e.g., P3: *"It was a help. All these little things gradually improve my daily life"*; P1: *"It had a positive impact. I ask myself how I did before"*; P10: *"It did me a lot of good. It brought me a lot of things. I was really filled and resourced"*; P1: *"There was a positive effect on my general well-being. Workshops allowed me to do little thigs to get better"*) through a more self-compassionate attitude (e.g., P10:*"I removed the notion of a duty"*; P4:*"I feel less guilty about myself"*; P11: *"I'm less critical toward myself"*; P2: *"I think it also gave me the keys to the acceptance"*) and self-care (e.g., P1:*"It allowed me to take time for myself"*; P2:*"It allowed me to do little things to take care for myself and to be more available afterwards for my children"*; P5: *"I take time for myself. More than before"*; P10: *"I was doing too many things for them and not enough for myself"*; P9: *"This weekend, I'm going to spend the day with a friend, we're leaving the children with my husband. I pay attention to have moments that belong to me as a woman and not as a mother"*). The intervention contributed also to a better relationship with a

child (e.g., P1: *"My relationship with my son has improved. He really felt a change in our relationship too"*; P4: *"Our relationship really improved. I try to accept her choices and to help her in the choices she makes"*; P2: *"So now I tend to fight less, to yell less. I can see that when I shouted at my daughters, I damaged our bond a little. I improved on that"*) and spouse (e.g., P9: *"At the level of the couple it has certainly enabled us more confidence"*; P6: *"With my husband we are very attentive to the needs of the other and we are really on the co-parenting mode. The atmosphere has changed. We distributed responsibilities a little better and I feel him more present"*; P7: *"We listen to each other with my husband"*; P3: *"I try to express myself more and he understands my needs"*), better sense of self-efficacy (e.g., P6: *"Before I wasn't sure about my role as a mum. I questioned myself all the time. I really felt like a bad mother and never doing things right. That's what changed"*; P5: *"I trust myself as a parent. As a parent, you have to trust yourself"*; P9: *"I'm very proud of how I'm as a mother"*; P2: *"We are all going through difficult things and we have the resources within us to overcome them"*), and the perception of a social support (e.g., P5: *"I realised that I still had a huge network around me. It's quite easy to ask for help when you're surrounded"*; P6: *"Before I felt so alone, really a bit alone in the world, well afterwards, I realised that I was not alone, that there were still people to help me"*; P7: *"I solicit more my friends and family"*). In addition, participants reported using the learnt skills in preventive way (e.g., P11: *"I manage to put in place things we saw in the workshop"*; P6: *"I read my notes. I'm looking for different solutions and I'm trying to use them"*; P1:*"Having practiced allows me to better react when I'm under stress or tired"*) as well as in the contexts not related to the parenting (e.g., P2:*"I try to use what I learnt at the workshops not only for children, in fact for any situation"*; P3:*"It really gave me a better understanding of myself and my mode of functioning so that's a benefit that doesn't just concern parenthood, but whole life"*). For instance, at work (e.g., P4: *"At work I let go of certain things more easily"*) or with family and friends (e.g., P6: *"I manage to take things less to heart"*). The

themes and number of occurrences related to the intervention's effectiveness, usefulness, and
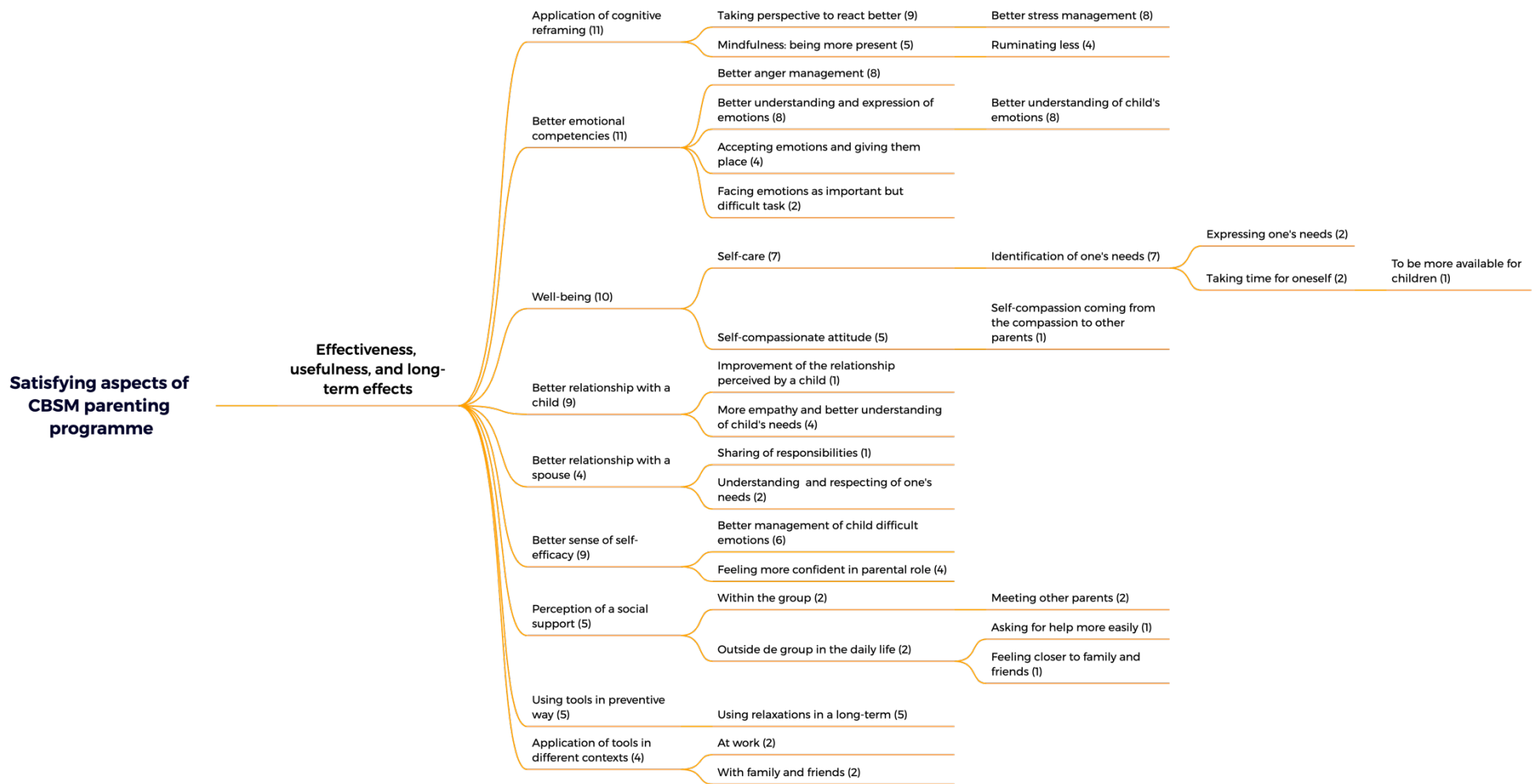
long-term effects are presented in *Figure 7*

Figure 7. The satisfying aspects of the CBSM parenting programme regarding the effectiveness, usefulness, and long-terms effects based on the

11 individual interviews

Regarding the areas for the improvement of the CBSM programme the thematic analyses identified unsatisfying aspects of the intervention, further needs in terms of parenting support, and the suggestions for the improvement. The aspects which were not satisfying were the quantity of the theoretical information (e.g., P2: *"I found that the explanations were a bit scientific. That's not really what suited me"*) and the fact that one person was taking too much space during the exchanges within a group (e.g., P9:*"She needed to tell her story, but it took up more space than the others so sometimes it was a bit unbalanced"; P1:"She was really in pain so often she monopolised the speaking time, and at the same time I think she really needed to talk"*).

The further needs in terms of parenting support after the end of the programme were: having a space to share parental experience, to be listened to, and to get help (e.g., P11: *"Having a space to speak if we have concerns or sharing of experiences. I think that it is always good to have feedback from other people"; P3: "Something like theatre with exercises where we can express, release emotions"; P5: "Something in the long term would be good"*), to organise the same workshops also for children and teenagers (P1: *"Well I wonder if it's not my son who need something. Maybe the same thing for kids might not be bad"*) as well as to organise the workshops specific to the relationship with a teenager (e.g., P9: *"I realise that there will undoubtedly be a stage where I will need other benchmarks. Screens, smartphones: do we leave the access to it or not? The question of sexuality, how to talk with her about it early enough but at the same time not too soon? These are the questions for which we're going to seek information today"*.

Regarding the suggestions for improvement of the CBSM intervention we analysed both the responses from the satisfaction survey and from the interviews. Participants outlined that they would appreciate it if the sessions were longer to have more time for the discussions (e.g.,

P5: *"I think it would be good if there were fore follow-up. That we could meet again twice a year to see how things evolve"*). They also suggested having more follow-up meetings and to keep in touch in between the sessions for example using social media group, having a personal coaching or receiving a newsletter with reminders (e.g., P3: *"I think we all might have wanted to extend the moment a bit. Hence maybe a social media group would be a good idea"*; P11: *"A newsletter once a month or so would be great"*; P2: *"A newsletter with tips, things to put in place"*). Participants would also appreciate more role play and more parental tips during the sessions (e.g., P11: *"Maybe more exercises like role play"*). Two participants expressed that they would appreciate it if there were more fathers in the group (e.g., P5: *"There was no man in our group. It was a shame"*; P11: *"Having dads in the group might have been good"*). Other suggestions regarding the organisation of the intervention were to propose: more schedules for example later in the evening after 7 p.m. for the parents who work, cosier environment with comfortable chairs and the equipment for the relaxations, and coffee breaks. All themes with their relevant number of occurrences relating to the areas for the improvement of the CBSM programme identified through the satisfaction survey and interviews are presented in *Figure 8*.
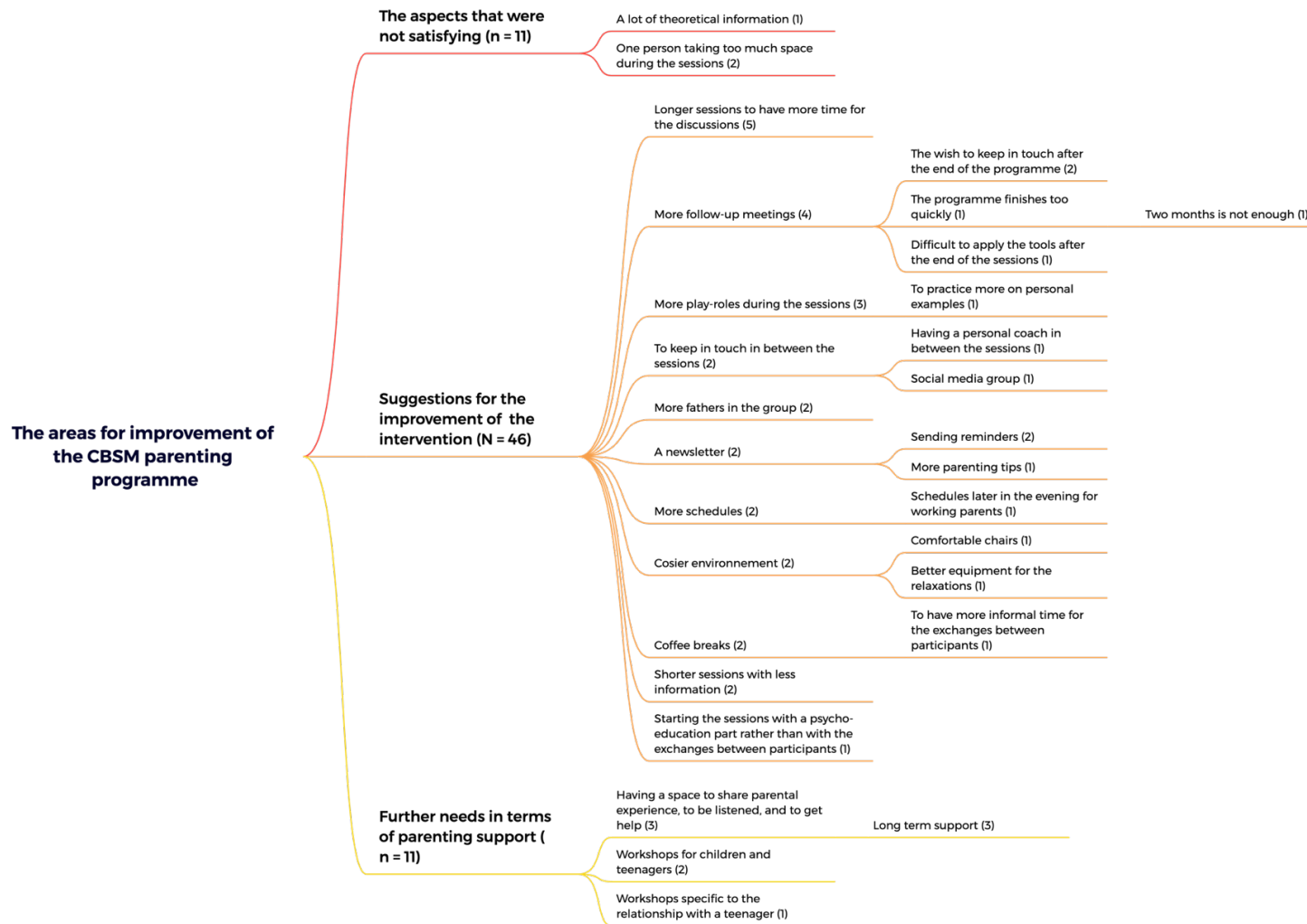
Figure 8. The areas for improvement of the CBSM parenting programme based on the 11 individual interviews.

Discussion

The aim of the present study was to assess the acceptability of the CBSM programme as well as the perceived effects and usefulness of the delivered intervention using both quantitative and qualitative measures.

The findings from the survey showed that participants were satisfied with the programme. On average they felt less often overwhelmed by their responsibilities, had less anxious thoughts and ruminations, and better managed stress and anger. They also reported having more confidence in the future, more desire to live, and taking more time for oneself. In addition, participants observed positive changes in their daily life, improved quality of life, and of their relationships with others. These findings are in line with previous studies showing that CBSM programmes contribute to the reduction of stress, ruminations, anxiety, as well as improvement in quality of life (Penedo et al., 2004; Tang et al., 2020).

Further qualitative analyses revealed that cognitive reframing and anger management sessions were particularly appreciated. Participants observed a significant reduction in ruminations which in turn enabled reduction of stress by taking distance from the situation and revaluating its importance. In addition, the cognitive reframing contributed to the observed changes in daily life by being more positive and changing the way of thinking. The anger management was found useful in terms of emotion regulation: it helped to react more mindfully and better understand one's needs, emotions, and automatic reactions.

The sessions on stress responses and social support were considered by some participants to be least appreciated because the subjects were already well-known and therefore less relevant. However, for other parents these sessions were considered as the most important as they enabled understanding of the mechanisms of stress reactions, to develop the self-awareness, and to find the balance between stress and resources. Indeed, respectively 5 and 17

participants reported that the sessions on stress responses and social support were one of the most useful ones. The social support session contributed to a better understanding of relationships and outlined the importance of cultivating them and taking care of people around them. This shows that parents have different needs and expectations when it comes to the content of the intervention. Indeed, this is a limitation of manualised interventions which propose the same content to all participants regardless of their difficulties and expectations. This could be addressed by a person-centred approach which gives the opportunity to assess and respond to individuals' specific needs or dysfunctional psychological mechanisms rather than delivering the same content of the intervention to all participants (Márquez-González et al., 2020). Without reducing the intervention to a case-by-case basis, recommendations for an intervention that retains a degree of flexibility allowing the professional to adapt the programme to the audience (targeted blocks according to needs/resources profiles) and to their practice can be considered (e.g., tailored manuals, algorithms, or computer programmes; Beck et al., 2010).

On the other hand, further findings from our study outlined that the heterogeneity of parents within the groups was appreciated, and although the parents had different backgrounds and daily struggles, they still shared many common views. Possibly such differences contributed to the richness of the exchanges between the parents, group dynamic, and enabled perspective taking on one's personal situation based on the experience of other participants by realising that all parents had both similar and very different difficulties.

Indeed, regarding the acceptability of the delivered intervention the findings from the interviews showed that all participants appreciated the group format of the intervention which facilitated the contact with other parents and the sharing of personal experiences. In addition, the group was considered as an important support where participants spent peaceful moments without children, learnt new skills, and practices, and were introduced to useful tools. Participants were also satisfied with the duration, frequency, and proposed schedules, the

content of the CBSM sessions, the psychologists who delivered the intervention, and the free access to the programme. This suggests that the intervention was well-accepted by participants and responded to their needs and expectations which is coherent with the fact that all participants declared that they would recommend the programme to other parents. These elements of the intervention meet with positive consensus and can be maintained in the systematised programme.

The qualitative analysis of the interviews enabled understanding of participant views of the satisfying aspects of the CBSM programme in terms of usefulness and perceived long-terms effects. All participants continued to apply cognitive reframing tools and declared having better emotional competencies. The intervention contributed also to the parents' well-being, more self-compassionate attitude, and a better sense of self-efficacy in parenting: parents felt that they were able to better manage their child's difficult emotions and were more confident in their parental role. These qualitative findings emerged from the interviews are consistent with quantitative data from the satisfaction survey and results of the main study (see *Article 2*). Parental self-efficacy is a predictor of positive parenting practices and both parents' and children's mental health (Coleman & Karraker, 1998) and self-compassion contributes to the prevention of parental burnout (Paucsik et al., 2021).

Participants also reported the improvement of their relationship with their child, with a spouse, and having better awareness of their social support network. More precisely parents reported having more empathy toward their children and better understanding of their needs. Burnt out parents emotionally distance from their children, lack empathy toward them, and have a tendency to act automatically as they are not available to respond to their child's emotional needs (Roskam et al., 2018). In addition, perceived social support and marital satisfaction were found to be negatively associated with parental burnout (Mousavi, 2020; Szczygieł et al., 2020;

Yamoah, 2021). Future research should attempt to establish to what extent social support may prevent parental burnout.

Regarding the areas for the improvement of the CBSM programme the thematic analyses identified unsatisfying aspects of the intervention, suggestions for the improvement, and further needs in terms of parenting support. For instance, participants outlined that the sessions could have been longer to have more time for the discussions as well as to integrate more role play exercises during the sessions, keep in touch in between the sessions, receiving a newsletter with reminders, and have more follow-up meetings. This highlights the fact that the content and the organisation of the programme can be further revised to propose more practical exercises and the possibility to stay in contact both during and after the end of the programme. It was also suggested to integrate more fathers in the groups, to propose more schedules especially later in the evening (after 7 p.m.) for the working parents, to propose coffee breaks, and a cosier environment. Moreover, parents expressed that they would like to continue to have a space to share their parental experience, to be listened, and to get help when needed. They expressed the need for support in more specific areas such as the relationship with a teenager. All these suggestions should be taken into consideration in future studies and clinical practice.

In conclusion, the present study contributed to better understanding parents' experience with the CBSM programme. The findings showed positive outcomes in terms of acceptability of the research protocol as well as the satisfaction and perceived effects of the programme. Some areas for improvement were identified to ameliorate future programmes as well as clinical practice.

Rationale from Article 3 to Article 4: Second wave positive psychology

Chapters 2 and 3 present the findings related to the evaluation of the CBSM programme for parental burnout reduction and prevention both in terms of its effectiveness and acceptability. Chapter 4 is dedicated to the study evaluating second wave positive psychology Coherence, Attention, Relation and Commitment: CARE programme (Shankland et al., 2018).

Positive psychology is a field of research dedicated to the understanding of conditions and processes which contribute to the flourishing and optimal functioning of individuals, groups, and institutions (Gable & Haidt, 2005). In contrast to the psychopathological approach which focuses on the reduction of symptoms, positive psychology research and interventions aim to promote health and well-being (Seligman & Csikszentmihalyi, 2000). Importantly, the aim of positive psychology is not to diminish the importance of the psychopathological approach but rather to complement it with the knowledge on human resilience, strengths, and growth (Gable & Haidt, 2005).

The first studies in the field of positive psychology (i.e., the first wave) strongly focused on fostering positive emotions considering them as inherently desirable (Seligman & Csikszentmihalyi, 2000). Indeed, in the PERMA Model, Seligman (2011) outlined that positive emotions, engagement, positive relationships, meaning in life, and accomplishment are the pillars of flourishing and well-being. Although the PERMA model combines both eudemonic (i.e., related to the meaning and development of one's potential) and hedonic (i.e., related to the satisfaction of desires and positive emotional states) components of well-being the valorisation of *positivity* contributed to the *pursuit of happiness* movement and a cultural expectation to be optimistic and avoid uncomfortable emotions. Yet, vulnerability and appraisal states of difficult emotions should not be avoided but rather considered as complementary aspects of human experience and not classified with a positive or negative valence (Lomas,

2016). This statement and underlying critics of the *tyranny of positivity* initiated the second wave of positive psychology (Wong, 2017).

The second wave of positive psychology recognises that the term *positive* is ambiguous and that "the development of character strengths and resilience may benefit from prior experience of having overcome negative conditions" (Wong, 2011, p.70). In that sense, it appears unnatural to classify emotional states as positive or negative: they should be rather considered as symbiotic and inseparable from human experience. In this light, second wave positive psychology aims to consider both benefits and risks of phenomena previously categorised as positive or negative recognising that both positive and negative traits may have positive and negative outcomes (Wong, 2011). Thus, in contrast with the first wave positive psychology which was oriented toward happiness the second wave of positive psychology is oriented toward the meaning (Frankl, 2006; Wong, 2017).

The CARE group programme **(**Coherence, Attention, Relation et Commitment; (Shankland et al., 2018) is based on evidence-based techniques drawn from positive psychology research. Positive psychology interventions aim at enhancing individuals' sense of accomplishment, meaning, adaptation, and resilience contributing to person's well-being (Seligman & Csikszentmihalyi, 2000; Sin & Lyubomirsky, 2009). In contrast to the CBT approach which is focused on the treatment of specific symptoms or dysfunctions, positive psychology interventions focus on the development of psychological flexibility and resilience (e.g., capacity to take a distance from certain situations, modify one's judgment, mobilise one's resources, Shankland, 2014; Shankland et al., 2018). Moreover, positive psychology interventions are likely to contribute to one's self-esteem and the sense of self-efficacy by identification and practice of character strengths and competencies. The group context of CARE programme favours the quality of relationships between the participants, which contribute to

the intervention efficacy, but also more widely in family and every-day life context within the family, at work, with friends, which in turn contribute to enhanced sense of well-being.

The CARE programme aims over all to develop in participants three central skills which lead to increased psychological flexibility (i.e., wide range of adaptative processes and abilities such as openness, non-judgemental awareness, shifting mindsets and copings strategies, maintaining the balance between different life domains, as well as committing to the actions congruent with one's values; Kashdan & Rottenberg, 2010); attentional flexibility; kindness toward oneself, others, and the environment; and involvement in meaningful activities. These competencies are developed throughout the 8 sessions of the program. Non-judgemental awareness is a pillar of both psychological flexibility and mindfulness and involves the acceptance of the experience as it is also while facing difficulties (Birtwell et al., 2019; Hayes & Plumb, 2007). While attentional flexibility is the ability to shift attention from one aspect of the situation to another which increases for example through the practice of the reorientation of the attention towards satisfying aspects of everyday life (e.g., paying attention to the strengths and satisfying aspects of oneself, others, and their environment) and trying to enhance these strengths in oneself and others. The CARE programme aims to enhance a kind and caring attitude toward oneself, others, and the environment by initiating and enhancing "pro-social" behaviours (i.e., aiming to take care of others), with an objective to improve the quality of relationships with others and their environment, develop altruism, and self-compassion, acceptance, and a non-judgemental attitude toward the limits of oneself and of others, while discovering new possibilities to make them evolve. In that sense, the CARE programme enhance basic psychological needs of competence, autonomy, and relatedness (Deci & Ryan, 2008). Similarly, the intervention aims at enhancing involvement in the meaningful activities and commitment to actions that correspond to one's values and basic needs. Thus, participants learn to identify their values to put in place actions committed to serve their values.

Burnout can be considered as a consequence of loss of sense of engagement (Maslach & Leiter, 1997). From a positive psychology perspective, both recognising one's difficulties and enhancing a person's strengths, fostering one's resources through positive human experiences and fulfilling goals could be more effective in terms of prevention and treatment then focusing solely on person's dysfunctional cognitions, emotions, and behaviours (Peterson & Seligman, 2003; Seligman & Csikszentmihalyi, 2000). In other words, the positive psychology approach outlines the importance of acceptance, personal resources, strengths, and values, all while challenging adversity.

Given that parenting stress is likely to deplete the person's resources, leading to deleterious consequences for the entire family, positive psychology interventions appear to be adapted preventive measure and treatment for parental burnout. To evaluate the efficacy of the positive psychology intervention for parents, we have adapted the original CARE programme to the context of parental burnout adding the psychoeducation elements on risk and protective factors of parental burnout based on Roskam and Mikolajczak (2018) recommendations for parental burnout treatment. The CARE programme manual is available under request. Chapter 4 overviews the results of a clinical trial evaluating the effectiveness of the CARE programme in terms of parental burnout reduction.

Article 4: Positive psychology in the prevention and reduction of parental burnout: the CARE programme

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Highlights

- The first study to assess the effectiveness of second wave positive psychology CARE programme for parental burnout prevention and treatment.

- Compared to the control group there was a significant reduction of parental burnout within the intervention group, with a large effect size.

- Second wave positive psychology practices were found beneficial for parents suffering from parental burnout or at risk of parental burnout.

Abstract

Positive psychology interventions aim to enhance individuals' resilience, mental health, and well-being. This study (N = 34) aimed to assess whether the CARE (Coherence, Attention, Relationship, Engagement) programme tailored to enhance parental strengths and resources may contribute to the prevention and reduction of parental burnout. We tested the hypothesis that, compared to a waiting-list control group, parents attending the intervention would present lower scores of parental burnout post-intervention (T2). The results of the study showed that compared to the control group the CARE programme contributed to the significant reduction of parental burnout within the intervention group, with a large effect size ($F(1, 32) = 7.74$, $p = .01$, $\eta^2_p = .20$). Within the CARE group the severity of parental burnout significantly decreased ($t(32) = 3.87$, $M_{diff} = 16.71$, $SE_{diff} = 4.32$, $p = .01$), whereas there was no statistically significant difference in parental burnout symptoms between T1 and T2 among the participants from the control group ($t(32) = -.07$, $M_{diff} = -.29$, $SE_{diff} = 4.32$, $p = 1.00$). In conclusion, the findings of the present study suggest that the CARE programme may significantly contribute to the reduction of parental burnout. However, these results need to be replicated with a larger sample of parents including a higher proportion of fathers.

Keywords: second wave positive-psychology, parental burnout,

Introduction

Positive psychology interventions aim to enhance individuals' resilience, mental health, well-being and optimal functioning (Gable & Haidt, 2005). In contrast with the psychopathological approach which focuses on individual deficiencies and their consequences (i.e., pathology), positive psychology aims at highlighting the positive aspects of an individual's functioning and focuses on the person's present resources (e.g., character strengths, personal values, satisfying relationships), and their environmental resources. Positive psychology interventions aim to increase psychological flexibility through the development of positive emotions which reduce the negativity bias and increase creative problem solving, as underlined by the Broaden and Build model of positive emotions (Fredrickson, 2001). This orientation of one's attention towards the positive aspects of life can be developed through various exercises which have been validated in past research such as writing a list of three good things that happened during the day or gratitude journaling. Focusing attention on rewarding aspects of life not only contributes to buffer against the negativity bias, but also to increase (a) pleasant emotions, (2) engagement, (3) and the sense of meaning in life, which underlie the sense *happiness* (M. E. P. Seligman et al., 2005). Thus, positive psychology interventions attempt to identify participants' strengths and values, to engage in meaningful actions which are in line with their values, and to focus attention on gratifying aspects of life. Furthermore, the practices aim at focusing attention on the strengths of significant others and of the environment, and to cultivate meaningful relationships.

Past research has shown that positive psychology programmes can achieve significant reduction, with small to medium effect size, in depressive, stress, and anxiety symptoms as well as the increase in subjective and psychological well-being, quality of life, and character strengths in general and clinical populations (for the meta-analyses see: Bolier et al., 2013; Carr et al., 2021; Sin & Lyubomirsky, 2009). In addition, positive psychological interventions have

shown their effectiveness in different contexts: for example, in students' and teachers' well-being (Shankland & Rosset, 2017), adolescents' mental health, self-esteem, and self-efficacy (Shoshani & Steinmetz, 2014; Waters, 2020). However, to our knowledge, positive psychology programmes have not been evaluated in the context of parental burnout.

In the present study, we developed a group-based positive psychology intervention for the prevention and reduction of parental burnout. This approach is likely to be of benefit for parents who are at risk or who experience parental burnout as it helps to identify and make use of available resources and one's character strengths to better cope in adverse situations. In addition, a positive psychology approach enhances the sense of self-compassion and the engagement in the meaningful actions which can buffer against self-critical thoughts and neglectful or violent reactions (Shankland et al., 2020). In contrast to typical interventions aiming to reduce parental burnout symptoms this approach guides the parents on to retrieve the sense of accomplishment and satisfaction in parenting as well as to enhance emotional bonds between parents and children (Seligman & Csikszentmihalyi, 2000).

Indeed, parental burnout is defined as a consequence of an imbalance between one's strengths and the factors of parenting stress (Mikolajczak et al., 2019; Mikolajczak & Roskam, 2018). It is characterised by four groups of symptoms: (a) physical an emotional exhaustion, (b) emotional distancing from the child, (c) lack of sense of accomplishment and feeling fed-up in parental role, (d) perception of oneself as not being a good parent anymore (Roskam et al., 2018). These symptoms increase the risk of deleterious consequences for the parents themselves (e.g., substance abuse, escape ideations, suicidal thoughts), couples (e.g., marital conflicts), and children (e.g., violent and neglectful behaviours toward children; Mikolajczak et al., 2018). As such, parental burnout constitutes an important threat to family well-being. More positively, it can be prevented and treated through interventions tailored either to decreasing parenting stress factors or increasing parental resources. A recent meta-analysis

identified different group-based interventions as effective in achieving these goals (e.g., cognitive behavioural therapy, CBT; mindfulness; Acceptance and Commitment Therapy, ACT; psychoeducation, active listening, and programmes aiming to balance parental stressors and resources; Urbanowicz et al., under review). However, to date no positive psychology programmes has been evaluated in this context.

This study aimed to assess whether an intervention tailored to enhance parental strengths could contribute to the prevention and reduction parental burnout. We adapted the CARE programme (Coherence, Attention, Relationship, and Engagement; Shankland et al., 2020) to the context of parenting aiming to enhance parental resources in the prevention of parental burnout. The CARE programme is an 8-week group intervention based on scientifically validated practices identified from positive psychology research. The CARE parenting programme aims to develop greater psychological flexibility by modifying attitude and habitual automatic behaviours, especially in parenting. The programme is designed around three axes: (1) an reorientation of attention towards satisfying aspects of everyday life, about oneself, others, and the environment; (2) the development of an attitude of gratitude, compassion, and non-judgment toward oneself and others; (3) the development of engagement in actions that correspond to one's values and basic psychological needs such as the need for social connectedness, a sense of competence, and autonomy (Ryan & Deci, 2001; Shankland et al., 2020).

The present pilot study was a part of a larger preregistered clinical trial for parental burnout prevention and reduction (see *Methods* section). However, based on the power analyses in this pilot study we decided to test only the main hypothesis that, compared to the waiting-list control group, parents attending the CARE programme would present lower scores of parental burnout following the intervention. The additional preregistered mediation and

moderation hypotheses will be tested in a subsequent main study to be carried out on the larger sample of participants.

Methods
Participants

In total 34 parents, with a majority of mothers (97 %), participated in the study. The mean age of participants was 37 years ($SD = 5.12$), and the median number of children was 2 ($M = 1.92$, $SD = .89$). All participants met the following inclusion criteria: (a) being parent of at least one child living in the same household at the time of the study, (b) being over 18 years old, and (c) having signed an informed consent for participation in the study. Participants attended the CARE programme for free and received no financial incentive for their participation in it.

Procedure

This pilot study was part of a larger parental burnout prevention and reduction research project having received approval from the French national ethical committee board (N°: 19.02.06.44810). The study was preregistered on the Open Science Framework (https://osf.io/f5c7b/?view_only=22472fb65a344e7cb52e948d2b39e0ff). In the current pilot study participants followed the same procedure as in the preregistered main study. However, based on power analyses we were not able to test all preregistered hypotheses, i.e., the mediation effects of stress, abstract ruminations, unconditional self-kindness, and emotion regulation on parental burnout reduction. Indeed, due to the outbreak of the Covid-19 pandemic many intervention groups were cancelled, and we did not reach the expected number of participants. These hypotheses will be tested in a subsequent main study carried out on an adequate sample of parents on the national level in France.

We recruited participants through announcements on social media and community-

based organisations working with parents and children. Prior to assignment to the intervention and control groups, parents participated in a meeting where they were informed about the study's protocol and the right to withdraw from it at any time. All participants received a written information sheet and signed the informed consent.

Parents who were available to attend one of the proposed CARE groups could immediately assign themselves to an intervention group running at a time of their choice. Parents who could not attend the intervention but who expressed an interest to participate in subsequent CARE groups were assigned to the waiting-list control group. In the light of the ethical implications associated with the parental burnout (i.e., increased rates of child abuse and neglect, suicidal risk; Mikolajczak et al., 2018) the self-selection of participants was preferred to random allocation. This methodological choice enabled the immediate assignment to the intervention for all parents willing and able to attend.

Parents from the intervention and waiting-list control groups completed the same pre-test and post-test measures via an online questionnaire before and at the end of the 8-week intervention. The flowchart of participation rates is presented in *Figure 1*.
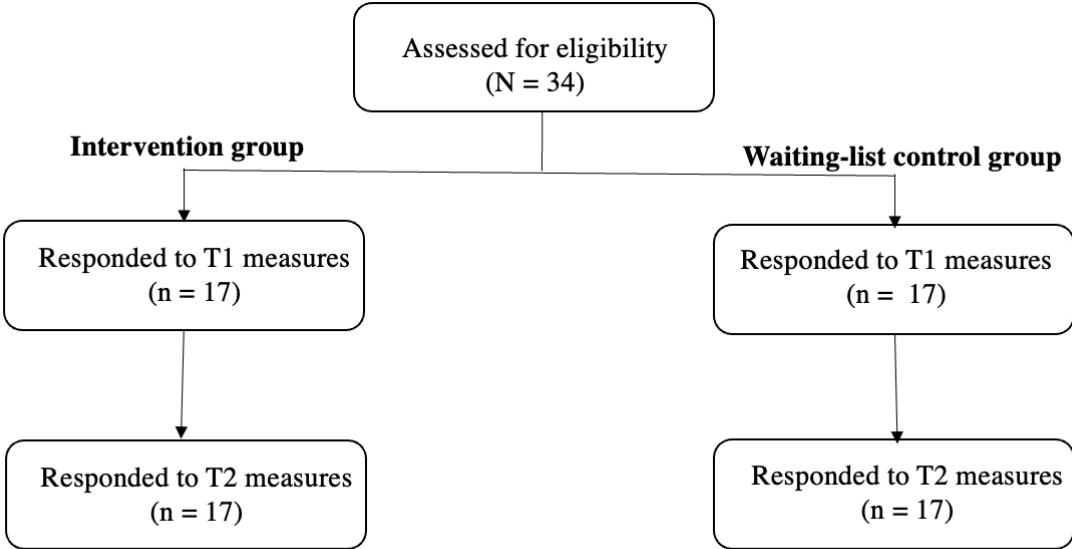
Figure 1. Flowchart

Intervention

The CARE parenting programme (Coherence, Attention, Relationship, Engagement; Shankland et al., 2020) is a group-based intervention delivered by trained psychologists. The intervention comprises eight 2-hour sessions taking place once a week as well as two follow up sessions: one month and three months after the end of the programme. We adapted the original CARE programme (Shankland et al., 2020) to the context of parental burnout based on guidelines for parental burnout treatment (Roskam & Mikolajczak, 2018). The CARE programme integrates the scientifically evaluated practices issued from positive psychology research as well as the techniques of the solution focused approach, e.g., scaling questions, exception-seeking questions, and coping questions (Garcia, 2019). A summary of the sessions content is presented in Table

Table 1. *Overview of the CARE programme protocol.*

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8
Theme	Negativity bias	Savouring of the present moment	Values and engaged actions	Environmental and character strengths	Relationship with a child	Relationship with the co-parent / partner	Cultivating gratitude	Summary of the programme
Practices	-Game highlighting the consequences of negativity bias in contrast to attention focusing on the satisfying aspects of the same experience. -Identifying 5 satisfying experiences then in pairs telling the story of one of them to another person.	-The raisin exercise: exploring the raisin with all 5 senses. Invitation to cultivate the similar attitude of curiosity, openness, and non-judgement in the interaction with children. - Identifying one's character strengths.	-The *Smallest Possible Step* practice: guided visualisation to identify personal values followed by the identification of the smallest possible action to engage toward the identified values. -Writing of a compassioned letter toward oneself?	-Perceiving the environment's strengths: orientating the attention toward appreciated aspects of the environment. -Using one's character strengths to cope with adverse situations.	-Focusing attention on the satisfying moments with one's children. -Identifying child's strengths: the things the child does with confidence and authenticity, what comes to them naturally, what they learn easily, and what they really like.	-Identifying the qualities, values, and preferences of the co-parent. -Exercise which focuses on one's reactions to positive events: *What do I do with your good news?*	-Identifying important moments and people encountered in live. Choosing one person to whom one would like to say thank you. Writing the gratitude letter to this person. -The gratitude journal	-Review of participants' experiences and discoveries since the beginning of the programme. -What is the most important thing they would like to keep after the end of the programme?
Objectives	Enhancing the psychological flexibility by orientating the attention toward satisfying aspects. Enhancing the state of well-being while recalling and sharing positive experiences with another person.	Enhancing the state of presence. Awareness of one's character strengths. Reduction of automatic responses by acting with consciousness.	Identifying one's personal values. Implementation of engaged actions in line with one's values. Enhancing the self-compassionate attitude.	Enhancing psychological flexibility by orientating the attention toward satisfying aspect of the environment. Mobilisation of the character strengths while facing a difficult situation.	Enhancing psychological flexibility by orientating the attention toward child's strengths. Savouring of the quality moments with one's children.	Enhancing one's ability to share positive experiences of other people in an active and constructive way.	Enhancing the state of gratitude. Invitation to practice gratitude with children.	Implementation of the motivation to continue the practices after the end of the programme/

Measures

The following demographic variables were measured: age, gender, number of children, child's current or past diagnosis of chronic illness or developmental problem, participants' education level family situation, and professional situation. In addition, participants completed validated scales for the assessment of: (1) parental burnout, (2) depression, (3) anxiety, and (4) stress symptoms, as well as (5) abstract ruminations, (6) emotion regulation, and (7) self-kindness. In the present study we analysed the demographic characteristics of participants, as well as the severity of parental burnout before and after the intervention.

Parental burnout

Parental burnout severity before and after the intervention was assessed by the *Parental Burnout Assessment* (PBA; Roskam et al., 2018). The PDA comprises 23, 7-point Likert-scale items, measuring four dimensions of parental burnout: (a) physical and emotional exhaustion (e.g., Item 4: "I have zero energy for looking after my children"), (b) emotional distancing with a child (e.g., Item 20: "I'm no longer able to show my children how much I love them"), (c) feeling of fed-up as a parent (e.g., Item 16: "I can't take being a parent any more"), (d) the contrast in perception of how the parent used to be and how they perceive themselves at the moment associated with a feeling of not being a good parent anymore (e.g., Item 13: "I tell myself that I'm no longer the parent I used to be"). There are five cut-off scores to assess the risk and severity of parental burnout: (1) scores below 30 show no risk of parental burnout; (2) scores between 30 and 45 suggest a low risk of parental burnout; (3) scores between 46 and 60 suggest a moderate risk of parental burnout; (4) scores between 61 and 75 show a high risk of parental burnout, and; (5) scores above 75 identify severe symptoms of parental burnout (Roskam et al., 2018). In our sample, the PBA scale presented an excellent internal consistency with a Cronbach's $\alpha = .97$ at T1 and $\alpha = .99$ at T2.

Statistical Analyses

Regarding statistical analyses, we first checked for demographic differences between participants from both groups using one-way ANOVA differences in gender, family situation, professional occupation, education level, and number of children using χ^2 tests for independence. Second, we calculated the prevalence of parental burnout according to the five cut-off scores recommended by (Roskam et al., 2018). Third, to check whether participants from CARE and control groups significantly differed on PBA scores at T1 we applied a non-parametric Mann-Whitney U-test for independent samples. The choice of a non-parametric test is justified by the fact that in general population parental burnout scores do not follow a normal distribution (Roskam et al., 2018). We tested our main hypothesis that compared to the control group parents attending the CARE groups would present lower scores of parental burnout at T2 with the repeated measures ANOVA.

Results

There was no statistically significant difference in mean age ($F(1, 32) = .01$, $p = .98$) between participants from CARE group (M = 37.3, SD = 5.07) and control group (M = 37.3, SD = 5.34). In addition, there was no statistically significant difference between the two groups in terms of gender ($\chi^2(1) = 1.03$, $p = .31$), number of children ($\chi^2(3) = 3.66$, $p = .30$), education level ($\chi^2(4) = 7.60$, $p = .107$), and family situation ($\chi^2(1) = .00$, $p = 1.00$). However, there was a statistically significant difference between the two groups in terms of professional situation ($\chi^2(2) = 6.61$, $p = .04$). The total of 34.6% of participants reported having one child, 46.2% of participants had two children, 11.5% had three children, and 7.7% had four children or more. Regarding child's characteristics, 14.7% of parents reported the child's current diagnosis of chronic illness or developmental problem, 2.9% of parents reported a past child's diagnosis, and 82.4% of parents reported no current diagnosis of child's chronic illness or developmental disorder. The

prevalence of parental burnout determined on the basis of PBA scores above 75 was of 17.6% in CARE group, and 23.5% in a control group. Table 2 presents the demographic characteristics of participants.

Table 2. D*emographic characteristics of participants*

	CARE		Control group		*p* value
	N	*%*	*N*	*%*	
Gender					*p* = .31
Female	16	94.1	17	100	
Male	1	5.9	0	0	
Education					*p* = .107
Less then a high school diploma	3	17.6	0	0	
High school degree or equivalent	6	35.3	6	35.3	
Bachelor's degree	6	35.3	9	52.9	
Master's degree	2	11.8	0	0	
Above Master's degree	0	0	2	11.8	
Family situation					*p* = 1.00
Single (never married)	1	5.9	1	5.9	
Living in couple	16	94.1	16	94.1	
Divorced	0	0	0	0	
Professional situation					*p* = .04
Full time professional activity	4	23.5	8	47.1	
Part time professional activity	4	23.5	7	41.1	
Unemployed	9	53	2	11.8	
Retirement					

Note. χ² test

Based on Mann-Whitney U-test there was no statistically significant difference in parental burnout severity at T1 between CARE and control groups (*p* = .55) with mean PBA scores of 50.7 (32.1) in the CARE group and 46.8 (37.7) in the control group. Table 3 presents the mean scores and standard deviations of parental burnout severity in both groups at T1 and T2.

Table 3. *Means, standard deviations of studied variables*

	CARE		Control Group	
	T1 ($N = 17$)	T2 ($N = 17$)	T1 ($N = 17$)	T2 ($N = 17$)
Parental Burnout	50.7 (32.1)	34.0 (22.4)	46.8 (37.7)	47.1 (46.9)

Note. Standard deviations are presented in brackets. T1, T2 correspond to pre- and post- intervention measures.

To test our main hypothesis that the CARE programme contributed to the significant decrease in parental burnout compared to the control group, we applied a repeated measures ANOVA with the group variable (CARE vs control) as between subject factor. The repeated measures ANOVA revealed a statistically significant within-group effect of time on parental burnout severity ($F(1, 32) = 7.21$, $p = .01$, $\eta^2_p = .18$) and of time*group ($F(1, 32) = 7.74$, $p = .01$, $\eta^2_p = .20$) with a large effect size. The between-group effect was statistically insignificant ($F(1, 32) = .15$, $p = .70$, $\eta^2_G = .01$). The post-hoc analyses showed no statistically significant mean differences in parental burnout between the two groups at T1 ($t(32) = -.32$, $M_{diff} = -3.88$, $SE_{diff} = 12.00$, $p = .99$) and T2 ($t(32) = 1.04$, $M_{diff} = 13.12$, $SE_{diff} = 12.61$, $p = .73$). However, there was a significant decrease in parental burnout symptoms between T1 and T2 within the CARE group ($t(32) = 3.87$, $M_{diff} = 16.71$, $SE_{diff} = 4.32$, $p = .01$) and no statistically significant difference between T1 and T2 among participants from the control group ($t(32) = -.07$, $M_{diff} = -.29$, $SE_{diff} = 4.32$, $p = 1.00$). These findings confirmed our main hypothesis.

Discussion

The present study assessed the effectiveness of the CARE programme in terms of parental burnout prevention and reduction. We compared changes in parental burnout severity between the parents participating in the 8-week intervention and those from the waiting-list control group. The results of this study confirmed our main hypothesis that taking part in the CARE programme led to a significant decrease in parental burnout symptoms in the intervention group compared to the control group where no significant change in parental burnout was observed. These findings showed that the decrease in parental burnout within the CARE group was more likely related to the effects of the intervention than to the natural remission over time.

This is an important finding as it shows that a positive psychology approach, designed to foster well-being can be as beneficial, or more, as programmes with other orientations. In the

present study, the CARE programme contributed to the statistically significant decrease in parental burnout with a large effect size ($\eta^2_p = .20$). These finding are consistent with a recent meta-analysis on parental burnout interventions which showed that identified interventions (i.e., CBT; mindfulness; ACT; psychoeducation, active listening, and programmes aiming to balance parental stressors and resources) were effective for parental burnout reduction with small to large effect sizes (Urbanowicz et al., under review). In contrast to previously proposed interventions, positive psychology approach focuses on enhancing person's existing resources without targeting the reduction of cognitive distortions or dysfunctional behaviours like in CBT and psychoeducation based interventions (Anclair et al., 2018). It is also different from mindfulness approaches which aim to enhance the state of presence in the moment with the non-judgemental attitude and acceptance (Kabat-Zinn, 2003). Parental burnout is considered to be the result of a chronic imbalance between the factors of stress and one's available resources to manage stress effectively (Mikolajczak & Roskam, 2018). The CARE parenting programme was designed to enhance parenting resources and strengths in daily life but also in the context of stressful or adverse events. In addition, the CARE programme aims to foster psychological flexibility and the engagement in meaningful actions and relationships. The practices proposed in the intervention are structured to counterweigh the negativity bias through the orientation of the attention toward more satisfying aspect of life, the available resources and qualities of the environment, and the development of gratitude. The findings of the present pilot study suggest that the CARE programme could be beneficial for the treatment and prevention of parental burnout.

Indeed, the small sample size was one of the limitations of this study. Although we had additional hypotheses (i.e., about the mediation effects of the increase in unconditional self-kindness and emotion regulation, and the decrease in abstract rumination and stress), based on the power analysis we could only test our main hypothesis. All preregistered hypotheses will

be tested in the main study involving a sufficient number of participants. The second limitation of this study was the imbalance in the proportion of mothers (97%) and fathers (3%) in the sample. This does not allow generalisation the findings of the study to the population of fathers. Such an imbalance is often encountered in the literature on parental burnout (Anclair et al., 2018; Brianda et al., 2020; Paucsik et al., 2021). Future research should attempt to replicate these findings on the population of fathers.

In conclusion, the findings of the present pilot study suggest that the CARE programme may significantly contribute to the reduction of parental burnout. However, these results need to be replicated on a larger sample of parents, including higher rates of fathers.

Rationale from Article 4 to Article 5: Informal mindfulness practices

Chapter 4 describes the second wave positive psychology CARE programme and presents the first results in terms of its effectiveness in parental burnout reduction. The following chapter is dedicated to the assessment of informal mindfulness-based practices FOVEA programme.

Mindfulness reflects the state of deliberately orientating the attention toward the present moment with openness and non-judgemental attitude (Kabat-Zinn, 2003). Regular mindfulness practices increase attentional skills, enhance emotional awareness, and reduce maladaptive automatic responses (Anderson et al., 2007; Birtwell et al., 2019). These skills are likely to decrease experiential avoidance and contribute to greater psychological flexibility (Birtwell et al., 2019; Kashdan & Rottenberg, 2010). Experimental avoidance is a transdiagnostic mechanism which consist of not confronting uncomfortable emotions, cognitions (i.e., thoughts, images, memories), body sensations, or behaviours (Hayes et al., 2004). Although such avoiding coping strategies (e.g., emotion suppression, thought suppression, distraction, or inactivity) in the short term can prevent feelings of being overwhelmed, they are associated with the development and maintenance of psychological distress across different mental disorders (Hayes et al., 2004; Hayes-Skelton & Eustis, 2020; Kashdan et al., 2006).

Mindfulness-based programmes (e.g., Mindfulness-Based Stress Reduction, MBSR, and Mindfulness-Based Cognitive Therapy, MBCT) have shown their effectiveness in the reduction of stress, anxiety, and depressive symptoms both in clinical and subclinical populations (Hayes et al., 2004; Hayes-Skelton & Eustis, 2020; Kashdan & Rottenberg, 2010). Moreover, they proved to be effective in the reduction of depression relapses, and improvement in pain management, substance use disorders, eating disorders, and obsessive-compulsive disorders (Courbasson et al., 2010).

MBSR and MBCT are group-based training programmes aiming to develop in participants mindfulness skills during weekly 2h sessions, and between the sessions during

daily 45 minutes personal practice (Kabat-Zinn, 2005; Segal et al., 2013). Both programmes are based on formal meditation practices combined with informal practices (e.g., mindful walking, mindful eating, mindful toothbrushing). Formal practices aim to train attentional flexibility and to develop the ability to manage difficult cognitive or physical experiences (e.g., chronic pain). Informal practices aim at increasing the awareness of present-moment experiences during everyday life activities (e.g., while communicating with one's child, while cooking, etc.). This implies that mindfulness-based programmes require high levels of motivation and self-discipline to perform the prescribed daily formal practices.

Recently, evidence showed the effectiveness of a mindfulness-based group intervention based solely on informal practices integrated in everyday life experiences (e.g., using present-moment attention mainly based on attention focused on the senses of touch, smell, hearing, taste, and vision to maintain a focused attention on the present moment; Shankland et al., 2021). The informal practices consisted of intentionally directing attention towards ongoing activities, welcoming the experience as it is with openness, curiosity, and a non-judgemental attitude. The advantage of this specific mindfulness-based approach is that informal practices can be easily integrated by participants in their daily activities without the need for finding extra time during the day for 45 minutes of meditation. As such, informal mindfulness-based programmes can be particularly beneficial for participants for whom it may be difficult to find time or who lack motivation for the regular formal practices, for example in the context of parental burnout (Shankland et al., 2021).

The FOVEA programme (Flexibility and Open monitoring, based on the Vittoz method, to enhance Experiential Awareness; Shankland et al., 2021) consists of 8 sessions delivered once a week in groups. During each session participants develop mindfulness skills through informal practices aiming to enhance the awareness of body sensations, cognitions, and emotional states. FOVEA practices also aim to encourage individuals to mobilise their

willpower, to make their own choices and conscious actions according to their current physical and emotional state, needs, and values. In that sense, FOVEA practices are likely to promote not only mindfulness skills but also self-compassion and self-care.

Given that burnt-out parents are overwhelmed with parental stress and lack the resources to cope with challenging situations (Mikolajczak & Roskam, 2018) and may have perfectionism tendencies regardless of emotional costs related to overlooking their personal needs (Lin et al., 2020; Sorkkila & Aunola, 2020), the FOVEA programme could be appropriate for the population of parents at risk of parental burnout or already suffering from symptoms of parental burnout. We adapted the original FOVEA programme to the context of parental burnout adding the psychoeducation elements on risk and protective factors of parental burnout based on Roskam and Mikolajczak (2018) recommendations for parental burnout treatment. The FOVEA programme manual is available under request.

The following chapter presents the results of the first study evaluating the FOVEA programme adapted to the situation of parental burnout prevention and reduction.

Article 5: Informal mindfulness practices: new approach to the prevention and reduction of parental burnout

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Highlights

- The first study to assess the effectiveness of informal mindfulness FOVEA programme for parental burnout prevention and reduction.

- Compared to the control group there was a significant reduction of parental burnout within the intervention group, with a large effect size.

- Informal mindfulness practices showed beneficial outcomes among the parents suffering from parental burnout or at risk of parental burnout.

Abstract

The present study aimed to evaluate the effectiveness of informal mindfulness practice among parents in terms of parental burnout prevention and reduction. The objective was to test the new approach of mindfulness practice, the FOVEA programme, implemented in daily activities rather than based on formal meditations. Indeed, traditional mindfulness programmes (e.g., MBCT, MBSR) require a 45-minute daily meditation practice which can be difficult to include in parents' tight schedules. In contrast, the proposed FOVEA intervention was designed to enhance the awareness of the present moment mainly using the five senses and awareness of body sensations. We tested the hypothesis that compared to the waitlist control group parents participating in the programme would present a greater reduction of parental burnout scores following the intervention. The results revealed a statistically significant large effect of intervention on parental burnout severity. There was a statistically significant decrease in parental burnout symptoms between T1 and T2 within the intervention group and no statistically significant difference in parental burnout within the waitlist control group. The results of the present study confirmed the intervention's feasibility as well as our main hypothesis that informal mindfulness practices contributed to the reduction of parental burnout severity. These findings justify the need of subsequent studies measuring the effectiveness of FOVEA programme on a larger sample of parents.

Keywords: Parental burnout, mindfulness, intervention

Introduction

Mindfulness skills reflect the capacity of deliberately orientating the attention toward the present moment with openness and a non-judgemental attitude, and without over-identifying with one's thoughts and emotions (Kabat-Zinn, 2003). Mindfulness is considered also as metacognitive skill of being aware of one's awareness (Bishop et al., 2004). Mindfulness skills can be developed through mindfulness meditation practices, or through interventions combining mindfulness meditation with some informal practices (e.g., mindful walking). In this study, we present a new informal approach to mindfulness training based on ecological experiencing, observation, and integration of one's physical sensations, thoughts, and feelings in ongoing activities rather than through a formalised meditation practice. We proposed a pilot study of the FOVEA intervention (Flexibility, Open monitoring, based on the Vittoz method, to enhance Experiential Awareness; Shankland et al., 2021) for the prevention and reduction of parental burnout.

Parental burnout is a growing concern due to its deleterious consequences on family well-being (i.e., increased suicidal ideation, child neglect and violence; Mikolajczak et al., 2018). Like professional burnout, parental burnout results from a chronic disproportion between stress-alleviating factors (e.g., social support, emotional competencies, psycho-social skills) and stress-enhancing factors (e.g., lack of emotional and material support, poor emotional skills, high parental standards; (Mikolajczak et al., 2018; Mikolajczak & Roskam, 2018).

Evidence has shown that perfectionism and high social expectations significantly predicted parental burnout (Kawamoto et al., 2018; Lin et al., 2021; Sorkkila & Aunola, 2020). The results of a large-scale international study across 42 countries (N = 17409) showed that the higher prevalence of parental burnout in Western countries was linearly related to cultural individualism (Roskam et al., 2021). These findings suggest that both individualism and

socially prescribed and self-oriented perfectionism can contribute to the development of parental burnout through the intensification of parental investment, growing social pressure on parents, and the isolation of parents.

Conversely, trait-mindfulness and mindfulness practice can buffer against parental burnout through the development of self-compassion and the reduction of abstract ruminations (Paucsik et al., 2021). Indeed, both mindfulness and self-compassion were found to underlie parenting self-efficacy, resilience (Cousineau et al., 2019), and satisfying family relationships (Fall & Shankland, 2021). Moreover, mindfulness-based interventions were found to significantly reduce parental burnout symptoms both among the parents of chronically ill children (Anclair et al., 2018), and the parents from the general population (Bayot et al., under review). These findings suggest that developing mindfulness skills in parents can significantly contribute to the prevention and reduction of parental burnout.

Mindfulness-based programmes (e.g., mindfulness-based stress reduction, MBSR and mindfulness-based cognitive therapy, MBCT) have shown their effectiveness in the reduction of stress, anxiety, pain, and depressive symptoms in both clinical and subclinical populations (Khoury et al., 2013, 2015). MBSR and MBCT are group-based 8-week interventions aiming to develop mindfulness skills through both formal meditation practices (e.g., sited meditations with a focus on a breath or physical sensations), and informal practices (e.g., mindful walking and mindful eating) during weekly 2h sessions and through daily 45-minutes personal practice between the sessions (Kabat-Zinn, 2005; Segal et al., 2013). In contrast to the informal practices which are applicable to a wide-range of everyday activities, the formal meditation practices require high motivation and self-discipline, especially in terms of regular between-session practice (Shankland et al., 2021). For this reason, in some contexts (e.g., parents who have very tight schedules or who raise their child alone) informal practices might be easier to integrate in daily activities than formal meditations (Shankland et al., 2021).

Evidence showed the effectiveness of a mindfulness group intervention based only on brief and informal practices integrated in everyday activities (e.g., using breath and the senses of touch, smell, hearing, taste, and vision to maintain the attention focused on the present moment) in terms of stress and negative affect reduction and increase in life satisfaction among the adults from the general population (Shankland et al., 2021). The informal practices consisted of intentionally according a non-judgement attention toward ongoing activities (FOVEA, Flexibility, Open monitoring, based on the Vittoz method, to enhance Experiential Awareness; Shankland et al., 2021).

This study aimed to evaluate the effectiveness of the FOVEA intervention among parents for the prevention and reduction of parental burnout. The present study focused on testing our principal hypothesis: compared to the waitlist control group parents participating in the FOVEA programme would present a greater reduction of parental burnout scores following the intervention.

Methods

Participants

Participants were recruited via announcements on social media and through community-based organisations working with parents and children. The inclusion criteria for participating in the study were: (a) to be a parent of at least one child living in the same household at the moment of the study, (b) being over 18 years old, and (c) having accepted an informed consent for participation in the study. According to the power analysis calculated with G* Power software, the required sample size was 54 participants. We determined a medium effect size (f = .25) with 95% power for repeated measures ANOVA based on previous interventional studies (Brianda et al., 2020; Bayot et al., 2020). In total, 30 parents (90% of mothers) participated in the study. The mean age of participants was 37 years old (SD = 4.05), and the median number of children was 2 (M = 1.77, SD = .82). Participants did not receive any financial incentive for their participation in the study and they participated in the FOVEA intervention for free.

Procedure

The study received approval from the French national ethical committee board (N°: 19.02.06.44810) and was preregistered on the Open Science Framework: https://osf.io/f5c7b/?view_only=22472fb65a344e7cb52e948d2b39e0ff. In the current pilot study participants followed the same procedure as in the preregistered main study. However, considering the small number of participants included in the pilot study due to the Covid-19 pandemic, we were not able to test all preregistered hypotheses, i.e., the effects of the FOVEA programme on depression, anxiety, and stress symptoms as well as the moderation effects of stress, abstract ruminations, unconditional self-kindness, and emotion regulation on parental burnout reduction. The main hypothesis was tested in this pilot study, i.e., the effects of the FOVEA programme on parental burnout reduction. The secondary hypotheses will be tested in a subsequent main study carried out on a larger sample of parents.

Before participating in the study, parents were invited to participate in a meeting where they were informed about the study objective and protocol, as well as about the right to withdraw from the study at any moment. In addition, all participants received a written information sheet and signed the informed consent.

Parents who were available to attend one of the proposed FOVEA groups could immediately assign to the intervention group. The waiting-list control group was proposed to the parents who expressed their interest to participate in one of the subsequent intervention groups but who were not available to participate immediately because of the schedule proposed. Because of the ethical implications associated with parental burnout (i.e., increased rates of child abuse and neglect, suicidal risk) we chose to include all parents that could be available at the time of the FOVEA groups rather than operating a random allocation to experimental and control groups. This enabled the immediate assignment to the intervention of all parents willing

and able to attend the intervention.

Participants from both groups responded to pre-test and post-test measures via an online questionnaire before the beginning and directly after the 8-week intervention. The study flowchart is presented in *Figure 1*.
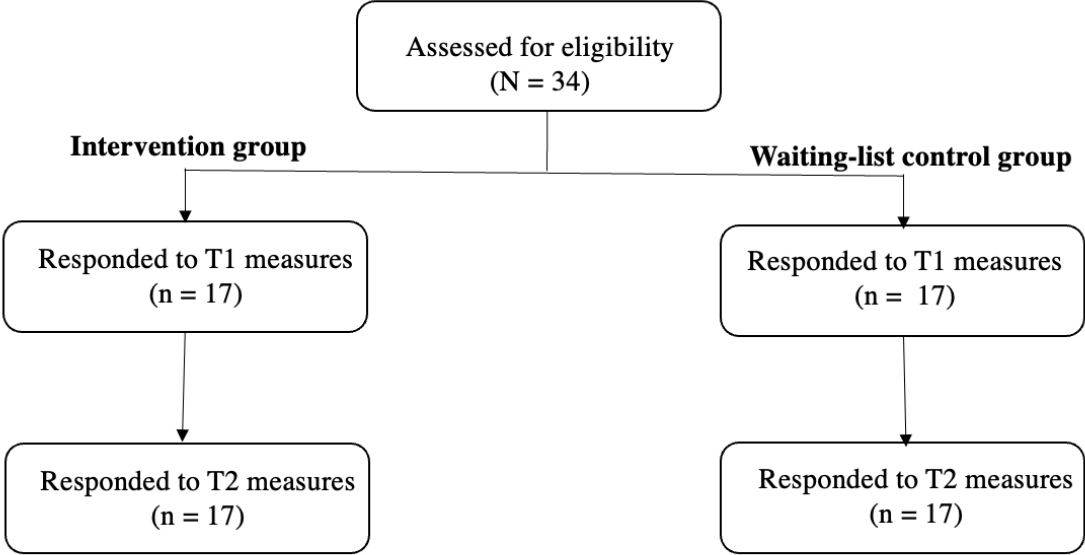

Figure 1. Flowchart

Intervention

The FOVEA parenting programme was adapted from the original FOVEA protocol (Flexibility, Open monitoring, based on the Vittoz method, to enhance Experiential Awareness; Shankland et al., 2021). to the context of parental stress and burnout based on the guidelines for parental burnout treatment (Roskam & Mikolajczak, 2018). The intervention consisted of eight 2-hour sessions delivered once a week by trained FOVEA instructors with more than two years of professional experience.

The FOVEA programme is based on informal mindfulness practices based on the Vittoz approach aiming to enhance the awareness of the present moment mainly using the five senses and awareness of body sensations. The brief and simple practices integrated into everyday experiences (e.g., using the breath and the sense of touch, smell, hearing, taste, and vision to

maintain the attention focused on the present moment) contribute to the improvement of the state of presence through the development of a caring attention to oneself, to others and to the environment. FOVEA practices are also likely to enhance emotional skills and well-being through the processes of psychological flexibility, openness to experience, non-judgemental attitude, and attentional training (Shankland et al., 2021). The intervention protocol is described in the Appendix and table 1.

Table 1. *Overview of the FOVEA intervention protocol.*

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8
Theme	Auditory receptivity	Tactile receptivity	Olfactory receptivity	Taste receptivity	Visual receptivity	Welcoming difficult emotions	Self-awareness	Staying focused
Practices	Orientating the attention toward auditory sensations. Introduction of the notions of automatic reactions and negativity bias. Body scan.	Orientating the attention toward tactile sensations. Meditation focused on a breath. Body scan.	Orientating the attention toward olfactory sensations. Standing meditation. Body scan.	Orientating the attention toward taste sensations. Grape seed exercise. Mindful movements. Body scan.	Orientating the attention toward visual sensations. Mindful walking. Acting intentionally and consciously. Body scan.	Body scan. Acceptance of disturbing sensations or emotions. Acknowledging that there is always an opposed feeling or sensation and that the present sensation will pass. Acting intentionally and consciously.	Body scan. Recalling the memories and sensations of energy, calmness, and tenderness states. Paying attention to all occurring sensations.	Body scan. Summary of the programme and developed skills. Meditation focused on a breath.
Objectives	Enhancing the state of presence, psychological flexibility, and the non-judgemental attitude. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Savouring of the present moment. Reduction of automatic responses by acting with consciousness. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Savouring of the present moment. Reduction of automatic responses by acting with consciousness. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Reduction of automatic responses by acting with consciousness. Cognitive reframing of automatic thoughts. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Implementation of the motivation to practice in between the sessions.	Enhancing the state of presence, psychological flexibility, body-awareness, and the non-judgemental attitude. Identification of observed changes. Implementation of the motivation to continue practices.

Measures

Participants responded to the demographic survey evaluating: age, gender, number of children, child's current or past diagnosis of chronic illness or developmental problem, family and professional situation, and the education level. Whilst data was collected for the measures of parental burnout, depression, anxiety, and stress symptoms, as well as abstract ruminations, emotion regulation, and self-kindness, the present study report only parental burnout due to the small sample size. However, in the present study we analysed only demographic characteristics of participants, as well as the severity of parental burnout before and after the intervention.

Parental burnout

Parental burnout symptoms were measured with the *Parental Burnout Assessment* (PBA, Roskam et al., 2018) measuring four dimensions of parental burnout: (a) physical and emotional exhaustion, (b) emotional distance with a child, (c) feeling of fed-up in parental role, (d) the contrast in perception of how the parent used to be and how they perceive themselves as a parent at the moment. PBA is a 23-item scale assessed on a 7-point Likert scale from 0 (never) to 6 (everyday). Roskam et al., (2018) proposed five cut-off scores to assess the risk and severity of parental burnout: (1) scores below 30 are considered as no risk of parental burnout, (2) scores between 30 and 45 are considered as a low risk of parental burnout, (3) scores between 46 and 60 are considered as a moderate risk, (4) scores between 61 and 75 represents a high risk of parental burnout, and (5) scores above 75 are considered as severe parental burnout. In our sample, the total scale presented an excellent internal consistency with a Cronbach's $\alpha =.98$ at T1, $\alpha = .99$ at T2.

Statistical Analyses

We examined the differences between participants from the FOVEA and control groups. We applied one-way ANOVA to examine the differences in age between the groups and χ^2 tests

for independence to examine the differences on categorical and discrete variables such as: gender, family situation, professional occupation, education level, and number of children. The prevalence of parental burnout in both groups was calculated using five cut-off scores as recommended by Roskam et al., (2018). We performed preliminary analyses to assess the normality of the data distribution (Shapiro-Wilk test) and the homogeneity of variances (Levene's test) of each variable. Considering that parental burnout scores do not follow a normal distribution in the general population (Roskam et al., 2018) we performed non-parametric Mann-Whitney U-test for independent samples to evaluate whether FOVEA and control groups statistically differed on PBA scores at T1.

To test our main hypothesis that compared to the control group parents participating in FOVEA programme would present lower scores of parental burnout we applied repeated measures ANOVA.

Results

The results of a one-way ANOVA (F(1, 28) = .285, p = .60) showed that there was no statistically significant difference in mean age between participants from FOVEA group (M = 37.5, SD = 4.03) and control group (M = 36.7, SD = 4.17). There was no statistically significant difference between the two group in terms of gender (χ^2(1) = 3.33, p =.07), number of children (χ^2(3) = 3.03, p = .39), education level (χ^2(3) = 3.06, p = .38), professional situation (χ^2(2) = 1.31, p = .52), and family situation (χ^2(1) = 1.03, p = .31). Regarding the number of children, 43.3% of participants had one child, 40% of participants had two children, 13.3% had three children, and 3.3% had four children or more under 18 years old living at home. In addition, 13.3% of parents reported the child's current diagnosis of chronic illness or developmental problem, 3.3% of parents reported a past child's diagnosis, and 83.3% of parents reported no child's diagnosis of chronic illness or developmental disorder. The prevalence of parental burnout determined on the basis of PBA scores above 75 was of 33.3% in FOVEA group, and

26.6% in a control group. Table 2 presents the demographic characteristics of participants.

Table 2. D*emographic characteristics of participants*

	FOVEA		Control group		*p* value [a]
	N	%	*N*	%	
Gender					*p* = .07
Female	12	80	15	100	
Male	3	20	0	0	
Education					*p* = .38
Less than a high school diploma	0	0	0	0	
High school degree or equivalent	5	33.3	5	33.3	
Bachelor's degree	9	60	8	53.3	
Master's degree	1	6.7	0	0	
Above Master's degree	0	0	2	13.4	
Family situation					*p* = .31
Single (never married)	0	0	1	6.7	
Living in couple	15	100	14	93.3	
Divorced	0	0	0	0	
Widowed	0	0	0	0	
Professional situation					*p* = .52
Full time professional activity	10	66.7	8	53.3	
Part time professional activity	5	33.3	6	40	
Unemployed	0	0	1	6.7	
Retirement	0	0	0	0	

Note.[a] χ^2 test

The preliminary analyses showed that as expected the parental burnout variable did not follow the normal distribution with Shapiro-Wilks *p* = .04 and the Leven's test showed homogeneity of variance for parental burnout: $F(1,28) = 2.71$, *p* = .11. The results of Mann-Whitney U-test revealed no statistically significant differences between intervention and control group at T1 on parental burnout (*p* = .171) with mean PBA scores of 61.3 (29.7) in FOVEA group and 47.4 (40.1) in the control group. The mean scores and standard deviations at T1 and T2 are presented in Table 3.

Table 3. *Means, standard deviations of studied variables*

	FOVEA		Control Group	
	T1 (*N* = 15)	T2 (*N* = 15)	T1 (*N* = 15)	T2 (*N* =15)
Parental Burnout	53.9 (28.62)	42.9 (27.57)	45.3(33.58)	45.4 (37.96)

Note. Standard deviations are presented in brackets. T1, T2 correspond to pre- and post- intervention measures.

To test the hypothesis that compared to the no-intervention control-group FOVEA intervention contributed to the significant decrease in parental burnout we applied the repeated measures ANOVA with a group variable (FOVEA vs control) as between subject factor. The repeated measures ANOVA revealed a statistically significant large within-group effect of time on parental burnout severity ($F(1, 28) = 7.48$, $p = .01$, $\eta^2_p = .21$) and of time*group ($F(1, 28) = 8.68$, $p =.006$, $\eta^2_p = .24$). The between-group effect was statistically insignificant ($F(1, 28) = .05$, $p = .83$, $\eta^2_p = .002$). The post-hoc analyses showed no statistically significant mean differences in parental burnout between the two groups at T1 ($t(28) = 1.08$, $M_{diff} = 13.93$, $SE_{diff} = 12.88$, $p = .70$) and T2 ($t(28) = -.59$, $M_{diff} = .69$, $SE_{diff} = -8.40$, $p = .93$). However, there was a significant decrease in parental burnout symptoms between T1 and T2 only within the active intervention group ($t(28) = 4.02$, $M_{diff} = 21.53$, $SE_{diff} = 5.36$, $p = .01$). No statistically significant difference in parental burnout was observed within the waitlist control group between T1 and T2 ($t(28) = -.15$, $M_{diff} = - .80$, $SE_{diff} = 5.36$, $p = .99$). These findings confirmed our main hypothesis.

Discussion

The present pilot aimed to evaluate the feasibility and effectiveness of FOVEA intervention among the parents at risk or suffering from parental burnout. In the present study we focused on testing the hypothesis that compared to the no intervention control group parents

participating in the FOVEA programme would present lower scores of parental burnout following the intervention.

The results of the study showed that the FOVEA programme significantly contributed to the reduction of parental burnout severity with a large effect-size ($\eta^2_p = .24$). Indeed, we observed a statistically significant reduction in parental burnout severity within the FOVEA group. Whereas among the parents from the waitlist control group the levels of parental burnout remained stable. This suggest that the reduction of parental burnout symptoms can be explained by the effects of the intervention rather than by the spontaneous remission over time.

Previous research demonstrated the protective role of mindfulness against the parental burnout (Anclair et al., 2018; Paucsik et al., 2021). Indeed, mindfulness practice was shown to decrease the parental burnout through the reduction of abstract ruminations and the increase in self-compassion (Paucsik et al., 2021). Moreover, mindfulness-based interventions where found to significantly reduce parental burnout severity (Urbanowicz et al., under review; Anclair et al., 2018)). Yet, the present study goes beyond these finding showing that informal mindfulness training also contributes to the significant decrease in parental burnout severity.

To our knowledge no previous study tested the effectiveness of informal mindfulness practices in the context of parental burnout. The advantage of the FOVEA intervention is its accessibility: mindfulness practices can be easily integrated into all daily activities and the programme to not require adding new exercises to the parents' tight schedules (Shankland et al., 2021). The present study showed that informal mindfulness practices are effective for parental burnout prevention and reduction.

Despite these promising results, it should be noted that the study presents several limitations. First, the study was carried out on a relatively small sample of parents (N = 30) which did not enable us to test our secondary hypotheses regarding the mediation effects of self-kindness, emotion regulation, and abstract ruminations. This encourages the development

of a larger confirmatory study to confirm the present findings. Second, the studied sample consisted mainly of mothers (90%) which does not permit generalisation of the results to the population of fathers. The issue of underrepresentation of fathers in the research on parental burnout was identified also in the previous studies (Brianda et al., 2020; Paucsik et al., 2021). This can be explained by the fact that fathers may be more reluctant to seek help in the situation of parental burnout or that fathers are less exposed to the parental burnout. Future research should examine the differences in parental burnout prevalence among the mothers and the fathers.

In conclusion, compared to the waitlist control group the FOVEA intervention contributed to the significant reduction of parental burnout severity. Subsequent research is required to replicate these findings on a larger sample of parents.

General Discussion

This doctoral thesis aimed to evaluate the effectiveness of three psychological programmes for parental burnout prevention and reduction. To achieve this goal, first we conducted a systematic review and meta-analysis of already existing programmes. Second, we carried out clinical trials to evaluate the effectiveness of three group programmes based on: (1) cognitive behavioural therapy; (2) second wave positive psychology; and (3) informal mindfulness. The content of these programmes was adapted to the population of parents based on the psychoeducational aspects highlighted in past research by Roskam & Mikolajczak (2018) and for the first time evaluated in this context. The findings of the five studies being the subject of this doctoral research are presented in five manuscripts (see *Figure 1*):

1. Article 1: *A systematic review and meta-analysis of psychological interventions for parental burnout.*

2. Article 2: *Cognitive Behavioural Stress Management (CBSM) for parents: prevention and reduction of parental burnout.*

3. Article 3: *Acceptability and effectiveness of Cognitive Behavioural Stress Management Intervention for parental burnout reduction and prevention: a mixed methods approach.*

4. Article 4: *Positive psychology in the prevention and reduction of parental burnout: the CARE programme.*

5. Article 5: *Informal mindfulness practices, a new approach to the prevention and reduction of parental burnout.*

The last section of the doctoral thesis is dedicated to the synthesis of the empirical findings of the presented studies, the general discussion of these results and of their clinical implications, the limitations, as well as the remaining questions and new directions for the future research

Aim:

Evaluation of psychological programmes for parental burnout

Objectives:

| Identification of already existing programmes | Evaluation of already existing programmes | Evaluation of CBSM programme | Evaluation of CARE programme | Evaluation of FOVEA programme |

Studies:

Article 1
Systematic review and meta-analysis

Article 2
CBSM clinical trial

Article 3
CBSM acceptability study

Article 4
CARE clinical trail

Article 5
FOVEA clinical trail

Findings:

Significant large effect size of identified psychological programmes for parental burnout treatment (SMD = -.858)

Significant medium effect size in reduction of burnout symptoms (η^2_p = .05); mediation role of stress and self-kindness

Satisfaction with format, content, and delivery of the sessions. Identification of the areas for the improvement

Significant large effect size in reduction of burnout symptoms (η^2_p = .20)

Significant large effect size in reduction of burnout symptoms (η^2_p = .24)

Figure 1.   Main findings of the five studies presented in the thesis.

Synthesis of empirical findings

The systematic review and meta-analysis of psychological interventions for parental burnout included 11 comparisons with a total of 632 participants. The results of the meta-analysis revealed a statistically significant large effect size of identified programmes favouring a reduction of parental burnout symptoms compared to a control group (SMD = - .858) independently from the cultural and socio-demographic context. In addition, the effectiveness of the programmes was shown to be sustained up to at least three months after the intervention. These results showed that psychological interventions can be helpful in reducing parental burnout both among the parents of chronically ill children and those from the general population. Indeed, these findings may not be surprising, as psychological factors seem to play an important role in parental burnout development and maintenance (Lin et al., 2021; Mikolajczak & Roskam, 2018; Paucsik et al., 2021; Sorkkila & Aunola, 2020a). This suggests that targeting the dysfunctional psychological processes may contribute to the decrease in parental burnout severity. Psychological programmes showing the largest effect sizes were psychoeducation groups, CBT-based, and mindfulness-based programmes. The psychoeducation group was focused on children's specific chronic diseases (i.e., cancer disease) and stress factors related to the cancer disease (Beheshtipour et al., 2016). The programme also included spiritual support aiming at the acceptance of child's disease. In addition, the psychoeducation group provided the parents with the information about the diagnosis and treatment, side effects of various treatments, daily activity, and available support. Moreover, the group context of the intervention enabled the participants to meet other parents facing similar difficulties related to their children's chronic disease. The CBT-based intervention aimed to enhance behavioural change through the modification of thought and emotions in relation to stressful situations: the intervention omitted the techniques promoting mindfulness and acceptance (Anclair et al., 2018). The mindfulness programme was derived

from the MBSR and MBCT and included practices aiming at purposely bringing one's attention in the present moment through increasing the awareness of body sensations (Anclair et al., 2018). The intervention also included the acceptance techniques and psychoeducation on stress. Indeed, all three approaches reduced parental burnout symptoms with large effect sizes. These findings suggest that the mechanisms of action (MoAs) involved in parental burnout can be targeted through specific and/or common active mechanisms (i.e., behavioural change techniques, BCT) used by these three approaches. This raises the question of whether complex evidence-based programmes should be considered as superior to the psychoeducation programmes or support groups.

This question has been already brought up in the context of parental burnout. For instance, Brianda et al. (2020) have shown that there were no significant difference in terms of parental burnout reduction between active listening group and the intervention targeting specific risk and protective factors involved in parental burnout. Indeed, previous research aimed at identifying the risk and protective factors of parental burnout to propose tailored interventions targeting these mechanisms of action (Mikolajczak & Roskam, 2018; Roskam & Mikolajczak, 2018). However, these findings suggest that either each programme target different equally important MoAs underlying parental burnout, or both programmes target common MoAs through the behavioural change techniques either specific or common to these different approaches (Carey et al., 2018).

The results of the second part of the thesis evaluating the CBSM programme among the parents ($N = 197$) from the general population compared to a waiting-list control group showed a significant medium effect size in the reduction of parental burnout severity ($\eta^2_p = .05$). The reduction of parental burnout symptoms maintained at 3-month follow up and was mediated by a decrease in stress and the increase in unconditional self-kindness. These findings are partially in line with previous research suggesting that self-compassion could play a protective role in

parental burnout development (Paucsik et al., 2021). Self-compassion was also found to buffer against perfectionism (Mehr & Adams, 2016) which was identified in the literature as a risk factor for parental burnout (Kawamoto et al., 2018; Lin et al., 2021; Sorkkila & Aunola, 2020). In addition, self-compassion has been shown to contribute to parental well-being (Neff & Faso, 2015), lower levels of parental burnout (Paucsik et al., 2021), and self-efficacy (Liao et al., 2021). Indeed, we expected that unconditional self-kindness could play similar protective role as self-compassion, as it reflects the capacity to be kind to oneself in challenging situations (e.g., in the context of rejection, failure, awareness of personal imperfections; Smith et al., 2018).

However, contrary to our hypotheses the reduction in parental burnout, in the CBSM study, was not explained by the decrease in abstract ruminations and the increase in intra-personal emotion regulation. Although we observed a decrease in abstract ruminations within the intervention group, this change did not significantly explain the variance in parental burnout reduction. Although Paucsik et al., (2021) identified abstract ruminations as a risk factor for parental burnout, in the CBSM quantitative study the decrease in abstract ruminations did not seem to contribute to the decrease in parental burnout. However, the findings of the mixed methods study revealed that the majority of parents observed the significant reduction in ruminations: they observed that they were able to take a step back from their automatic thoughts and stop the vicious circle of ruminations. This discrepancy could be potentially explained by the low sensitivity of the scale used to measure abstract ruminations or another psychometric issue. Indeed, it is possible that the scale was not sensitive enough to register the change in abstract ruminations. Indeed, the abstract ruminations dimension of *Mini-Cambridge Exeter Repetitive Though Scale* (Douilliez et al., 2014) comprises the items which are very general and do not necessary reflect the ruminations related to parenting stress (e.g., item 2: I compare myself with other people; item 5: I think I'm not good at all). It is possible that the adaptation

of the scale to the parenting contexts (e.g., item 2: I compare myself with other parents; item 5: I think I'm not at all a good parent) would enable detection of the real differences observed by the parents. In other words, it is possible that in the context of parental burnout parents ruminate about the topics related to their parental role and the generally formulated items do not reflect their experience (e.g., they may not compare to other people in the professional context, but they may do in the parental context). It that sense, the results from our quantitative study (see *Article 2*) suggest that abstract ruminations as measured with the *Mini-Cambridge Exeter Repetitive Though Scale* (Douilliez et al., 2014) are not the main MoAs involved in parental burnout. Yet, considering the findings from the mixed methods study (see *Article 3*) it is possible that active mechanisms of the CBSM programme (e.g., self-monitoring of automatic thought, cognitive reframing, awareness of the link between thoughts and emotions) still contribute to the decrease in ruminations as reported by the parents in the qualitative interviews. In this light, it remains important to assess whether the discrepancy observed between the results from the CBSM quantitative study and both mixed methods study, and previous research is related to the used questionnaire, sample characteristics, or underlying theory that abstract ruminations are involved in parental burnout development and maintenance (Paucsik et al., 2021).

In addition, the results of the CBSM quantitative study (see *Article 2*) showed that the increase in intra-personal emotion regulation did not predict the variance in parental burnout difference between T2 and T1. In contrast to previous findings on the protective role of emotional competencies (EC) and emotional intelligence in the context of parental burnout (Bayot et al., 2021; Lin et al., 2021; Mikolajczak et al., 2018), the findings of our study did not confirm the hypothesis that reduction of parental burnout would be mediated by the increase in intra-personal emotion regulation competencies. There are several possible explanations for this discrepancy between the results in our study and previous findings. First, the 8-week period

of intervention may not be long enough to significantly increase in participants' emotion regulation skills measured at post-intervention. This suggests that emotion regulation may not be the most important factor determining the immediate reduction in parental burnout during the programme. Second, in our study we measured solely the intra-personal emotion regulation competency which constitutes only one dimension of EC (Brasseur et al., 2013). This may suggest that other EC (i.e., emotion identification, expression, comprehension, and utilisation) could be involved in parental burnout to a larger extent than intra-personal emotion regulation skill alone. For example, emotion identification skill could contribute to an increase in awareness of one's need, or emotion expression skill could enhance emotional social support which in turn could contribute to the prevention of parental burnout. However, there is no consensus about the extent to which EC buffer against parental burnout.

Indeed, while some studies showed that both intra- and inter- personal EC played a protective role against parental burnout (Lin et al., 2021; Mikolajczak et al., 2018) other studies showed that only intra-personal competencies buffered against parental burnout and inter-personal EC could even predict parental burnout (Bayot et al., 2021; Lin et al., 2021). Thus, in some contexts inter-personal EC may contribute to parental burnout, e.g., while the person is overly involved with other's emotions as they may be impacted by the distress of other people (Lin et al., 2021). In that sense, interventions aiming at enhancing emotional competencies should clearly distinguish between the overidentification with other's emotions which can be deleterious when the person presents low intra-personal EC and the competency of understanding other's emotions (e.g., empathy) which can enhance positive parent-child relationship, the sense of self-efficacy, and secure attachment (Stern et al., 2015). For instance, previous research showed that empathy predicted the family burden solely among the parents with low self-efficacy. In addition, the overidentification with difficult emotions seems to be related to low levels of compassion and self-compassion (Gilbert, 2019; Neff, 2016). In that

sense, interventions targeting the development of EC should focus on enhancing the compassion.

For instance, the findings of the mixed-methos study (see *Article 3*) showed that parents were much less self-judgemental toward themselves and toward their children, as well as they felt less isolated in their difficult parenting experiences and were more self-compassionate toward themselves. Also, the results from the quantitative study (see *Article 2*) showed that the increase in unconditional self-kindness mediated the decrease in parental burnout symptoms.

Likewise, it is possible that inter-personal emotional competencies contribute to positive outcomes (e.g., improvement of parent-child relationship or the sense of self-efficacy in parental role) only when the person has developed sufficient intra-personal EC or compassionate attitude. Hence, the fact that the parent identifies the child's emotion can lead to positive outcomes when the parent has also competencies of understanding this emotion and the need behind it, as well as to regulate their own emotions which could arise in this situation and using the child's emotion to help them the regulate it. Otherwise, if the parent identifies child's emotion but is not able or available to use other EC it is possible that it may lead to parent's emotional exhaustion and deterioration of parent-child relationship, or even violent or neglectful behaviours toward the child if the parent does not respond to child's emotional needs.

In that sense, future research should evaluate the independent effects of each dimension of emotional competencies while controlling for the effects of others (Lin et al., 2021) as well as determine other factors which may enhance positive outcomes of EC such as compassion. Based on the current state of knowledge the inter-personal emotional competencies can both buffer against and predict parental burnout, thus interventions aiming at reducing parental burnout should target other MoAs (e.g., compassion; Bayot et al., under review; Paucsik et al., 2021).

Although, the results from our study suggest that cognitive and behavioural techniques (e.g., increasing the awareness of stress responses, cognitive reframing, coping flexibility, anger management, enlarging social support network, assertiveness) associated with relaxation and group discussion effectively targeted psychological processes involved in parental burnout, it remains important to further identify the MoAs underlying the effectiveness of the CBSM programme. For instance, the reduction in parental burnout could be explained by reductions in perfectionism (Lin et al., 2021), as well as increases in self-efficacy, psychological flexibility (Coleman & Karraker, 1998; Kashdan & Rottenberg, 2010), or perceived social support (Szczygieł et al., 2020). Indeed, the findings from the mixed methods study (see *Article 3*) showed that parents were more self-compassionate and confident in their parental role which may mitigate the perfectionism. Parents also reported the ability to better manage stress and to take the step-back from difficult situations which related to stress reduction and increased psychological flexibility.

Moreover, the observed parental burnout reduction can possibly be explained by the development of psychosocial competencies such as self-awareness, identification and understanding of one's emotions, critical thinking, emotion regulation and expression, stress management, creative thinking, critical thinking, decision making, satisfying relationships, cooperation, assertiveness, empathy, conflict resolution, and communication skills (see *Figure 2*). In addition, similarly to other group interventions, the CBSM programme aims to develop coping flexibility and enlarge the social support network which can also contribute to the reduction of stress underlying parental burnout (Lazarus, 1993; Szczygieł et al., 2020; Yamoah, 2021). Future studies should assess both the protective role of these potential MoAs as well as extent to which the CBSM programme contributes to their development. In addition, it remains important to compare the extent to which different programmes (e.g., CBSM, psychoeducation, active listening) target these MoAs with both their specific and common behavioural change

techniques. Indeed, it remains important to assess whether evidence-based manualised interventions are more beneficial for parents suffering from or at risk of parental burnout compared to support groups which do not require specific time and financially costly training of professionals. For instance, future studies should aim to assess to what extent MoAs targeted in the CBSM programme are specific for this intervention compared to the common MoAs which are also present in other approaches (e.g., positive relationships, reassurance, release of tension, therapeutic alliance and active participation, therapists expertise and attitude of warmth, respect, empathy, acceptance, or insight; Cuijpers et al., 2019). Possibly, the MoAs underlying the reduction of parental burnout can be targeted through a wide range of psychological approaches.
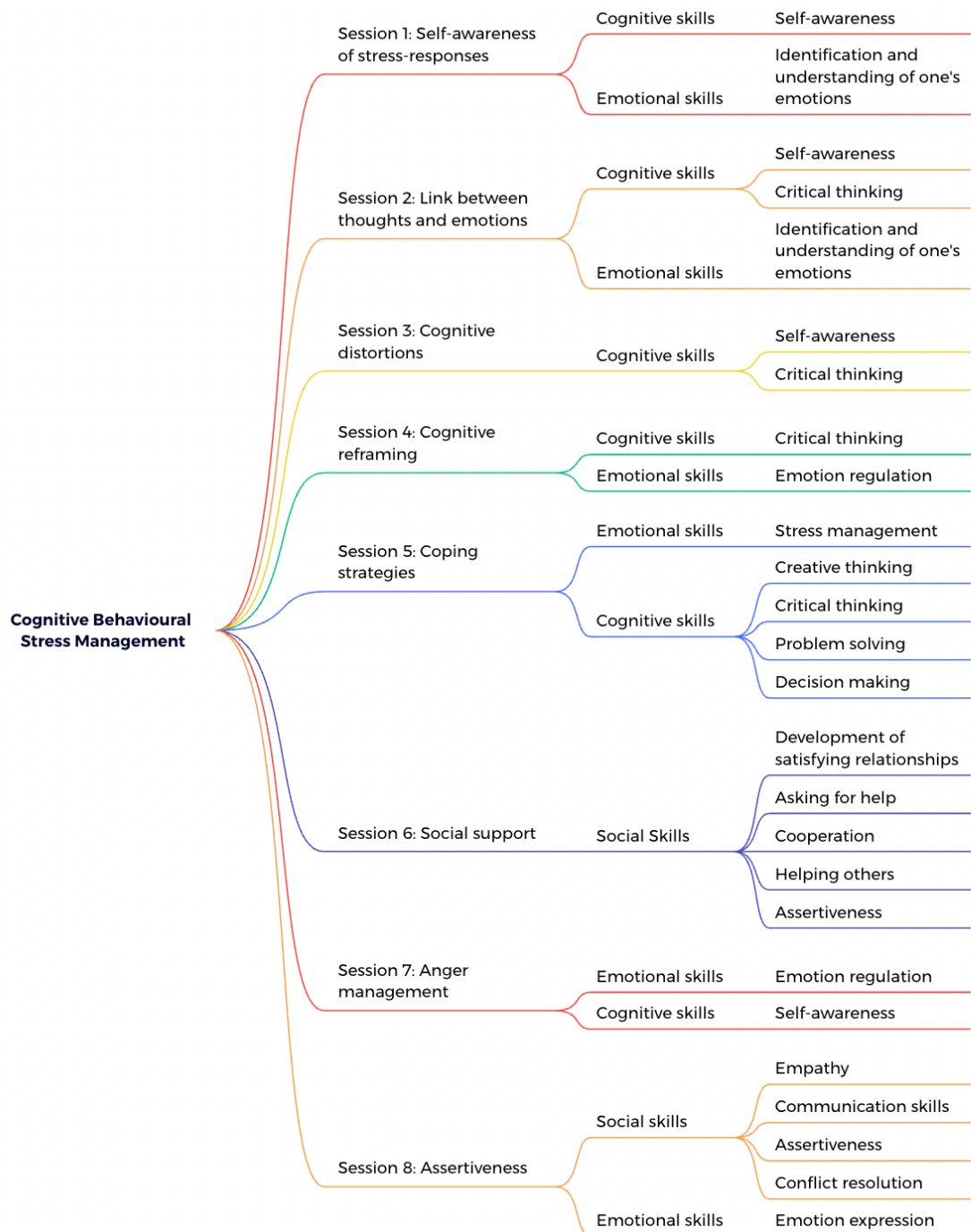
Figure 2. Psychosocial competencies targeted by the CBSM programme.

As a complement to the preceding results, the mixed methods study showed positive outcomes of the CBSM programme in terms of its acceptability. Participants expressed their satisfaction with the duration, frequency, group format, content, and delivery of the sessions. In addition, participants reported the improvement in their stress management and emotional

competencies, well-being, self-efficacy as well as in the relationships with their children and the spouses. Areas for improvement were also identified to advance future research and clinical practice in this field (e.g., proposition of the schedules latter in the evening, more follow-up meetings, cosier environment). Indeed, these areas for improvement are possibly generalisable to other programmes for parents.

The mixed methods study contributed to a better understanding of the parents' experience with the CBSM programme and as mentioned above to further identify psychological processes possibly underlying the reduction of parental burnout severity (e.g., parental self-efficacy, perceived social support, psychosocial competencies). For instance, participants observed an improvement in their emotional competencies and well-being. They also reported being more self-compassionate and a having a better sense of self-efficacy: they felt that they managed their child's difficult emotions more effectively and that they were more confident in their parental role. Indeed, parental self-efficacy is a predictor of positive parenting practices and both parents' and children's mental health (Coleman & Karraker, 1998), while, self-compassion contributes to the prevention of parental burnout (Paucsik et al., 2021).

Moreover, participants perceived an improvement in terms of the quality of relationships with their children: they reported having more empathy toward their children and better understanding their needs. Given that burnt-out parents emotionally distance from their children, lack the empathy toward them, and have tendency to act automatically (Roskam et al., 2018), these findings suggest that CBSM programmes contribute to the prevention of the deleterious consequences of parental burnout. This suggest that that key to the benefits of CBSM programmes is this wider set of outcomes which may be common to other approaches and may benefit from being primary outcomes in future studies.

In addition, attendees reported having greater awareness of their social support network and observing an improvement in the relationship with their partners. These findings are very

important as perceived social support and marital satisfaction were found to be negatively associated with parental burnout (Mousavi, 2020; Szczygieł et al., 2020; Yamoah, 2021).

The second intervention evaluated in this doctoral project was the second wave positive psychology CARE programme. The study ($N = 34$) showed that compared to the control group programme contributed to the significant reduction of parental burnout with a large effect size ($\eta^2_p = .20$). In contrast to previously proposed CBT and psychoeducation-based interventions, the positive psychology approach focuses on identifying and enhancing individuals' existing resources and the sense of meaning rather than targeting the reduction of stress, cognitive distortions or dysfunctional behaviours. The results of the pilot study showed that the CARE programme was beneficial for the prevention and reduction of parental burnout. Yet, these findings need to be verified in future studies including a larger sample of participants. In addition, it remains necessary to further evaluate the acceptability and the MoAs targeted by the CARE programme. Indeed, given the small statistical power of this study we did not aim to test secondary the hypotheses regarding the mediation effects of the decrease in abstract ruminations and stress as well as the increase in unconditional self-kindness and emotion regulation intra-personal competence (the mean scores comparisons of these variables between the intervention and control group are presented in *Appendix*).

Yet, we hypothesise that similar to the CBSM programme the decrease in parental burnout could be mediated by unconditional self-kindness, reduction in stress, and possibly other MoAs. It is possible that reduction in parental burnout could be mediated also by the increase in self-esteem and the sense of self-efficacy which can be enhanced by the identification of one's character strengths and values. The CARE programme aims to develop increased psychological flexibility, kindness toward oneself, others, and the environment, as well as meaningful relationships and engagement in activities that correspond to one's values and basic psychological needs (Deci & Ryan, 2008). In that sense, participants learn to identify

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their values in order to put in place purposeful actions. In addition, the programme integrates the tools from solution-focused therapy which aim at identifying one's resources, enhancing the motivation, and achievement of goals. These MoAs (i.e., self-efficacy, social support, psychological flexibility, self-awareness of one's needs, compassion) could contribute to emotional and physical well-being, satisfying parent-child interactions, of accomplishment in parental role, and parental self-efficacy, therefore buffering against core parental burnout symptoms (Roskam et al., 2018). However, future studies are required to test these potential MoAs.

The last part of the thesis was dedicated to the evaluation of informal mindfulness practices using the FOVEA programme (N = 30). The results of the pilot study showed a significant reduction of parental burnout symptoms with a large effect size (η^2_p = .24) compared to the waiting list control group. This suggests that informal mindfulness practices can be effective for parental burnout prevention and reduction. However, it remains necessary that future research continues to assess the MoAs of the FOVEA programme as well as its acceptability among the population of parents. Due to the low statistical power, we were not able to test the mediation effects of abstract ruminations, stress, unconditional self-kindness, and emotion regulation variables. Yet, we present the supplementary analyses of measured variables in *Appendix*. Although we observed a significant reduction in parental burnout severity the mechanism of action underlying this change needs to be documented.

Informal mindfulness practices consist of intentionally orienting attention toward ongoing activities, welcoming the experience as it is, with openness, curiosity, and a non-judgemental attitude, and aim at increasing the awareness of a present-moment experiences during everyday activities, such as encouraging the savouring of pleasant moments, de-fusion from unpleasant experiences. In addition, FOVEA practices aim at identifying one's needs and enhancing mindful actions in respect of these need. From this perspective, the MoAs of the

FOVEA programme could be e.g., self-awareness of one's needs and emotions, self-efficacy, compassionate attitude toward oneself and others, and psychological flexibility. Yet, further research is needed to verify these hypotheses.

Clinical implications

The findings from the meta-analysis showed that psychological programmes are effective in terms of parental burnout reduction both among the parents of children with chronic diseases and the parents from the general population. Moreover, the clinical trial conducted for the purpose of this doctoral project showed that parental burnout can be treated and prevented using different psychological approaches: (1) cognitive behavioural therapy; (2) second wave positive psychology; and (3) informal mindfulness. This suggest that MoAs underlying the reduction of parental burnout symptoms can be targeted with different techniques. In that sense, the choice of the intervention can be determined by parents' needs, expectations, and preferences as well as the expertise of the professional accompanying the parents. In that sense, the choice of the treatment should be individually determined by the prior evaluation of parent's expectations, motivation, and therapeutic objectives. For instance, some parents may seek very specific tools, theoretical background, or practice whereas the others need to meet other parents and share their experience. Based on the acceptability study (*Article 3*) parents expressed their need to regularly share their experience with other parents. However, they did not necessarily express the same needs in terms of the intervention's content and proposed tools.

Undoubtedly further research is needed to confirm these findings across different populations of parents. Future studies should also include more participants and different types of interventions to establish the interventions' efficacy in specific profiles of parents. Yet, based on the current state of knowledge psychological programmes based on different approaches (e.g., psychoeducation, CBT, second wave positive psychology, and both formal and informal

mindfulness practices) are beneficial for the prevention and reduction of parental burnout and can be proposed to the parents suffering from or at risk of parental burnout. In that sense, depending on the context of the intervention delivery the therapeutic approach should be adapted to providers preferences and competencies as well as the needs of the attendees, and therapeutic objectives.

Indeed, for the research purpose, it remains important to use manualised programmes which can contribute to the better understanding of the psychological processes and MoAs involved in the behavioural change. However, in the clinical settings providers usually aim to deploy all their competencies which seem to them the most appropriate in terms of therapeutic objectives decided with their clients. Indeed, within the field of psychotherapy clinicians may have different backgrounds, trainings, and preferences which determine their choice of therapeutic techniques offered to the clients. The question of the superiority of specific approaches over the common factors shared by other interventions remains central regarding the clinical implications. However, based on the limited findings from the meta-analysis and three intervention studies presented in this thesis we hypothesise that MoAs explaining the effectiveness of psychological interventions can be enhanced through different behavioural change techniques (Carey et al., 2018). As such, the effectiveness of the intervention is not solely explained by the common factors theory (e.g., positive relationships, reassurance, release of tension, therapeutic alliance and active participation, therapists expertise and attitude of warmth, respect, empathy, acceptance, or insight; Cuijpers et al., 2019) but also specific MoAs (e.g., self-efficacy, compassion, psychosocial competencies) which can be targeted in different manners.

Limitations

Studies reported in this doctoral thesis present several limitations. Regarding the systematic-review and meta-analysis to date very few studies evaluated interventions specific

for parental burnout. Thus, the number of identified interventions did not enable firm conclusions to be made about which intervention is the most effective for parental burnout treatment and for which kind of parents. For this reason, the results of this meta-analysis should be considered with caution. Further intervention research in this field will enable updates to be made to this meta-analysis with sub-groups meta-analyses, for example among different populations of parents or across different therapeutic approaches.

Regarding the limitations of the three intervention studies, it remains important to outline that participants were not randomly assigned to the intervention and waiting-list control groups. We decided to not apply the RCT design to facilitate the access to the intervention: parents could choose the suitable schedules and periods of time to participants in one of three proposed programmes. This decision was justified by the ethical implications of not providing an immediate parental support to the parents expressing their will to participate in the intervention (Brianda et al., 2020; Mikolajczak et al., 2018). As such, participants could assign to one of the three intervention groups depending on their choice of schedule. In that sense, participants were choosing the day and time of the intervention which suited them the most. However, they were not informed in advance to which intervention they were assigned. The waiting-list control group was constituted of the parents who were interested in participating in the intervention but who were not available to directly assign to the intervention group. New groups were regularly proposed every 2-3 months, as such, parents from the waiting-list control group could assign to one of the newly proposed intervention groups.

The non-RCT design presents some limitations. For instance, in our three clinical trials we observed the differences in the mean scores of parental burnout severity between the participants from the intervention and control groups: participants from the intervention groups presented higher scores of parental burnout at T1 (before the intervention) compared to the waiting list control group. From the clinical perspective it means that parents who assigned to

the intervention groups were these who needed parental support the most and those who benefited from the intervention in the first place. However, this difference in parental burnout scores at T1 reflects the self-selection bias (Higgins et al., 2008, 2011) which may skew the real effect size of an intervention, for instance, while conducting meta-analyses.

Another limitation of the presented clinical trials refers to the fact that the samples of participants consisted mainly of mothers. Thus, it is not possible to generalise the results of our studies to the population of fathers. This limitation applies to the majority of studies in the field of parental burnout (Brianda et al., 2020; Paucsik et al., 2021; Roskam et al., 2021). The research suggests that fathers are less frequently concerned by parental burnout than mothers (Roskam et al., 2021). However, future studies should focus on parental burnout among the fathers as this population seems to be overlooked by the research.

In addition, due to the context of the Covid-19 pandemic, the three intervention studies did not include enough participants to test all preregistered hypotheses. Indeed, the sanitary restrictions following the outbreak of the pandemic interrupted the ongoing studies. Based on a power analysis calculated with G* Power software the required sample size for each type of intervention group was of 66 participants. Based on previous RTC for parental burnout (Bayot et al., 2020; Brianda et al., 2020) we have determined a medium effect size (f = .25) with 95% power for repeated measures ANOVA.

Regrading low statistical power especially in the CARE and FOVEA pilot studies we couldn't test the mediation effects of the decrease in abstract ruminations and stress as well as of the increase in intra-personal emotion regulation and unconditional self-kindness. Future studies should evaluate both the mechanisms of action and acceptability of the CARE and FOVEA programmes. Although we could not test the mediation hypotheses within the presented articles, and we decided to test solely the main hypothesis, the supplementary analyses are presented in *Appendix*.

Remaining questions

Although this doctoral thesis contributed the assessment of psychological interventions for parental burnout some questions remained unanswered, and some new questions emerged. It remains unclear which intervention is the most effective for parental burnout treatment and prevention and whether the effectiveness of psychological programmes depends on individuals' characteristics or specific profiles of parents. We can imagine that depending on individual's motivation, expectations, needs, or preferences some programmes may be more effective than others. It is also true for the competencies and training of professionals accompanying parents. Therefore, future interventional studies should focus on identifying factors related to participants (e.g., different profiles of parents, context), providers (e.g., experience and training), and intervention (specific and common MoAs) which may predict the superior effectiveness of one therapeutic approach over another.

In addition, although we identified that the CBSM programme contributed to the reduction of parental burnout symptoms through the decrease in stress and the increase in unconditional self-kindness it remains unclear which other MoAs underlie the observed changes. The acceptability study contributed to the identification of psychological processes activated by the intervention based on parents' subjective experience (e.g., reduction in ruminations, self-awareness, emotion regulation, self-efficacy, self-compassion, social support). However, future studies should aim to further examine the MoAs using standardised measures.

Likewise, future research should aim to further evaluate the role of specific mechanisms and common factors of psychological interventions in the context of parental burnout. Indeed, it is possible that evidence-based interventions show their superior benefits in some contexts (e.g., anxiety disorders or obsessive-compulsive disorder; Olatunji et al., 2013; Smits et al., 2008) but not always (Wampold et al., 2011). This perspective was supported by Hofman and

Barlow (2014) who stated that: "it is time for our field to move beyond the arguments picking CFs [*common factors*] versus evidence-based psychological treatments in some kind of all or none analysis and instead focus on issues that will help our clients to improve and our scientific discipline to move ahead. This requires us to isolate and understand the effective treatment ingredients and the underlying treatment mechanisms" (Hofmann & Barlow, 2014, p.3). Indeed, possibly in the above studies both common and specific MoAs contribute to the reduction of parental burnout. However, research should aim to clarify these.

New directions and perspectives for the future research

Future research should focus on identifying the other protective and risk factors underlying parental burnout as they have not been exhaustively identified in the literature yet. Research on risk and protective factors will further contribute to the improvement of the existing programmes as well as to propose the new treatments and preventive measures. For example the protective role of parental psychosocial competencies could be an interesting direction for the future research.

Indeed, psychosocial competencies have been broadly studied in terms of positive outcomes in the population of children and adolescents (for a meta-analysis, see Durlak et al., 2011). To date, the existing interventions dedicated to parents aimed primarily to promote psychosocial competencies in children and were not directed to the parents themselves (Encinar et al., 2017). In that sense, psychosocial competences have been overlooked in the context of parental mental health, parental burnout prevention, and the promotion of the parent-child relationship. Psychosocial competencies underlie individual's optimal functioning and adaptation. They contribute to maintaining a state of psychological well-being and to successful adaptation to daily situations, while interacting with others in a constructive way. The competencies showing the strongest associations with low levels of parental burnout were stress management, emotion regulation, interpersonal communication skills, and empathy

(Urbanowicz et al., in preparation). Yet, future research should aim to assess to what extent parental psychosocial competencies may buffer against parental burnout and which interventions enhance these competencies in parents.

Moreover, future studies should aim to integrate direct measures of psychological processes targeted by the interventions. Brianda et al., (2020) showed that hair cortisol levels provide a reliable and non-invasive indicator of chronic stress and parental burnout. This direct measure should be used in future studies to evaluate whether the interventions for parental burnout contributes to the regulation of the HPA axis. In our three clinical trials we attempted to use the hair cortisol measure. However, due to the storage of the hair sample in inadequate thermic conditions the results obtained from the laboratory were aberrant and therefore we did not include them in our studies. However, the subsequent ongoing studies (Shankland et al., in preparation) which aim to further evaluate the psychological interventions for parental burnout, among which CBSM, CARE, and FOVEA programmes, include this physiological measure.

Another direct measure of stress and emotion regulation is heart rate variability index of physiological vagal tone (HRV; Thayer et al., 2012). For instance, vagal tone is involved in the physiological regulation of stress and recovery capabilities (Holzman & Bridgett, 2017). We attempted to use the HRV measure in an experimental task before and directly after the end of each programme. The task consisted of performing the electrocardiogram to measure heart rate and heart rate variability (Meyer et al., 1996) at 3 successive times: (1) at rest (10 min) as an indicator of the vagal tone activity, (2) when faced with a stressful situation (video of a 2-minute scene showing an interaction between a parent and a child who "casts a tantrum"; measurement of physiological reactivity to stress), and (3) during a 10 min recovery period (Laborde et al., 2017). This experimental study aimed to evaluate whether the interventions contributed to the improvement of emotion regulation in the context of induced stress. However, due to the outbreak of the COVID-19 pandemic we were not able to finalise the

study: we collected the data at T1 (before the COVID-19 outbreak) but we could not access the laboratory premises at the time of T2 measures. As such, we were not able to compare the pre- and post-intervention results. Nevertheless, this experimental task has been included in the ongoing clinical trial for parental burnout programmes including CBSM, CARE, and FOVEA programmes (Shankland et al., in preparation).

Conclusions

In conclusion this doctoral thesis contributed to the evaluation of psychological programmes for parental burnout prevention and treatment. First, a systematic review and meta-analysis identified already existing programmes. Second, three interventions based on: (1) cognitive behavioural therapy; (2) second wave positive psychology; and (3) informal mindfulness showed positive outcomes in terms of parental burnout reduction. These studies contributed to the better understanding of psychological processes involved in parental burnout development and maintenance. Although the interventions identified in the literature review and meta-analysis, as well as the CBSM, CARE, and FOVEA programmes showed their effectiveness in terms of parental burnout reduction, future research should investigate which behavioural change techniques specific for these different approaches target the mechanisms of action explaining the interventions' efficacy.

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Appendix

National Ethical Committee Board Approval

COMITÉ de PROTECTION des PERSONNES EST-III

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Projet de recherche enregistré
Sous les références
N° National: 2019-A00359-48
N° CPP: 19.10.09
N°: 19.02.06.44810
N°: 5399

Madame,

Je vous prie de bien vouloir trouver ci-joint l'avis du Comité concernant le protocole intitulé :

Prévenir et réduire l'épuisement parental : un essai randomisé contrôlé pour les interventions psychologiques basées sur la thérapie cognitive et comportementale, la pleine conscience et la psychologie positive.

Veuillez agréer, Madame, l'assurance de ma sincère considération.

Le Président

Docteur P. PETON

Questionnaires

Parental Burnout Assessment (Roskam et al., 2018)

Children are an important source of fulfillment and joy for their parents. At the same time, they may also be a source of exhaustion for some parents. (This is not contradictory: self-fulfillment and exhaustion can co-exist, and it is possible to love your children, yet feel exhausted in your role as a parent). The questionnaire below concerns the feeling exhaustion that can be experienced as a parent. Choose the answer that best matches what you feel personally. There is no right or wrong answer. If you have never had this feeling, choose "Never". If you have had this feeling, indicate how often you feel it by choosing "A few times a year" to "Every day" that best describes how frequently you feel that way.

(0) Never
(1) A few times a year
(2) Once a month or less
(3) A few times a month
(4) Once a week
(5) A few times a week
(6) Every day

1. I'm so tired out by my role as a parent that sleeping doesn't seem like enough.

2. I feel as though I've lost my direction as a dad/mum.

3. I feel completely run down by my role as a parent.

4. I have zero energy for looking after my child(ren).

5. I don't think I'm the good father/mother that I used to be to my child(ren).

6. I can't stand my role as father/mother any more.

7. I feel like I can't take any more as a parent.

8. I have the impression that I'm looking after my child(ren) on autopilot.

9. I have the sense that I'm really worn out as a parent.

10. When I get up in the morning and have to face another day with my child(ren), I feel exhausted before I've even started.

11. I don't enjoy being with my child(ren).

12. I feel like I can't cope as a parent.

13. I tell myself that I'm no longer the parent I used to be.

14. I do what I'm supposed to do for my child(ren), but nothing more.

15. My role as a parent uses up all my resources.

16. I can't take being a parent any more.

17. I'm ashamed of the parent that I've become.

18. I'm no longer proud of myself as a parent.

19. I have the impression that I'm not myself any more when I'm interacting with my child(ren).

20. I'm no longer able to show my child(ren) how much I love them.

21. I find it exhausting just thinking of everything I have to do for my child(ren).

22. Outside the usual routines (lifts in the car, bedtime, meals), I'm no longer able to make an effort for my child(ren).

23. I'm in survival mode in my role as a parent.

Depression, Anxiety, Stress- 21 items (Lovibond & Lovibond, 1995)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statementapplied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

(0) Did not apply to me at all

(1) Applied to me to some degree, or some of the time

(2) Applied to me to a considerable degree or a good part of time

(3) Applied to me very much or most of the time

1. I found it hard to wind down.

2. I was aware of dryness of my mouth.

3. I couldn't seem to experience any positive feeling at all.

4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion).

5. I found it difficult to work up the initiative to do things.

6. I tended to over-react to situations.

7. I experienced trembling (e.g. in the hands).

8. I felt that I was using a lot of nervous energy.

9. I was worried about situations in which I might panic and make a fool of myself.

10. I felt that I had nothing to look forward to.

11. I found myself getting agitated.

12. I found it difficult to relax.

13. I felt down-hearted and blue.

14. I was intolerant of anything that kept me from getting on with what I was doing.

15. I felt I was close to panic.

16. I was unable to become enthusiastic about anything.

17. I felt I wasn't worth much as a person.

18. I felt that I was rather touchy.

19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat).

20. I felt scared without any good reason.

21. I felt that life was meaningless.

Mini Cambridge-Exeter Repetitive Though Scale (MCERTS; Douillez et al., 2014): Abstract Ruminations Subscale

Read each of the proposals presented below, then select the box that best describes what you usually experience. Don't spend too much time answering, it's your first impression that is important. "When thoughts about myself, my feelings, or situations and events that I have experienced come to mind…"

    (1) Almost never
    (2) Sometimes
    (3) Often
    (4) Almost always

1. My thinking tends to get stuck in a rut, involving only a few themes.

2. I compare myself with other people.

3. I focus on why things happened the way they did.

4. I think about why I can't get started on something.

5. I think I'm no good at all.

6. I feel under pressure to stop my worst fear happening.

7. My thinking tends to spiral out from one specific event to broader, general aspects of my life.

8. I'm concerned of what other people might think of me.

Unconditional Self-Kindness Scale (Smith et al., 2018)

Answer the questions below as honestly as possible:

(0) Not at all	(6) Completely

3. How much are you patient and tolerant with yourself when you are criticised or rejected?

4. How much are you loving and kind to yourself when you become aware of your personal flaws or imperfections?

5. How much are patient and tolerant with yourself when you fail or make a mistake?

6. How much are you loving and kind to yourself when you are criticised or rejected?

7. How much are you patient and tolerant with yourself when you become aware of your personal flaws or imperfections?

8. How much are you loving and kind to yourself when you fail or make a mistake?

The Profile of Emotional Competence (Bresseur et al., 2019)**: intra-personal emotion regulation subscale**

The questions below are intended to better understand how you live with your emotions. Respond spontaneously to each of the questions, taking into account how you react in general. There are no right or wrong answers because we are all different at this level.

For each of the questions, you will have to position yourself on a scale of 1 to 5. 1 means that the written sentence does not correspond to you at all or that you never react in this way, on the contrary 5 means that you recognise yourself completely in what is described, or it happens to you very often.

1. I easily regain my composure after having experienced a difficult event.
2. When I am sad it is easy for me to put myself back in a good mood.
3. I find it difficult to manage my emotions.
4. When I'm angry, I can easily calm down.
5. When I am faced with a stressful situation, I make sure to think about it in a way that helps me stay calm.

Table 1. *Means, standard deviations of studied variables*

	CBSM			Control Group	
	T1 ($N = 67$)	T2 ($N = 67$)	T3 ($N = 35$)	T1 ($N = 67$)	T2 ($N = 67$)
Parental Burnout	53.9 (28.62)	42.9 (27.57)	44.5 (24.99)	45.3(33.58)	45.4 (37.96)
Stress	17.1 (4.24)	14.8 (3.91)	14.1 (4.39)	16.4 (4.59)	15.3 (5.06)
Anxiety	11.2 (3.20)	10.0 (3.01)	9.7 (4.08)	11.2 (4.06)	10.08 (4.16)
Depression	12.8 (4.03)	10.9 (3.57)	11.0 (4.43)	12.3 (4.70)	11.6 (4.64)
Abstract Rumination	21.6 (3.68)	20.0 (4.00)	16.6 (3.40)	19.7 (3.48)	20.1 (4.87)
Unconditional Self-Kindness	12.6 (6.83)	15.4 (7.12)	17.6 (3.95)	14.2 (7.08)	13.9 (7.61)
Emotion Regulation	13.0 (3.76)	14.2 (2.99)	14.6 (3.95)	13.04 (3.45)	13.5 (4.08)

Note. Standard deviations are presented in brackets. T1, T2, and T3 correspond to pre-, post-, and follow-up measures.

Table 2. *Means, standard deviations of studied variables*

	CARE		Control Group	
	T1 ($N = 17$)	T2 ($N = 17$)	T1 ($N = 17$)	T2 ($N = 17$)
Parental Burnout	50.7 (32.10)	34.0 (22.4)	46.8 (37.70)	47.1 (46.9)
Stress	18.3 (4.77)	13.8 (3.07)	15.9 (4.66)	14.5 (5.16)
Anxiety	11.5 (5.24)	10.6 (4.03)	11.3 (4.16)	10.6 (3.08)
Depression	13.9 (4.88)	10.0 (4.11)	12.2 (4.42)	12.1 (5.27)
Abstract Rumination	23.9 (5.52)	22.1 (5.30)	20.5 (3.50)	20.8 (4.91)
Unconditional Self-Kindness	14.7 (5.87)	17.4 (4.27)	13.5 (7.49)	15.5 (7.02)
Emotion Regulation	13.5 (3.38)	21.2 (8.71)	13.2 (3.77)	13.4 (4.55)

Note. Standard deviations are presented in brackets. T1, T2 correspond to pre-, post- intervention measures.

Table 3. *Means, standard deviations of studied variables*

	FOVEA		Control Group	
	T1 ($N = 15$)	T2 ($N = 15$)	T1 ($N = 15$)	T2 ($N = 15$)
Parental Burnout	61.3 (29.7)	39.8 (24.0)	47.4 (40.1)	48.2 (49.6)
Stress	17.4 (3.64)	14.3 (4.08)	15.9 (4.89)	14.6 (5.46)
Anxiety	11.4 (3.89)	10.1 (2.94)	11.7 (4.27)	10.9 (3.10)
Depression	12.4 (4.39)	10.9 (2.95)	12.5 (4.67)	12.1 (5.63)
Abstract Rumination	18.8 (3.73)	17.9 (3.10)	18.9 (4.76)	18.0 (4.78)
Unconditional Self-Kindness	15.5 (8.48)	15.9 (8.98)	13.2 (7.91)	15.5 (6.95)
Emotion Regulation	11.9 (2.84)	13.8 (3.12)	13.3 (3.33)	13.4 (4.31)

Note. Standard deviations are presented in brackets. T1, T2 correspond to pre-, post- intervention measures.

Qualitative analyses

Stages of qualitative analysis of the interviews with NVIVO software

1. Importation of the eleven interviews in separate files

2. Coding: Identification of the occurring themes from each interview

3. Coding: Identification of the number of occurrences for each theme among the eleven participants.

4. Identification of principal and secondary codes

5. Organisation of identified codes in the form of mind map focused on main identified topics using XMind software.
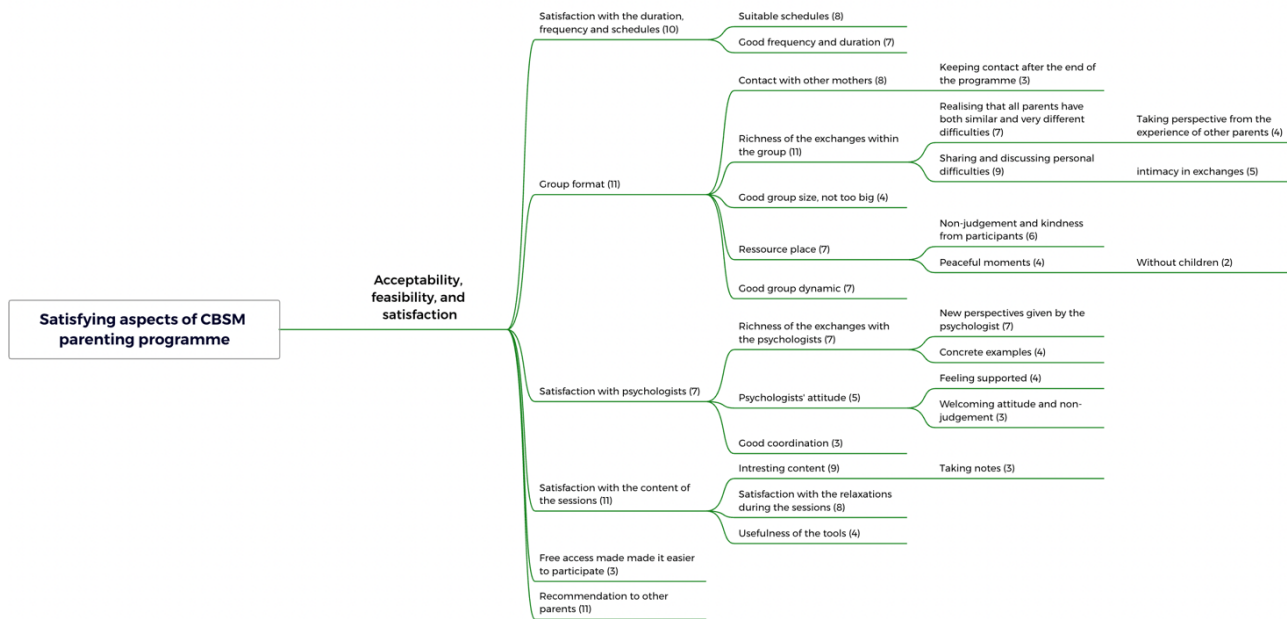
COREQ (COnsolidated criteria for REporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

Topic	Item No.	Guide Questions/Description	Reported on Page No.
Domain 1: Research team and reflexivity			
Personal characteristics			
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	1
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	1
Occupation	3	What was their occupation at the time of the study?	
Gender	4	Was the researcher male or female?	1
Experience and training	5	What experience or training did the researcher have?	1
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	3
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	3
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	NA
Domain 2: Study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	10
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	5
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	5
Sample size	12	How many participants were in the study?	5
Non-participation	13	How many people refused to participate or dropped out? Reasons?	5
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	5
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	5
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	5, 11
Data collection			
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	9
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	No
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	5
Field notes	20	Were field notes made during and/or after the inter view or focus group?	No
Duration	21	What was the duration of the inter views or focus group?	8
Data saturation	22	Was data saturation discussed?	11
Transcripts returned	23	Were transcripts returned to participants for comment and/or	No

Topic	Item No.	Guide Questions/Description	Reported on Page No.
		correction?	
Domain 3: analysis and findings			
Data analysis			
Number of data coders	24	How many data coders coded the data?	7
Description of the coding tree	25	Did authors provide a description of the coding tree?	10
Derivation of themes	26	Were themes identified in advance or derived from the data?	10
Software	27	What software, if applicable, was used to manage the data?	10
Participant checking	28	Did participants provide feedback on the findings?	No
Reporting			
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	12-20
Data and findings consistent	30	Was there consistency between the data presented and the findings?	23
Clarity of major themes	31	Were major themes clearly presented in the findings?	12-20
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	21-24

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

Once you have completed this checklist, please save a copy and upload it as part of your submission. DO NOT include this checklist as part of the main manuscript document. It must be uploaded as a separate file.

Transcribed interviews

Participant 1 (P1)

Q - What did the program bring you?

A – It gave me to know how to take time for myself. It was a weekly meeting which, which took up my personal time and as I'm overwhelmed, I almost didn't come the first time, telling myself no but I wouldn't have no time to do it with all that I have to do already. And in the end, it made me a lot of good because I saved time on other things at home.

Q- Okay. How did you experience organisation and functioning in group?

A – Very well, there was a true benevolence and compassion that was felt. We are all in the same boat with very different situations in fact. In any case, we really share similar experiences: being a parent is tiring. I am a parent, and I am tired. And we were all in, all in this same, this same situation, except that our personal situations were completely different. And despite these differences there was a lot of benevolence. These moments were zen in fact. Even if we talked about stressful things or our difficulties, it was really an important moment. This had become an important weekly meeting, not to be missed.

Q - And so, do you think the fact that it was in a group did anything for you?

A – Yes, there was sharing. And then, I very often like to say that we are often much more lucid about the stories of others than about our own history, but when we talk to others, we can also listen to each other and give advice and support. Perhaps I would do well to apply them to myself as well. Even if we weren't necessarily giving each other advice but still trying to support each other, to try to find solutions, or appeasement or whatever. The sense of being considerate by others and caring.

Q – You gave each other little tips?

A – Yes indeed!

Q - What exercises have you managed to implement in between sessions?

P – Well, personally discovering that I had emotions. I was going a long way. I think this workshop was really a great opportunity. It was unexpected, unexpected, completely necessary. And yes, I think I didn't even know how to recognise that I had emotions. So afterwards I managed to recognise my emotions. I've made good progress.

Q - Okay, so that was helpful?

A - Oh yes!

Q - Did you encounter any difficulties during the cycle?

A – Uh well, well personally when I realised that I had emotions and that I had to face them somehow. it's a bit trying. But it's my personal approach. I had no difficulty coming to the workshops, motivating myself to come, getting into the theme

Q - So you didn't have any particular difficulties in organising the sessions?

A - No. Every Mondays, it puts a dynamic in the week. Monday is sometimes a little complicated but here not on the contrary it gives momentum.

Q - What were your expectations before starting these workshops, did they you're your expectations?

A - I didn't really have any expectations, huh, but it went beyond my expectations. Far beyond, yeah really.

Q - As a result of these workshops, what was their impact on your overall well-being?

A – A really positive impact. My relationship with my son has improved.

Q - Okay, so there's a real difference between before and after sessions?

A – Yes, oh yes!

Q - And so, on a scale of 0-10, how would you rate the effectiveness of the intervention?

A – So for me 10 straight up

Q - Could you explain why?

A – Well, all that, everything that allowed me to engage on my side. The tools also for relaxation, manging my emotions, understanding my needs and emotions. All these tricks to know how react better in stressful situations. Analyse my emotions and react better. All that. I ask myself how I did before.

Q - In your opinion, how have these workshops enabled a different handling of stressful situations or strong emotions?

A – A very complex question… in a pragmatic way, it's the tools. That's all I've said so far: to identify thoughts and emotions, by identifying well I've been able to take a step back better and put things in perspective. And relaxations too because it allows to tell myself that I'm going to save time by spending 5 or 10 minutes telling myself that I have to take a breath. It's somehow accepting to have the impression of wasting time because my days are full.

Q - And so did you manage to set up the relaxation?

A - Yes, it's not very frequently but yes, from time to time anyway. Now I know it exists and I know that from time to time when it's really necessary I'll tell myself go ahead

Q – With the exercises on emotional regulation, on how to manage anger, have you observed a difference in the expression of your emotions, beyond the fact that did you manage to recognise them?

A – Yes, really. Yes.

Q – On a scale of 0 to 10 how would you rate your satisfaction with these workshops, and can you specify what that rating is made of?

A – Well I'm giving 10. Without any doubt I'm giving 10. I'm really excited and I can only recommend these workshops. I would also say that the psychologist really knows the subject. And that, finally, it was really great because with each thing that we were able to talk about, poof she had knowledge and also tips to give us. Then she's also a mom so there was really this thing about I know the situation well and so these tips are proven.

Q - She had mom's experience in addition to teaching all of this?

R – Yes it could be felt, it was felt that she mastered the subject in a way of training. We participated in workshops but she gave us her knowledge. There were things that were still very academic, I want to say, like emotions, and theory. But it was all, it was very pragmatic too because it all corresponds to life, real life. Me anyway when she talked about it was really helpful.

Q - So the workshops, beyond being theoretical it was still very much applied to real life?

A - Yes, the rhythm was good. I think we spent about half the time talking. The round table lasted quite a long time but it's not that we felt it was too long, on the contrary it was necessary, that's what makes it precious. It's a workshop so we are there to participate and we also started from our experiences to progress in our daily life

Q - Do you think this round table has been good for group cohesion as well?

A - Oh yes. Yes, we have created a WhatsApp group. We are all super different and it's really nice because we still have things that bring us together and in particular this workshop, the fact that we shared things that were still quite intimate and in kindness. So, it really creates an intimacy between us which is really nice, and which lasts after the workshops.

Q – What would be your needs regarding parenting support right now?

A - Well actually I wonder if now it's not my son who needs something. He really felt a change in our relationships too. And if I had trouble identifying my emotions and all that, I can see that it's a difficult for him too and maybe the same thing for the kids might not be bad.

Q - If there was something to improve in these workshops for the next few years, what would you suggest as an adaptation?

A - I have nothing that comes to mind it was fine as it was. In terms of rhythm, it was good, 2 hours was good. So, we did 8 sessions which were cut by 2 weeks of vacation. I don't know if 8 weeks in a row wouldn't have been a lot.

Q - Was the 2 weeks break beneficial?

A – I don't know if it really felt good, it gives a dynamic to the week but as it is very very busy before in January. I had not done the relaxation at all. I didn't have time, you see, I couldn't get myself into it. I don't know if, if we spaced out the time, if the rhythm was different, that would leave more time I don't know.

Q - So for example let's imagine that the sessions take place every two weeks would that be helpful?

A – So yes, I don't know because at the beginning we worked on a lot of things that are very, very useful to us. So maybe 3 weeks, 3 weeks and then we take a break for a week, I don't know, maybe. I didn't necessarily feel that.

Q - Finally, on a scale of 0 to 10, with 0 being "not at all" and 10 being "completely", would you recommend these workshops to a friend and why?

A – Yes, yes, I would really recommend this workshop because, because I have friends with whom we can talk about our difficulties, but the thing is that we really go around in circles. This is a pro thing. The fact that it's a psychologist that we don't know, a professional outside our lives, the impact is different and well, I can give the tips to my friends about what I experienced there, but It's not the same, at all, I'm not a professional.

Q - So it would be beneficial if more people had access to it?

A – Yes, yes, yes, that's it and since I'm not a professional and as I also told you it's the fact of having someone who doesn't know you at the start.

Q - Is it easier to open up to someone who doesn't know you?

A – I'm not sure if it's exactly that, I rather think it has a different impact.

Q - How so?

A – Because I think we listen better to people we don't know, for example there hasn't been any criticism, but precisely with friends we can more easily start to criticise or perceive things like criticism, and that's not super nice.

Participant 2 (P2)

Q - What did the program bring you?

A - What did the program brought me? So, it brought a reflection that I found interesting, on the stresses that I have. I have already thought about that, but I never really took the time as much as there during the workshops. So, I find it really interesting to reflect on stress in the life of a parent.

Q - How did you experience organisation and functioning of the group?

A – I think the group dynamic was great. The fact of being in a group well, I liked it. It suited me. The fact of being in a group I find that it allows the exchanges. We had a lot of exchanges on a whole bunch of things. And in relation to our life as parents. So there I found that the dynamic, it brings a dynamic, it brings exchanges, and it's, I think it's good.

Q- Okay. So, what did it mean to you that it was in a group?

A – I was more comfortable than if I had been alone, I think, because it actually allows you to position yourself in a group, to express yourself when you want, not to when you don't want to. And to still be present, attentive. It brought me more… how am I going to say that… yes, I actually felt more at ease. Because it wasn't something well, I find it's not easy to tell yourself that you're a mom, so we were all just moms and we were very stressed by that. Finally, it is already not easy at the start, it is already a difficult observation to establish. Being in a group is

actually reassuring. Saying ok in fact I'm not alone, we're all here, well we come for different reasons but what brings us together is that we find that it's not easy to be a mom.

Q - So can we say that it was beneficial for you that it was in a group?

A – Yes, yes, I appreciated it.

Q – What exercises have you managed to implement between sessions?

A – So I was doing meditations, visualisations, well I don't know what you can call that…

Q - Relaxations?

A – Yes, Relaxations, that's it. In particular cardiac coherence, for me it was a technique that I knew but that I never really put in place. And then it really suited me and I think about it when I'm overwhelmed by the situation. So I was doing the exercises of returning to the moment, of consciousness, of increasing my awareness of the thought process before sinking into something that is not actually real. At the time, to come back to the event, to ask the questions, to ask yourself, to be a little observant of yourself. Here. These are things that I have somewhat put in place and that I continue to do.

Q - Okay, so you get to do it regularly?

A – Yes absolutely. it's not always a success, but every time I really think about it in fact, when I'm really in a stressful situation and I see precisely my thoughts, my distorted thoughts, and so on arriving, arising in my mind. I realise in fact that it is happening and that I try to come back in the moment, and precisely as we had seen, to adjust the response to the event rather than to leave in these fears.

Q - Okay. What difficulties have you been exposed to?

A– The difficulties, so honestly what I found difficult was, I find that it was too scientific. I am not at all an academic person in fact. All the explanations, after all [name of psychologist] was great and everything, but I found that all the explanations, the whole thing was a bit scientific, finally I that's not what suited me completely. I remembered that we have the documents it's

true, but I admit that I have not reread them. But here it is my personal point of view, I found it a little too didactic, academic.

Q - And in terms of the organisation of the sessions did you encounter any particular difficulties?

A – No, that's fine, well, I couldn't come for the last session, but that was due to a personal reason. But no no, I think it was good, the two hours sometimes even wasn't enough. But otherwise yes, I think that organisation was fine.

Q – Ok, what were your expectations before starting these workshops and were they satisfied?

A – So me before starting these workshops I was waiting for, well, I have three children. In fact, I have already done something similar, in another context really a personal initiative, not something organised like now. And I had a third child in the meantime, and I was at the time when I wanted to take part in the workshops. I was really a little… overwhelmed, a lot in fact. In the daily life of a 21st century parent. The group really allowed me to take a step back and then also the fact of being 2 hours in a quiet place without the children is not bad too. And to exchange as I said in a group with other mothers then with professionals too, to exchange about our daily life as a mother and to realise that in fact it is not extraordinary because it is common, and it is not fatal either. We go little by little as we can. So, my expectation was yes, that was to take a step back from the situation, from my role as a mom. And it fully responded to my need because the fact of coming, of disconnecting, and coming back home with tips and also nourished by exchanges and so on. Honestly yeah it helped me a lot. It met my expectations in this case.

Q - Did it allow you to take time for yourself?

A – Yes, it allowed me to take time for myself and take a step back from what I am actually going through. Instead of me saying "yeah ok..." because it's easy to tell yourself that you are a

bad mother in fact. It's something very easy, the fact of being, having done these workshops allowed me to say to myself "well, in fact, that's what you need : to relax a little".

Q - What differences do you see in relationships with your children and spouse after the workshops?

A – With my children, I find that when I shouted at my daughters I, I damaged our bond a little. So that allowed me overall to reduce the situation of shouting, which was actually due to stress, which is my first reaction to stress. I would like to continue because I feel bad to shout, I realise it immediately after that it is not good neither for me nor for my children. Well, that allowed me to reduce that and, in any case, to tell myself that I'm going to do it. That's it, it's telling me OK that I want to improve on that, and I don't want to shout like that at my children anymore. With my spouse, how to say, so I think that there are less stressful situations with the children but honestly, I can't tell you if there is anything significant.

Q - OK, so what was the impact of these workshops on your overall well-being

A – I think that if I say that I feel better it is not precise enough. So, because afterwards I did lots of other actions at the same time, on my general well-being, it actually allowed to take more time for myself. It's true that I said to myself for a long time "I will take more time to myself" and when I during the workshop it made me bim now I will do it. So, take more time for me. And on my general well-being yes there was a positive effect, so… in fact it is the most difficult first step, already to say to myself I also want to take care of myself, of my interior. It allowed me to do little things, small actions as far as possible to get better.

Q - Did it kind of push you to take some time for yourself?

A – That's it, it allowed me to have this reflection, to say to myself "ok now I want to take time for myself" and I do it from time to time, I will walk by myself, I am doing little things. I do yoga sessions even if it's online, I do things a little to take time for myself and to be more available afterwards for my children.

Q – On a scale of 0 to 10, how would you rate the effectiveness of the intervention?

A – Effectiveness, so the impact it has really had in my life. Well, it has been a very long so for the moment I would say 5.

Q – Okay, can you explain a bit what this note is made of?

A – Well, it's made of this stepping back. Which allowed me to improve and make small decisions to improve my daily life, the daily life of my family without getting lost in it and taking care of myself. Well, I think it's all the little actions I took. So all these things allow me to gradually improve my daily life.

Q - In your opinion, how have these workshops enabled a different handling of stressful situations or strong emotions?

A – With the tools in fact. The tools given during the workshops therefore all the tools. There are actually relaxations, but that's more something we do in the end outside of the stressful situation, and what I find really interesting is self-observation, in fact, I do not know if we can call it that way but self-observation. Self-observation, putting awareness into what you do, even when you are actually stressed. Even when the outside seems really knocked out and you have to wake up the 3 children and it's 8:10 a.m. and the school is going to close, we're going to be yelled if we arrive late. It's a situation that can make everyone smile, but in fact in a parent's life it's really a stressful situation and so even at that moment, saying I'm OK, we're going to do our best, we're going to go to school, we're going to go to nursery and not anticipating in fact, not saying anymore to yourself like I was doing before "ok I'm going to be late , the gate will close I will find myself with my two kids on my arms, at work, etc. » Just to say to myself ok what can I do now to go to school faster and that's it. That's what I find interesting: these tools, finally the tools of self-observation and awareness of what we do even when the situation is chaotic.

Q - So it allowed you to put things into perspective a bit?

A – Yes, I think. Instead of projecting yourself into a horrible future, telling yourself what I'm doing now. Be in the present moment. Say to yourself in this moment, yes what am I doing.

Q- Okay. And do you notice a difference in the expression of your emotions following these workshops?

A – So, yes. It is difficult for me to say because I find that indeed the workshops are part of a whole lot of things but for me it is something on which I have been working for a long time. The workshops contributed to this. It is to take in charge my own emotions without pouring them out on others, on the people I love the most, those with whom I live, therefore my spouse and the children. It's about taking them in charge and finding a way to express them. To finally take responsibility for my own emotions and so yes I am improving. I'm getting better at that, especially I scream much less. The scream is a bit of an emotion... I don't know, anger and that made it possible to express it without screaming. And also, the fact of doing the relaxations I find that it also allows me to be less nervous when you I'm angry perhaps to be less angry.

Q - So to express the emotion less strongly?

A - Yes that's it, the fact of doing it regularly make it that I'm not super tense for 10 days or a month and then afterwards when I explode it's really not possible. It's even when I'm well I still do something for my well-being which means that when I'm not well I react a little less strongly.

Q- Okay. And do you think it has allowed you to better identify and express your needs?

A - Yes and that's difficult all the same time. Because when you have small children who also have needs that can't wait, I mean they're children. My daughters are 9 months, 4 years old and 6 years old and when they are hungry, they have to eat. So, to situate my own needs in relation to the needs of the child, I still find it difficult. But I identify my needs perhaps a little better. For example, right now if I need to be alone, that's my need. Can I be alone? No, I mean I will

not leave my 3 daughters here. But once I identified my need, I listen to it, I'm not going to say to myself "no I don't want to be alone, everything is fine". I say to myself "ok, I want to be alone" and there for example I plan things for spring, I say to myself "ok now I want to be alone" I listen to my need, and I say, "even if it's in 3 months, in April, in May I could go 2-3 days somewhere alone without my children". Already done, here I am planning something to meet the need that is now that I cannot satisfy now but here it is. I identify them better but honestly, to say that I manage to be as close as possible to my needs is not true.

Q- Okay. On a scale of 0 to 10 how would you rate your satisfaction with this workshop, and can you specify what this rating is made of?

A – Well I'm going to put 8, that's a good 8. It's already been done so the fact of having organised these workshops I think it's very good to be able to offer them like that for free to parents, I think it's as if already in a certain way we organise them like that we already hear the fact that the parents need that. So, I think it's great that it exists. So, I think this is an interesting experience. The organisation was good, finally here we were welcomed at the *house of the citizens* and if we had little tea, it would have been good. No, but here it is, made of all that, the fact that it exists, the fact that it's free, the fact that the psychologist knew the field, and the group dynamics too. I was a little disappointed not to be able to be there for the last 2 sessions and that's it.

Q - And in terms the organisation did the schedules suit you?

A - Well it would have been good if it had been for example in the evening because in the evening, I could have done the whole cycle because during the day I work. Because it was for parents who weren't actually working, because on Monday afternoons, it's true that if it had been from 6 p.m. to 8 p.m. it would be easier.

Q - And you've already started to answer a little bit but if you were to improve this workshop for the next few years what would you suggest as improvements?

A - So I'll suggest evening hours for working parents and perhaps for non-working parents. Because in addition I proposed it to a friend in fact this workshop and she, she works, and she said to me "Monday afternoon I can't". So that's the point and often parents who work are often very stressed, I'm not saying that those who don't work aren't stressed, I know both, I've known both but it's true that it can be good. A second thing, I think it's true in fact I said the tea was for fun but not too much because it's true that if you have a warmer atmosphere. The room was fine, but I think the fact that we were sitting on chairs like as if we were at school, so I think that if there had been, for example, we could have sat by ground or on small chairs and it's true with a hot drink to really relax and it's also easier to express yourself. It would have made it easier to disconnect too because it was 2 hours for the mother after all. What else can I say? Afterwards I think for the organisation was good.

Q – Was the content of the sessions suitable?

A - It's true that it was good, personally I didn't re-read the handouts too much because I found them a bit heavy in fact, I really felt like I was doing a master's in psychology at university. No, but I will read them again after the interview. I'm going to read them again to see. The content of the sessions yes, I don't know what to say about the content, the content was good because there was a method carried out, it's true that there was an aspect all the same a little rigid. I remember someone who was taking notes it was… sometimes say "ok, okay what should I do? distorted thoughts" and in fact it's as if you have to remember the process first before you set it up. It wasn't very intuitive in fact, that's something we say to ourselves "ok, this week I'm doing that" finally after I don't know how it can really be improved but maybe offer something simpler. Finally, I managed to do it but yes I found it too rigid sometimes.

Q- Okay. So ,what would your needs regarding parenting support after the programme?

A – I think those cycles are good, but having already had them maybe offer the follow up sessions you know? A bit like we find ourselves in a group in 6 months and we redo a session to precisely update our knowledge, see what we are doing, what we are not able to do, a little what we are in the process. In addition, in a group to say to each other here is what is difficult and then also to meet the same people too. So, there we created, I had created a WhatsApp group with all the girls who were there but it's not the same. So, I think one thing that would be good is really that, doing updates and then maybe by email… it's true that during the confinement the University of Grenoble had organised something, there was a website, they had made a website with all the toolkits for parents because the confinement was difficult for parents and young children. And maybe here it is, send us the newsletter with tips, things to put in place. And for parenthood, I find that yes... it's really encouraging to get out of your home, as I said at the beginning of your loneliness because when you're

in it you feel like you're alone in the world and we're not doing everything right. So, organising meetings. Meeting other parents. As soon as I heard that there were things I went there because each time it allowed me at least to meet other parents, professionals, just to talk about it sometimes that may be enough.

Q – So, for you it would be beneficial if there was a follow-up over time?

A – Yes, because once again I have already experienced it. I did the first parents' workshop, but it was in a somewhat outdoor setting. I had my second daughter who is 4 years old now she was very small, she was 5-6 months old maybe and it is fading. Unfortunately, that's it, there is a decreasing effect. Afterwards, if we don't put other tools in place on the side, if we don't do things that are really a little personal development on the side, the effect fades. Really, I think it's important to have a follow-up, to do I don't know but what seems to me the simplest, the most logical is update sessions. I would have needed that in any case each time I participated in this kind of workshop.

Q - Finally, on a scale of 0 to 10 (0 being "not at all" and 10 being "completely"), would you recommend these workshops to a friend?

A – Ah yes, so I recommend 10 out of 10 to all the parents around me. Really, I've already recommended it to friends, I said go for it, because it allows you to manage stress differently it really allows you to take care of yourself. It's a real help. It's not just 2 hours that we spend, it's a real help, it really helps, it's concrete, it allows you to learn new things, to know new people. It allows you to discuss your parenting difficulties without judgement, without falling into self-criticising. Yes, without judgment and in all authenticity in the end because it is very hard to be a parent in our society today. So yes, I recommend it and I think there should be more. But it's really helpful. I think all parents should go through it, it's super important. I think it's really beneficial for a parent to do that.

Participant 3 (P3)

Q - What did the program bring you?

A – So what did the program bring me? The program brought me. It brought me an awareness of the emotions that arise, let's say, mine, and tools to better manage them even if I still have a little trouble on certain points. So also, beyond that perhaps a reflection that I had not necessarily repeated the models that I received as a child. I made connections, so I also talked a lot with my dad, I think it comes from the program suddenly. And then afterwards, well with my child it gave me keys for the future because for the moment he is still small. Perhaps I was less concerned than other participants on side of managing child's emotions too. But I am better armed, I think, for the future.

Q - How did you experience the organisation of the group sessions?

A - That's very good, very good. I think the whole group has a WhatsApp group now. The number of participants was good. Well, after that I think we weren't all present every time but that was good. The format was good, because the round table which sometimes lasted quite a long time but we felt that depending on the week some had more need to share and unburden themselves. There was a lot of kindness, [psychologist's name] did everything with kindness and everyone in the group too. There was no judgment, and it was good, I think, for the moms to let go. In any case it was a resource place, and the group was benevolent and kind so that was great. Then the relaxations were great too. And the theoretical part which gave keys to think about for the week after was very useful too.

Q – Okay, so what do you think about the group format?

A – Oh well, to see people because we are in the Covid period, and then I like to meet people. In addition to meet people from all completely different universes, that is to say, people that we wouldn't have met outside of this program, I think, or there's little chance. We wouldn't necessarily have known each other. So that brings a richness, the experiences of each other, the stories of each other. Yeah, no it was good. It was, yeah I was going to say happiness, it's nice to come on Monday afternoon and see the everyone.

Q – Ok, and what exercises have you managed to implement between sessions?

A – I didn't do the relaxations more than once, I would have to do them again because, I didn't do the relaxations too much. Afterwards I was more thinking about it when I was angry or sad, looking if I had distorted thoughts or things like that, trying to rebalance. Not always easy, I still don't necessarily always get it right but that was mostly it. Recognising the symptoms, the distorted thoughts, all that, trying to rebalance and see what was causing it in me. That's it and on anger management too. Trying to get down before I explode-I tend to explode. A bit of everything in fact, a bit of everything she gave as tools were useful. Afterwards, it is perhaps a little less obvious, I tell myself that at home, compared to other participants, it really worked

very well. I always tend to want to analyse everything, and I don't know if, well here it is. I think about it, after has there really been a big change in me, I'm not sure but in any case, I'm more aware of things. And I try to continue to apply them daily.

Q - So it still gave you some awareness?

A – Oh yes, yes, an awareness, moreover at that time I was already working. I started to work on the child's emotions but not on my own. So, the fact that it was focused on us, on the parents was good too. It is complementary with the emotions of the child ultimately. So, I don't come from a family where we verbalise emotions much: it's like in a lot of places I think actually. So, it's a bit new to say, well I do it now when I'm angry I tell my son "now I'm a little angry" so at least it's posed, it's expressed and I feel good after.

Q - So what are the difficulties you have been exposed to?

A – Some relaxations work better on me than others. Those based on vizualisations I have trouble with, those that are more physical, bodily focused suit me better. But otherwise, no difficulties, no particular difficulties. I try to remember everything but, well, there were some weeks where I think I was doing the exercises more than others. Perhaps because there are things that speak to me more than others for example stress which speaks well, anger also speaks well to me.

Q - What were your expectations before starting these workshops and were they met?

A – Let's say that but my expectations were completely different, finally were completely different as I hadn't understood that it was focused on parents, in fact I had precisely understood it was focused on child's emotions. I don't know why because I was into my thing and so I was expecting something really focused on how to accompany the little ones in their crisis, in their anger, the big emotional storms, all that. And in fact, it wasn't about that. So, my expectations were different, but afterwards the workshop responded well to what it was and it brought me a lot so I'm very happy in the end that it was more focused on us rather than the children. Because

ultimately it is we who transmit things to our children, and it is also our behaviour that makes children respond in this or that way. So, it's much better like that, I'm very happy.

Q - Following these workshops, what was their impact on your general well-being?

A - Well, it's a pity that it's over. Yeah, it feels good. It had a positive impact, even if I would have liked to continue. I would like to do it again, I told [social worker's name] that I would like to do the workshop again a little later when my son will be older. I'd be interested in doing it again. Or continue it in another form, I don't know, that wouldn't be bad. Afterwards, everyone, should benefit from it, but we could have continued for a long time, I think.

Q - And what differences did you observe between before and after in the relationship with your child and with your spouse?

A – Well my spouse, I really worked on this. I think I try to express myself more and everything. Well, it's not always easy... it's not always easy, when you're a parent I think the couple takes a little hit anyway so there are always ups and downs. It's not easy but in any case, yeah I try to explain myself better, then the same to rationalise. It's always the same when I'm angry I say to myself "oh well why am I angry with him", because in the end I'm more angry with him than with my son. When I get angry it falls on him because it has to fall on someone. And so yes that's a little better, I think. And afterwards with my son too, I try to verbalise his emotions to him, I verbalise mine too, so that's better

Q - But for example do you get angry less?

A - Well, I'm not too angry with him, no. But yes I get less angry in general. I still get angry I think but now am aware of why so I try to calm down a little. Or I explain calmly, I explain calmly to my spouse why I am a little tired, or nervous, or sad, or stressed in the evening.

Q – You are better at verbalising.

A – Yes, I can verbalise better. Yeah. And after that it gets better.

Q – And on a scale of 0 to 10, how would you rate the effectiveness of this intervention?

A – Oh well 10.

Q - Can you explain why?

A – Well, I'm speaking from the group's point of view. We saw week after week that the impacts were very positive, mothers were more and more aware of things and they were better able to communicate with their children, with their spouses. For example, when 5psychologist's name] had given them a little trick to manage a situation with their child, they had put it in place and it actually worked, in general it worked pretty well. So, we can see that everyone in the group I think has evolved compared between the first and the last sessions. Whether it's through parenting tips, let's say, tools or relaxations, or tools for awareness and stress and anger management. That on top yeah it was effective. And then I think that the group effect was also important. It works, it's a bit as if we had homework to do for the next time, like a theater group, we practice during the week then we note how we react and we realise that yes things can change, it's not fixed. That I also think that if everyone had a group like that it would be good. We can all evolve and rectify and change.

Q - And on your level for efficiency you give 10 as well?

A - At my level...well, I give 10 yes, after that, in terms of what I want to achieve, I wouldn't give 10, but that's different. The workshop did the work and after that it's up to me to continue working on myself. So yes, I give 10 on efficiency afterwards, however I have not achieved what I would like to achieve but there is still time. I started the journey and I still need to work on my emotions, especially anger and stress.

Q – Ok, in what way do you think the workshops have allowed you to react differently in stressful situations or those engendering strong emotions?

A – Well, I think precisely because [psychologist's name] taught us to spot the symptoms and signs of anger and stress and once it's spotted, everyone has a little alert in our head and even if we explode in anger or even if I don't know the situation doesn't end up like we would have liked it, we still have the little signal in our head and afterwards we say to ourselves "oh well, it went like that, I could have reacted like that, I could have put in place this or that such a tool", do a little relaxation, we recorded them all so I think I...yes that's it I think it's to have that in mind. Then to identify stressful situations and allow them to be reassessed, rebalanced, and discussed the next time, that feels good. Hence the famous round table will be missed the most because now we have the tools, we understood I think how it works. On the other hand, we will no longer have the possibility to empty our bag, yeah, the little round table where we can say what happened and we receive opinions or just a listening.

Q - So for you the round was really important?

A – Oh yes, yes, the round table was very important. Well in fact it was seen because it took a big, big part of each session. I don't know if it was planned at the beginning but in any case, it took a big part and I think that round table was central. Everyone looked back on their week, and we realise that there are good weeks and bad weeks. And I think it allowed to say just what is on your heart. You can't always really do it, neither with friends, nor with your parents, nor with your children, obviously not with your children. Nor with your spouse who doesn't necessarily want to hear that and then we don't necessarily have the same facility. It's not the same to talk to people you don't know very well or in a dedicated group and to talk to friends or people you know. It's not the same thing. It's somewhere easier when you feel that the group is benevolent and that yes there is no judgment, you throw the lyrics and yes here we actually empty our bags. And that was, yes that was very useful, I think. I don't know what [psychologist's name] thinks about it but I had the impression that she welcomed each story. She was the sponge, she does like us with our children in fact, she welcomes, what's there. She

welcomed the emotions and then afterwards we could, once that was done, we could move on to the tools for the following week.

Q- Okay. And did you notice a difference in the expression of your emotions?

A –yes, I express them more verbally, I try to express the anger and to manage it better. I always have trouble with stress because stress, it's complicated.

Q - And so do you think it has allowed you to better identify and articulate your needs?

A - Oh! This question is interesting. Yes, I think so. Yeah, yes, I think so, completely. Especially in relation to the spouse or things like that. Yeah, that helped me I think.

Q - Okay, and you manage to take a little more time for yourself to precisely meet your needs?

A - Yes, yes. I still have a bit of guilt. There's a mom who was talking about it and it's a bit the period that means that because I'm completely, almost completely unemployed and my husband works 100% so somewhere it's still normal that it's me who manages all the household. I take time for myself, but it is sometimes a little difficult. It might be easier if we had like before our two jobs and we said to ourselves "on Saturday morning it's you who will run and on Saturday afternoon it's me who will to that for myself" Well, here it might be simpler. Now, I feel a little guilty saying "ah I need time for me" when basically I've been on vacation for almost a year. But yeah, I take more time for myself.

Q – On a scale of 0 to 10, how would you rate your satisfaction with this workshop, and can you specify what that rating is made of?

A – Bah 10 too. Well from everything I said before. Very nice group, very competent psychologist. She is also a parenting coach I think and that was really felt, it was really nice too because we feel that she has experience on the benevolent education. We feel that she always has an appropriate response to each situation. It feels like she has answers for all the difficulties you may have with a child. So, if one day I have a problem I think I will go see her. So that was one side and then there is the stress management side. So, there were really both and then you

could feel it in the workshops, she was doing her stress management part, that's it, but next to it there was necessarily the parenting coach side that stood out and that was great. Let's say the format I really liked the format, the relaxation, all that. The schedule suited me well too, 2 hours was good, it doesn't take too long, that's what it takes. The less it would be a little fair, the more it would perhaps be a little too long. Same about number of people it was good. I have nothing to complain about.

Q – Okay, what would be your needs right now after the programme?

A –I would like to continue working on managing the child's emotions and then continuing our little meetings. but it's perhaps not the same thing but a bit on the same model. Something like theatre with exercises where we can more express, release emotions. But not around the table but with the body. I don't know if that exists, breathing exercises It's almost like therapy. That's all I think.

Q - Okay, and you've started to answer but if you were to improve this workshop for the next few years, what would you recommend?

A – wWell it's difficult because it's already well paced, so I don't know if it's doable. Maybe it could be something instead of relaxation a standing exercise. Two more sessions, to continue a little bit on the anger perhaps. It's true that the last session we all had to leave a bit quickly, for different reasons and everyone was not there. It's true that perhaps a feeling of incompleteness on the last session, which is also due to the Covid situation, all that. But I think we all might have wanted to extend the moment a bit and then finally we had to leave quickly. Hence maybe the Facebook group too or WhatsApp. I don't see too many improvements.

Q - Ok, and on a scale of 0 to 10, with 0 being "not at all" and 10 being "completely", would you recommend these workshops to a friend?

A – Ah well yes totally, to all the parents. Well, in fact, it's funny because in the end, it's in the context of parenthood, which is very good, when you're a parent, you're faced with situations that actually push us a little into our limits and that promote burnout and everything. But the work too, ultimately it should be workshops that should be given to everyone. Everyone should do this at least once in their life. And early enough to learn how to manage emotions and stress. If there are more similar workshops, I'm interested in participation too. it's all about communication, between humans, human relations, basically not only parenting. But yes I will recommend to everyone.

Participant 4 (P4)

Q: How did you experience participating in the workshops?

A: So, this participation brought me to see that I was not alone in experiencing difficulties as a parent, to see that I was not alone to live situations like that, to be normal.

Q: Ok, so I understand that you particularly appreciated the group format.

A: Yes, yes to be able to share and hear other experiences

Q: And beyond this group modality, what did you think of the organisation, the functioning of these workshops and the exercises between the sessions?

A: It helped me to be able to decenter a little bit from the problem, take a step back and it was effective, for me. In a group I managed to do relaxations, but I can't manage to take that time when I'm home. I don't take that time in fact, in any case it's not a priority, it's not the priority you give yourself when you're a mom.

Q: And what were your expectations before starting these workshops?

A: I found the information about these workshops completely by chance and I was in such a state of despair let's say I didn't really know what to expect and I was rather positively surprised by what it could bring me. So, I was really going there for discovery. There was also the psychology side that interested me because by my profession, I am a schoolteacher so it's true that I'm often also called upon to help children so I had this expectation. I was interested in psychology when I was young since I I also studied psychology at some point.

Q: Ok, and do you think that these workshops responded to what you needed

A: Oh yes, absolutely. It worked, even if I didn't really have any expectations, it helped me a lot and it answered questions that I didn't think I could ask myself by participating in the workshops, but it brought me a lot of answers.

Q: Great. I wanted to go back to something you told me that these workshops had come at the right time, can you tell me more about it, perhaps?

A: So I was in a search, I was in full confidence with my 14 year old son and then he was 12-13 years old and my daughter uh 15-16 and I have a third child of at that time 3-4 years. So it was quite complicated, especially with my second one. I had a lot of problems with him being separated from the dad and I have the children full time. I felt really alone with my second boy in the face of his difficulties, and I had submitted a file to the Language Center and I was waiting at that time but there was no diagnosis yet posed so I had no idea what was going on, I couldn't understand.

Q: Ok, okay. Uhm, what information did you find useful in these workshops? Any examples that come to mind?

A : For example, to take the time to breathe to relieve stress, wait uh I think it's 70 seconds something like that, be here and now I've done my thing, it's to say that I don't get angry any more right away, I'm going, I'm going to breathe ,even if I am in the presence of my child, before I needed to leave the room, for example at homework time, and now I manage to do it

and tell myself ok it's not my fault, it's not his fault, I'm going to breathe and I'm going to resume more calmly. So, I get angry much less quickly, I am much less quickly in stress, and I manage to take this necessary step back.

Q: Are there other examples that you can think of, of difference in your daily management or in your relationship with your children?

A: So, I avoid answering my teenagers with a negative sentence, that is to say, I have another example, my daughter who told me last vacation here I don't want to go on vacation with you anymore, I want to go with my friends. So of course there's everything, everything that a mum can see, yes, but you don't have any money, I won't be able to pay for your holidays in addition to those of the family, so I answered her yes ok no problem my darling you will be able to leave with your friends but you may have to find a job because you will have to finance your vacation. And there it went super well she said that yes of course yes, I'm going to work. Well, she still hasn't done what was needed to work but it avoided a conflict, and it went pretty well in terms of understanding.

Q: And now what would be your needs following these workshops?

A: So, it evolves it's difficult because there are things that have been put in place and which I have improved, there have also been assessments that have been made compared to my second too, which also allowed me to have an understanding of what was going on. In terms of expectations, the difficulties I still have are relations with the college, for example. When there is a child in difficulty, then everything depends on the college where you go eh I imagine but there with the college *** it's completely blocked. I don't know how improve things, at the same time my son is in 3rd grade so he has a little less than 6 months left, so I gave up a bit and then I said to myself we're going to do it, we're going to leave the past behind, but that's true that the relationship with the institutions remains complicated so I will see after following his

orientation if it continues or if it improves or I don't know for the moment I don't know but it's true that the institutions which are rather refractory, that's something that I don't master yet .

Q: Okay yes. And how do you estimate the long-term effects of the workshops?

A: So, I'm looking for different solutions and I'm trying to use them, so it depends, on the time I have, on the level of fatigue, if I'm very tired I'm going to have a lot of trouble taking this step back, but the fact of having practiced still allows me to take a little bit even when I'm under stress or tired.

Q: So, it helped you not only in the area of parenthood, in your work as well.

A: Yes. Yes, to take this step back and it helped me on the theoretical contributions and also in a way of looking for solutions. It's as if it had been a model that I used, that I tried to copy later. Well let's say that in work I let go of certain things more easily, if a child doesn't understand right away, I manage to let go and tell myself it's good we'll start again another time, in another form, in another way, we're going take a little time. And also I feel less guilty about myself I not telling myself anymore that I'm the one who sucks, or that I can't do it.

Q: Did you notice a difference in the expression of your emotions? do you have an example?

A: So, for me there's something huge, especially with my children I stopped shouting, seeing everything that was negative, putting what's negative in a first place. Now I try to not to raise my voice at all.

Q: Ok. You told me that you participated in the workshops before the confinement, do you feel that they were useful for you to manage this difficult period?

A: Yes, so it was a good time since I had no, let's say that with my son who has now been diagnosed with ADHD. Everything, I did with him, any request related to school, for example, doing homework, things like that uh he is in refusal, in addition he has been identified as someone who has a disorder of opposition so everything that comes from he will try to contradict it, to refuse it, to look for other paths and everything is negotiated so that's it, it's

really something that was problematic between us so it's still a bit problematic but I manage, thanks to the workshops, to take a step back by saying to myself okay he's a child he has his difficulties I have to help him, if he does that it's not to bother me but, that's even if sometimes it's not easy every day but I, I'm less in the guilt and fear. We managed to do 2 hours of homework a day which is very little but here I was able to see the good side, we still did 2 hours which is already not bad, even if it was not 2 hours full since he needs to take breaks here.

Q: Ok, so beyond the fact that you were able to better understand, better regulate and react to your emotions, it also helps you to understand those of your children.

A: Yes absolutely. In any case, I don't talk about relations with my eldest because there are less, there are more worries with my eldest. At the level of our relations, our relations have really improved we have really good relationships, after all, I don't endorse everything she does, I'm still deep down I still think I'm a little stressed because I know that she doesn't necessarily always make the right choices, but I try to accept them and to help her in the choices she makes. Something I wouldn't have done before because I would have been too scared.

Q: And I was wondering, did your son's diagnosis come after the workshops?

A: The diagnosis arrived in October 2020 so yes, before the diagnosis it helped me a lot, a lot. Just to try to value my son and to try to defend him, something I didn't do before, since I, I'm a bit part of this family because of my job where I gave reason to the institution and not to my son so there I told him well you have to be defensible so if you want me to defend you you have to, we will have to see together what is or is not defensible and how you can act to make it defensible. So well it's not always the case but now I manage to identify and see him a little better when he is hyper-stressed, and to see in which situations he is really in a good state, when he had fun. Because the difficulty I have with my second son is that he is in the middle of his teenage period so there are also teenage worries that emerge and his difficulties due to his behavioural problems. So it's not always easy to make sense of things and that in college they

don't make any difference at all, for them he's an insolent teenager, who responds and who seeks the limits so here it allows me to be stronger mentally to be able to talk to him about it, also in a more serene way with the teachers even if, for me, it ends when I see the answers. They don't understand anything. But I try to encourage him and to, to, to give something positive when it's needed, that's it.

Q: Alright okay. So, it is especially with your two big ones that it has served you?

A: It's especially with the 2 big ones because I separated with their dad, so they live with me and there was this this war, we had a not nice separation at all so with the two big It was difficult, they had trouble accepting their stepfather here, while the youngest has his dad who is at home so it's, let's say it's easier. But there are still difficulties, today the difficulty I encounter is for example the disputes between the second and the last. The second puts himself at the height of the last, not understanding that he is the big one.

It's difficult to manage especially since the middle one comes off the table very quickly because he doesn't stay in place due to its troubles so we have to manage it so I manage to manage it but I will say that it stresses me less than before, even if I can't manage it I think completely as I should, but it gives me less stress, it puts me less in a state where I think about it before sleeping and where it keeps me from falling asleep.

Q: Okay. So before leaving, do you have any other comments to make about the workshops? on the organisation, the content, the usefulness?

A: And I think it's really super important to set up, because given the number of participants, I think a lot of parents need it, so that seems important to me. And the other thing that I appreciated is that it could be done at the beginning of the evening, even if it had been at the end of the evening maybe for me it would have been even easier but hey there, I was able to do it. And then the free access too. Because financially at that time I would not have been able to

participate if for example there had been a financial blow, very clearly it would have been difficult.

Q: Okay. And on a scale of 0 to 10, 0 not at all and 10 completely, how satisfied were you with these workshops?

A: I would say 10

Q: So still on the same scale of 0 to 10, would you recommend these workshops to a friend?

Q: Oh yes completely yes. I even used to explain my journey to, because I am in the process of making a disability recognition in relation to my son and in the life project I did write that I had participated in these courses precisely it had brought me a lot of good and necessary hindsight to manage my son at that time.

Participant 5 (P5)

Q: How did you experience participating in the workshops?

A: Well, the schedule was not very simple but otherwise it was good. In fact, we had the concern of the premises at the university which close early

Q: What were your hours?

A: it must have been like 5:30 p.m. to 7:30 p.m., yeah, something like that. It was pretty early when you're actually working. It was complicated to arrive on time and to organise family life on such an early schedule.

Q: I imagine. And apart from that how did you experience the organisation and functioning of the group?

A: It was fine the group was not very big then there was no man it was a shame, yeah we were, I think we were only 8 or 9 but in any case there was, there was no man, it was a pity. But

otherwise, it was fine. Some people took up more space than others. But yes, well it's more rewarding, to have the return also of other parents.

Q: Of course. And concerning the exercises, have you managed to put things in place outside of the sessions?

A: Well, it depended on which ones, there are some that I found quite easy to do in fact and there are others that didn't necessarily speak to me or there were no situations that came up. I tried to do as much as possible.

Q: And when you say that you didn't necessarily succeed in setting up exercises, what blocked you?

A: Well, either there weren't any situations that arose that fell within the scope of the exercise, or the exercise didn't speak to me. It's starting to go back at least 2 years so it must have been one of the very first groups, it must have been almost 2 years.

Q: Alright. And what were your expectations before starting this group?

A: I actually didn't have that many expectations, it was discovery, my goal was also to, before recommending to the other parents I accompany, to have tested it myself.

Q: OK, because you accompany parents as part of your work?

A: Yes, I accompany parents but with small children in fact, between 0 and 2 years old roughly, and I often redirect them towards other professionals and there I wanted to do the cycle before. On the other hand, I recommended it to a lot of parents, where I said to myself really there are tools.

Q: Okay, so you didn't necessarily have a personal parental problem?

A: Oh well I knew I wasn't going to solve them but if there were problems, I'm not sure there were parents who didn't have any, but after that I thought it was interesting to discover things,

things that I didn't know, or it was interesting to review tools that I already knew. And then it forces you to take some time to really ask yourself all these questions

Q: And what information was useful to you in these workshops?

A: Cardiac coherence for example I had already heard many times, but I had never tested it and finally I liked it well. I could even introduce it to my eldest son who is taking his baccalaureate this year.

Q: Do you have any other examples that come to your mind?

A: I found that it allowed me to take time again to think about lots of things, about my place as a parent and the time that I took for myself. I tell myself, even if most of the tools we saw I knew them, maybe in everyday life I took less time to set them up.

Q: And you observed differences in the relationship with your children and your partner?

A: Not necessarily, but not, I tended to tell them a little about what we had done so it was not bad too since I think that my spouse understood it differently from when I explained it and even my children.

Q: And today, what would be your needs following these workshops regarding parenting support?

A: I think it's a shame that behind there isn't a group that continues to see each other, I don't know, once a quarter. I think that something in the long term would make it possible to put things in a more lasting way in daily life, and afterwards well, I have the particularity of having children who had diagnoses so there were tools that were offered to us and that I couldn't use because of difficulties that I could never remove in our daily lives.

Q: Ok, so maybe it was not suitable enough for your situation?

A: Well, let's say that it would still be not bad to set up a group like that but with parents who have a child with a disability. I would like a cycle like that but handicap-oriented, really.

Q: And regarding the long-term effects of the workshops, how would you rate these long-term effects? Do you have some practices left?

A: Yes, there are some left. First there are things that I set up with the children, like guided meditation, which I set up for the two youngest and which they now use alone in the evening to fall asleep. It's the same in fact in the end it was things that I had already tested but that I hadn't really liked, and then there to see the interest in. I said to myself well it's not because that I don't care that they won't care, so that forced me to propose them some meditations. Cardiac coherence that I like it a lot. I still think that I have to take time for myself, more than before. Although I knew in theory that it was important to take time for myself.

Q: Ok, so you were really sharing what was discussed during the workshops with those around you?

A: Yes, in fact, each time we saw a technique I explained to them. But I would have to go back to the list to tell we did on stress management. Well after all that was the symptoms that I already knew but I found that it was still good to hearing it again it still allows me to remember it, because I find there are things little by little we forget. So, muscle relaxation typically for once is something that I already used before, firstly because we use it a lot in yoga, at the end of the session and because it's a trick that I had the chance to learn in elementary so 35 years ago, and suddenly it was something that I already mastered it, so I continue to use it. The automatic thoughts are something I continue to work on but I have a little trouble undoing them. Because that, that's something where precisely I think that if we had sessions that came back, I don't know, every 6 months or what, that, that would have helped me. Breaking the vicious circle, it was complicated before and it's still complicated. Then deep breath, it was already things that I was doing in fact, so I continue to do.

Q: Yes, you already had a good foundation, you knew.

A: These were things that I did it was good because it forced me to do them systematically. Because in the end, apart from yoga class, I don't necessarily take the time to do it. Mental imagery doesn't work at all for me, but it's never worked, it's a bit like sophrology, it doesn't work at all. The times we used it I tended to go off in my thoughts. Visualisation does not speak to me at all. In fact, I have very little imagination, so it's hard for me to imagine something that isn't real. We worked on rational thinking, so that I find that it's also not obvious, I already knew, and I had trouble. Afterwards I tend to do a lot of reformulations, to be sure I understood what the other was saying to me, I think I was already doing it before and I think I do it even more. But it tends to annoy people when you rephrase it, they're not really trained in it. We still have balance at home, there is a real division of tasks and I think I was one of the only ones to have that in the group, so I rather went home giving my spouse compliments by telling him: well you know what you're a great guy. Asking for help, well it's similar, I realised that I still had a huge network around me, whether family or social and that in the group I was still a little the only one to have so many. It's quite easy to ask for help when you're surrounded. Yes, it was the day when we had to find people around us for material psychological support.

Q: Last question, in your opinion, how have these workshops enabled you different management of stressful situations or situations that generate strong emotions?

A: I think it allowed me to respect my limits more, telling me: OK, it's for nothing, it's not his fault if he has such or such difficulty but that doesn't mean that I have to systematically go beyond what I can do. So yes, I think it allowed me to be more attuned to myself. And to also tell me in fact I have to trust myself as a parent. As a parent, you have to trust yourself. And also, I think I'm more careful not to go beyond my limits.

Q: Okay fine. Before leaving, do you have any other comments, remarks to make on the workshops? in relation to the organisation, the content, the usefulness?

A: I find it super useful, that's for sure. Timings I think is a real problem. So, we're putting on a workshop at the Children's Café, the meeting is March 29 and it's at 5:15 p.m. or 5:20 p.m. we're at work at that time. And the schedules offered are good for parents who don't work and all those who have to juggle between work and children, it's complicated. Then I think it would be good if there was more follow-up, that we could actually meet again, twice a year, 3 times a year, to see how we continue how things evolves I tell myself we saw each other 7 times, I didn't do the last session and in fact we didn't keep in touch at all, so I tell myself that it's a shame.

Q: Yes. And on a scale of 0 not at all to 10 completely, how satisfied were you with these workshops?

A: Well, I would say a 9 because for once I didn't like the room and the campus at all, I found that the place was not at all welcoming. If the chair is comfortable, it is still more pleasant than being on a classroom chair.

Q: Okay. And still on a scale of 0 to 10, would you recommend these workshops to a friend?

A: 10 Really whatever happens we will all find something positive by going there.

Participant 6 (P6)

Q: Please tell me how did you experience participating in these workshops?

A: I really, really liked it and then it really happened at the right time for me.

Q: At the right time for you?

A: [crying] Actually, I was I think very overwhelmed and in parental burn-out. And I think it really happened at the right time, it's been 2 years now and I really enjoyed it I think that if I hadn't had that I don't know where I would be today. It happened at the right time but it's true

that it gave me keys that I would have been happy to have before in fact, for put them in place earlier, faster. Because there I managed to put in place things that we saw in the workshop in a preventive way, so when I feel that I am completely, overwhelmed or that I start to have sleep disturbances, I actually take what we saw in the workshops : mediation and relaxation 3 times a day but I only do it when I feel that I'm at the emotional limit and it's starting to bother me, that I feel overwhelmed. And I think it prepared me to live through other harder elements that happened to me well a year ago now and I actually managed to take what was happening day by day without anticipating too much and I think that's clearly due to the workshops, what we had seen. Because I was always either in the past or in the future, but never in the present. And I was anticipating things that in fact I had no power over so there are really things following the workshops. I realised it yesterday while filling out the questionnaire, that there were a lot of things that before I had more into it that happens to me every week or every month and there now it's more than ever happens to me or once in a while in fact. I'm not at all in the same way, I don't feel like a bad mother at all. I manage to have a little more self-confidence by telling myself well maybe I don't necessarily do the things perfectly, but I think that all the same, well, we are still not too bad. I lived very well lockdown last year. I was really good with my 2 daughters at home, I really enjoyed being the teacher I didn't worked at the same time because I was on partial unemployment so that changed the situation too, but the confinement I went through it very very well. And yet we were really together all the time during the 2 months. But also, I think that because I managed to take a step back, because it was not always easy. So well only positive consequences, II think it was really for me at that time, it was perfect what, it was really what I needed.

Q: Very positive feedback then. And how did you experience the organisation and functioning of the group?

A: I think it was good that it wasn't too big a group, because I sometimes have trouble talking with other people, so the fact that I don't know anyone helps too. After the organisation was good, it was regular, it suited me. I think it was from 9.30 a.m. it was good, it made it possible not to speed too much in the morning, not to get stuck in traffic, that was good too, so it was good. I experienced it well, even compared to the group, I think it was good that it was only people I didn't know it allowed me to speak more freely.

Q: Okay. And regarding the exercises outside the sessions, have you managed to put things in place?

A: Yes, so I managed to do them, let's say every time time, but it was a little hard, but, well, I still managed to do them.

Q: And did you have any expectations before starting these workshops?

A: No. No, I even remember it I say to myself good I'm going but in my opinion, it will bring me nothing in particular. I was very pessimistic, I said to myself well I'm doing it anyway, plus it's free, it just takes me time, but I don't expect much. I was really expecting that because I had already done psychological sessions that didn't brought me a lot. I had no expectations in fact, I said to myself I'm going then we'll see and then if I don't like it I stop in the middle and then that's it. And in fact, I learn things and I will continue.

Q: Okay. So, although you didn't have any specific expectations for these workshops, do you think they were able to meet what you needed?

A: Yes, absolutely.

Q: Ok. And what information was useful to you in these workshops?

A: What really comes to me as an example stress management, the things that we can control and things that are uncontrollable. There were things I was ruminationg about before, like, what if one day my daughter is kidnapped, and what if this and what if that. Here, I found it's useless

for me to get my mind confused about that was projecting myself, I was stressing about what could possibly happen in the future. So, I was going to bed at night and I was thinking about this, what if this happens, what if this happens for my daughters, and I couldn't sleep because I was planning about things that could possibly happen. Well, of course the media and everything we could hear were contributing to it. But in fact, I couldn't protect myself from that. And now I don't actually do it anymore.

Q: Okay, and are there any other examples that come to mind? What could have been the impact on your general well-being?

A: Well in daily life I better manage my youngest daughter with whom I had perhaps a little more difficulties. Maybe I manage to take things less to heart, I don't know, something has changed anyway.

Q: Ok, and what other differences do you see in the relationships with your children?

A: Well yes more than, that is to say that I feel like before I questioned myself all the time, I was always hurting, whereas now I say no, I don't always hurt and suddenly I think I'm a little more sure of myself. So, I dare to say no to them a little more too, I better set my limits too, before I had the impression that it was going a little all over the place, I think that they were also a bit lost. Before I wasn't sure about my role as a mom and not sure what I could or couldn't do and I questioned myself all the time, all the time. That's what changed, but before I really felt like a bad mother and never doing things right and now that's changed.

Q: Okay, and did you also notice any differences with the co-parent?

A: Yes maybe the atmosphere has already changed a little bit at home, has evolved a little bit. Before I felt really alone, really a bit alone in the world, well afterwards also following the sessions I realised that I was not really alone, that there were still people to help me.

We also distributed resposibilities a little better I feel it more present. So obviously I think that also helps a little more.

Q: And today what would be your needs following these workshops, in terms of parenting support?

A: A little reminder from time to time, doing a workshop from time to time, once a year, I think it's good because afterwards we tend to forget, the problem with children is that they change they grow up which goes well at some point and well after that I tell myself there will be adolescence, I don't know how it's going to be. I'm trying not to project myself but here it is. It's true that we managed to find a good balance but after that, they change, and we have to adapt. So, it's true that once a year it would be good to see each other.

Q: And regarding long-term effects of these workshops, how would you rate them? What do you have left of the practices?

A: The practices that I use today are the relaxations with an application, well I have it on the phone, so I do it regularly. [Psychologist's name] used to propose us relaxations regularly, at each session, so that, it will be things like that that I will use. It's really calm me down. And reading my notes. I look at it from time to time I do it to tell myself oh yes there was that too, we had talked about that and that and that. This is what I reuse.

Q: Okay, so relaxation and going back to your notes.

A: Yes, I reread my notes, I don't reread the reports, I reread the notes that I had done myself. I had printed everything, I have everything on hand, I thought I was going to reread all the reports but in fact no, it is easier for me to reread my notes. And that I think, for me in any case, I'm happy to have taken notes, even if I knew that there was a report because it is perhaps easier to read. I wrote and felt things at that time, because the same after I put annotations. I reread my notebook.

Q: Ok. And in your opinion, how have these workshops enabled a different management of stressful situations or situations that generate strong emotions?

A: Can you just repeat the beginning of the question?

Q: Yes, this question is a bit long, I'll try to put it another way. Have you observed a difference in the expression of your emotions, do you have an example?

A: Knowing how to actually defuse from my automatic thoughts to step back. When there is a stressful factor, I ask myself what I can do, on what I can act. I really manage to welcome the emotions. Take a closer look at them. And that's kind of what I tried to put in place I took it day by day.

Q: Okay, so you adapt what was discussed in the workshops to other situations?

A: Yes, completely. I try to use what I was able to learn at the workshops not only for children, in fact for any situation. I find psychology super interesting in the end, since I tell myself, it's true that when I left the workshops, I was interested, I said to myself I'd be interested to know a little more, because I find that human psychology is complex and I found that it was interesting, I found that it was very interesting to know well here is how we could try to manage all that at best . But in any case, yes I try to, I use it not only for the life of, family. Even with relationships with others it's sometimes a little bit complicated too, but I still tend to have a little more self-confidence and to question myself less too. In fact, I find that everything, everything is linked in fact, everything is linked. I still feel less stressed even with this big stressor which was my father's illness.

Q: Earlier, you told me that the confinement had gone very well for you, do you feel that the contributions of these workshops have been useful to you in managing this difficult period? Could you give me some examples?

A: It's true that we always had things to do 'end had to go to school, I had to manage my other daughter it taught me how to do things differently with her, that's it.

Q: That is to say, what do you do it differently?

A: I understand that she is very stubborn as a little girl, but not at all like my first one that I managed to do, so now I understand how she is functioning, so I don't impose more on myself how I want it to work, I know that if I tell her too firmly it's like that. So now I tend to fight less, to yell less. And then during her crises too I let her evacuate, I let her do it and then we're going to take it differently.

Q: Before leaving, do you have any other remarks to make on the workshops you attended? about organisation, content, or usefulness?

A: No, I'm convinced, I'm even so convinced before becoming a parent, you should, I'm also thinking of midwives, where we talk about how to give birth, how that is, and maybe for many parents are going very well, there are no problems, the children go to sleep right away, it's not stressful but I think that there are still many who are not, who are surprised at the difficulty.

Q: And on a scale of 0 to 10, 0 not at all and 10 completely, how satisfied were you with these workshops?

A: Let's say 9.

Q: Okay. And still on a scale of 0 to 10, would you recommend these workshops to a friend?

A: Oh yes yes ,yes 10/10 yes. I even think it's a pity that we don't see it at school, we don't talk about it enough, to take psychology courses at school. Because I think we don't talk about it enough, here we offer yoga, childbirth preparation classes, we offer lots of things but nothing on parental stress that.

Participant 7 (P7)

Q: How did you experience your participation in the workshops?

A: Well, I found it interesting. It was a time that we give ourselves in the week with people who we see regularly for several weeks in a row. And that's it, I think that's really a great strength of the workshops, also because sometimes in a part of solutions simply come from others. Sometimes it's not going to look far, you just have to listen to others in their problem and say ours, I found that to be very powerful. I feel that there is really something instructive in this workshop.

Q: What did you think of the duration, the format of the schedules? Was it something that suited you?

A: The schedules, from memory the range offered was very wide, from memory I believe that there were workshops in the evening, in the morning, in the afternoon, almost every day or almost. At least 3 or 4 different days. That I thought everyone could relate to. I found that the length was appropriate in any case compared to the content. And the duration in time, the number of workshops as well. As I tell you unfortunately there were many absentees. So, I think that in relation to that and to the imperatives of each other, there are some who had generally freed themselves from their professional commitments. But there were always unforeseen events which meant that there were one or two absences over the period. People who came at the start, who stopped everything after a few sessions, it's true that it was quite variable. I can't say if it would have been good if it lasted longer. Here I felt that people perhaps did not want to invest in like that any longer despite everything. That's what it can bring yes, there was content to certainly fuel more sessions but if we expect people to be regular, I think it was good and which was also very good one or two sessions if I remember correctly a little longer after, it's true that it was good because we are quickly overwhelmed by everyday life, we forget everything and well I'm not saying that's not the case but it was still good to have small appointments you laugh after the last session.

Q: In your opinion, how clear and understandable was the information given in these workshops?

A: So, in fact there were several configurations, in my workshop, finally they were all directed by a student but sometimes also assisted by the person who supervised her, I don't know exactly but an experienced psychologist. And here I would say that her presence added a lot when she was there for the discussions, not necessarily in clarity but in examples or to answer our questions. That's it, but on the whole, I would say that it was clear. After that, it is the implementation that is sometimes more complex.

Q: What exercises have you managed to put in place between sessions?

A: During the sessions I would say almost all of them because we were in this rhythm of weekly meetings with relatively precise practices. So at least once each, each exercise I tried to do them. After over time, I can't tell you that today I practice regularly, in difficult situations, all the little tools that were given to us.

Q: Precisely, before starting this workshop, did you have any expectations

A: No, it was more the communication, and the way the workshop was presented, where I felt, I said to myself that it could bring me something. But no, I didn't really have a precise idea of what it could look like or what I could really expect from it

Q: Do you think these workshops satisfied you needs?

A: So, I don't know how I don't really know what I expected of them I don't really know if they responded, on the other hand I can say that they gave me an understanding of some of my modes of operation, which was quite beneficial, yes.

Q: How did you found the theoretical contributions seen in these workshops?

A: It didn't shock me or disturb me in the sense that it still seemed relatively practical to me because even the theory was immediately supplemented with examples, and precisely small exercises that we had to do the following week. Maybe once or twice, it's true that it didn't

really speak to me, but overall, I wouldn't say it was very theoretical. I know what you are talking about, but for me it was more practical than theoretical. Even including the purely theoretical part.

Q: Is there an exercise or a tool that has been relatively accessible to you, you could give an example?

A: From what I can remember today it would be how our thoughts work. The fact that our brain will create a certain type of thought in different situations which will be different from one person to another and that if we manage to identify our type of functioning and what type of thought we will have, we will be able to better manage to get out of it and manage the emotions behind it.

Q: What information did you find useful in these workshops?

A: Well especially that one in fact that I have just given that I still manage to use today. Afterwards, it's true that there were data that seemed to me accessible and usable at the time or in the week following the workshop, but that today I haven't integrated enough to be able to use them daily.

Q: Did you notice a difference in your daily life after the workshops?

A: So, in relation to this aspect of managing emotions and identifying thoughts, yes, I am able to progress. Simply having understood my mode of operation on this point, that gives me more serenity, it allows me to take a step back. When I feel like my brain is bringing certain thoughts that do not necessarily correspond to reality. After that I don't really have any other examples.

Q: Did the workshops have an impact on your general well-being?

A: I answered the little questionnaire you sent me at the beginning of the week, it's difficult to evaluate because the workshop took place quite a long time ago. My son has grown up, so yes, I am more serene than at the time, but it is also because my context of family life are different.

The proposed meditations I found very interesting, but it's the same thing that I don't manage to practice them every day. So, I think it probably it was beneficial to me at that time and in the weeks that followed, but today I would say that it really gave me a better understanding of myself and my mode of functioning so that's a benefit that doesn't just concern parenthood, but whole life. Afterwards it's true that I only have one child and frankly at the time I didn't work a lot so I was still privileged compared to the others, it is difficult to answer your question on a well-being that can be quantified.

Q: What difference do you see after the workshops in the relationship with your child, and with the co-parent? Do you have an example?

A: What had been quite interesting in relation to the spouse was the non-violent communication, so it's the same I can't say that I apply it in 100%, but the session had been really interesting. And compared to my son, here it is, it's more a personal positioning, if I'm relaxed, inevitably everything is much better, (laughs), so that's where you have to start.

Q: Today regarding parenting support, what would be your needs?

A: I find it difficult to answer because it is true that my position has changed compared to that time, my professional situation, my son has grown up. I have the impression that it's not at all the same thing as at the time, when I saw the presentation of the workshops and I said to myself really, I'm tired and I can't stand it this way for too long. What could help me today would probably be a better understanding of how a child matures, how their brain works to manage tantrums, to better know when I should oblige him to finish his plate. Everything around benevolent parenting, which we hear a lot about, but we are no longer able to position ourselves, by saying yes, we must be benevolent but at the same time it leads us by the nose. And everything that goes around that, that is to say the relationship with the spouse, to succeed in getting into the same dialogue and agreeing, together to know what common behaviour we are going to adopt in such a situation.

Q: How do you estimate the long-term effects of the workshops?

A: I tell you it's complicated because it's a real job to go over again, in fact, what would be ideal would be to go over the notes, I don't know, every quarter or even every month, depending on the moment when we lose the thread a little bit, and say to ourselves, as at the end of the workshops, to take up this or that situation, to apply this or that tool or even better to cross the tools, which are given, to challenge myself and , and really succeed in integrating them. Over all the sessions, I think for the majority of people, it only happened to me once or twice, and everything else requires work on the length. That's even meditation, it's nice to hear all the time all the time all the time that it's a tool that lowers stress, even parenting or not parenting, well here it is, it's hard to find time in their day to do so. In the long term, that's it, that's what I find really difficult, but after that there's not really a solution, it's up to everyone to find the time and motivate themselves to integrate.

Q: In your opinion, how have these workshops enabled a different management of stressful situations or situations generating strong emotions?

A: Well for me I realised that I was really anxious, in the sense that my brain always feeds my thoughts with something stressful. Even if there's nothing stressful, he's always going to find something that's going to happen, something that has happened, so like I was saying earlier that's what I was referring to because anyway there will always be something in my head which in 99% of cases does not correspond to any reality, well that's it for me it really helped me and it lowers my stress even if the thoughts are still there. But I manage to rationalise them.

Q: For example, if a child has a tantrum in a store, how do you handle the situation?

A: I'm going to try to stay calm, to understand the subject, and to reason it out as much as possible, that's it.

Q: Do you observe a difference in the expression of your emotions, and do you have an example?

A: I don't think it's even if it's a bit linked as I said with non-violent communication, directly and indirectly with stress management, and so on, but afterwards I wouldn't have the pretension to say that it's very different.

Q: For example, when you feel anger, how do you express it before the intervention and how do you express it today?

A: Yes, I remember well this session which was interesting besides beyond the tools as I said previously, to think about how I work, how I express my anger, is it rather internalised, externalised, all that is true I find that there are interesting tools. The only thing perhaps that I can underline is to ruminate less and to say things more rather than to keep it internalised, and to say to yourself, to repeat yourself. So try to be a little more expressive, say rather than always think that what I think everyone thinks is obvious and that we can always do otherwise.

Q: Do you think that the intervention allowed you to better understand your emotions?

A: Yes. Especially anxiety and ager yes, I would say that on these two in any case.

Q: Are you better able to regulate your emotions? How do you regulate your emotions in general?

A: I don't really know how to say there are always times when it doesn't work, after that it's always the search for a balance, within the family, in communication. I'm a little more relaxed, and sometimes simply express your emotions rather than internalising them. I understand them better and I'm able to express them.

Q: Do you feel that you have a better understanding of your child's emotions and reactions following the intervention?

A: No, I wouldn't say that because I probably haven't advanced enough to familiarise myself with all the practices to successfully use them with my child. I would have to be really

comfortable with all these tools and be able to use them on a daily basis so that I can transpose onto him and tell myself that in such a situation that is what is at stake. After it would be very interesting to go that far but I can't say that's the case.

Q: Can you tell me how you react to your child's emotions?

A: It's a little bit complicated, as I was saying earlier, in relation to a benevolent education that we want to give but which sometimes makes us lose our bearings a little, and we are also told that we must not put the kids around the corner. There are lots of things that we would instinctively want to do, or because we were simply brought up like that, so it's quite difficult to find the happy medium. I tend to always be in the understanding and accompany his emotions because here I am still a little aware of that. I talk about the workshops and the readings I do on the side, but I always doubt whether I am doing it well or not. It's still something difficult even if he's also working on it now at school and we even sometimes manage to identify their emotions, so there's a lot of work being done around that, but it's still a complicated subject.

Q: Do you observe a difference in the expression of your needs? Do you have an example?

A: I try after I can't say that I can't do it but good. For me, your question rather evokes a relationship with the spouse, the needs that one may have in the management of daily life, and then a second time which is perhaps the needs, for which one could solicit either friends or family. Indeed, we can ask around when we feel that we can do more so here in the close family circle I try to verbalise things more if I consider that here I need my spouse to help me with household chores in particular, but it's good that there is a workshop it takes a lot of work.

Q: Did the intervention allow you to better identify your own needs? Do you have an example?

A: So, identify. I don't know I would rather express, yes in that sense of saying we have the right to ask for help well, that if we don't dare to ask it's because we think that the others reluctantly say yes, that's what I think.

Q: So, did you participate in the workshops before the March lockdown? Did you feel that the contributions of these workshops were useful in managing this somewhat difficult period? Do you have a concrete example?

A: I finished the workshops in 2019 yes that's it 2019 it really goes back, and I admit that no, I don't think I thought about it at all to tell the truth it went pretty well, but overall here it is maybe I didn't need either, maybe I didn't feel in danger. I honestly didn't think about it.

Q: Do you have any other comments or remarks to make on the workshops you have followed concerning their organisation, their content, their usefulness?

A: Here is as I said, I really appreciated when there were 2 speakers, obviously it is luxury yes, but here it was really a plus. As I also said, the fact that the group was small it helped to intervene and support each other and give each other advice, bounce back on what the others could say, it was really full of benevolence and non-judgement. I really felt it was rich, I think we could have gone further. Afterwards I think it was probably one of the very first workshops, so I imagine that it has evolved since then. Afterwards there is one thing, here I am saying it like that, but there are people in the group that I really felt were very fragile, and I don't know if there would have been possibilities for them to be accompanied more, at the end of the workshops, or between the workshops, I don't know. Clearly there were 2 people who were really not well.

Q: Okay how satisfied were you with these workshops? On a scale from 0 which would mean not at all, completely to 10?

A: I would say 7, in the sense that I think there is really room for improvement in the version I knew, which for me was really experimental, and a bit of a test phase, I don't know what it looks like today, but in any case compared to this starting version, from 2019, I think there is great potential but which deserves to be deepened, developed, enriched, both in the interactions with the band, maybe to go deeper.

Q: Would you recommend these workshops to a friend? It is also a question on a scale from 0 not at all to 10 completely.

A: Absolutely. 10 points.

Participant 8 (P8)

Q: How did you experience participating in the workshops?

A: It was quite pleasant for me, I really enjoyed participating in the workshops, and quite supportive too.

Q: What do you think of the duration of the workshops? Of their format? Suggested hours?

A: It suited me well, so that goes back a little bit, a few years ago, it was a year or two ago. I participated, that there were several slots, and I don't remember which slot I took, but it matched quite well. I had arranged it, it was later in the afternoon, and it suited me well. The format, I found it neither too short nor too long, I thought it was a very good format.

Q: How did you experience the organisation and functioning of the group?

A: very few criticisms to make, I found it very good, the organisation. I like the fact that there are both tools that were provided, and both spoken and written. I thought both were enough, to have both was rich enough.

Q: Okay. In your opinion, how clear and understandable was the information given?

A: Yes, if for me it was clear, after I know that sometimes, we started I think with a tour of speech, and sometimes there were people who had more things to say. Oh yeah, the tools came next, and sometimes we had a less time for that. The elements were given more quickly, here I was taking notes. I thought both were interesting, I didn't mind that there was a little less time for the theoretical tools and a little more for the testimonials.

Q: Okay. And what are the exercises that you managed to put in place between sessions?

A: So, what did I manage to put in place? Well, I tried to play the game, there was, at some point we had worked on, a situation where I don't know anymore. It was related, well me in my case, a nanny. We had to imagine the worst that could happen, a kind of imagination around a problematic situation. So, I remember this exercise, afterwards, there was meditation, but I was doing yoga elsewhere, so I didn't necessarily use the tools that were given to us in yoga. Otherwise also on the biases, there are small tables that she had us fill in, which had marked me. Trying to rephrase my thoughts, I know there was also an exercise for that, rephrasing thoughts in a positive direction, or trying to spot any biases that there might be in certain thoughts that we had. That's what I remember.

Q: Ok. What were your expectations before starting the workshops?

A: I didn't have many, I was curious, the theme interested me, then I had no idea what I was going to find, just the title "being a parent is tiring". But since there was little description, I didn't necessarily have any expectations except that I wanted to deal with this theme of parenthood, I had never been part of a group like that, where we can talk about that, here it is. Afterwards, I wasn't necessarily expecting anything in particular. I thought it was basically workshops to learn a little more about children, about their behavior, things like that. And so, it was not that at all. At first, I was surprised (laughs) then finally I found other things, I liked that too.

Q: Ok. So, do you think these workshops responded to what you needed?

A: Yes.

Q: Can you specify?

A: I think the strength of the workshops, the tools were interesting, but I think the strength were the testimonials. That is to say, meeting up, in a group, with, it was mostly mothers, who are having problems with parenthood, who are asking questions, or who are tired, that's it. A support group, I think, is for me what I found the most important, the richest. I thought it was

really de-dramatising, on a problem that can be encountered. To realise that we all have the same problem, suddenly it changes the problem. So for me personally, more than the tools, it's above all the exchanges, the testimonies, and realising that something that seemed like a mountain to us, everyone encountered it, and that there were solutions yes, here. So, it's more the collective what.

Q: And what do you think of the content you followed during these sessions?

A: So more about the tools, well I found it interesting, after a bit stereotyped, it's true that I know a little about psychology, and I'm not necessarily, how to say, I found it a bit too mechanical as a tool, so I lent myself to the game and I found it interesting. Afterwards, I think in practice, these are not things that have remained with me too much. From time to time, I think about it, I tell myself how, but how I can put it into life.

Q: Okay. How did you found the theoretical contributions seen in the workshops?

A: well then, that's what I was saying before, that is to say interesting, but I don't do much about it because I find it a little too flat, that's all. So, the theoretical contributions, I found things there, but I don't use them. I don't reuse them.

Q: Okay. What information was useful to you in these workshops?

A: I think it's not really the knowledge, the knowledge or the tools, or the information that was useful to me. As I said, it is the sharing of a situation by other people, and not necessarily one person who brings more things, but rather the collision of these different stories, testimonies, which, because they are together, cause the situation to cease to be dramatic. I think that's really the benefit. It's not really a positive contribution in terms of knowledge, tools, or information that I retain. If I try to think about information perhaps for me, the only trace I have left, I had been sensitive to the ruminations of thoughts, but even that I no longer apply. So, to try to reformulate, and it's true that it's not rooted in my life, I don't know how to put it, I did the exercises and after that it remained in the state of exercises.

Q: And following the workshops, what was the impact on your general well-being?

A: So that's a real question that I'm asking myself, because I like the workshops, I think it was supportive, it was interesting. And so afterwards I felt better, afterwards I don't know if it's related to the workshops. I know that I was the mother who had the youngest child, so I was also in this fatigue of the first baby. There you go, access to parenthood, there you go, all that, and then I don't know to what extent it's linked to the workshops, or to the weather, so the baby sleeps better, so it's better, but also the holidays. So, there were sessions before the holidays, and the last sessions were in September. The well-being also linked to the fact that there are holidays, that's it. So, I don't know exactly what relates to what, but I still felt it, indeed, as something that brought me serenity, I think.

Q: Ok. What difference did you notice in the management of your daily life after the workshops?

A: Day-to-day management maybe a little more serenity. Also, more internal peace compared to the worries of everyday life, compared to the problems. Try to either circumvent tell yourself that it's not necessarily serious, say that there are solutions, that's it. More lightness.

Q: So, following the workshops, what tools did you use or practice and do you have an example?

A: So, I was already doing yoga, I wanted to continue, I continue, so yes it was yoga, meditation, and in the exercises, I continued to practice, very little except the one I'm talking about. And already there I apply it very little. I know that there had been plenty of tools on thoughts, automatic thoughts, which come to pollute the mind, which had marked me a little more. But no, I can't really say that I apply it, but in any case I remember the marking on the tools.

Q: Okay. In what context do you use the strategies during the workshops, and do you have an example?

A: So, if we consider yoga, yoga is to learn to let go, it's a practice that I already had, but where I pay a little more attention, even more perhaps. For example, I know that afterwards, when I return to work, between noon and two, I always take a short break. I have an hour, half an hour where I ate and half an hour where I did a little bit of yoga. Here, I did a little more than before after the workshops.

Q: Okay. What difference do you see in the relationship with your children and with the co-parent and do you have an example?

A: I know that we are a blended family, and at the workshop there were other "blended family" mums, and I think that there are certain things that bothered me and that are related to the blended family. I put them on the account of the blended family, for example, there are the positions in a blended family. My spouse has 2 children, it's complicated for them to accept a new baby. There's going to be another one coming soon, and suddenly it bothered me a little, I was scared, I had fears about the place there might be for this baby who was coming. My baby, and in fact I realised in these workshops that it was complicated to position yourself in a blended family, and I was on edge about it, tried to think more from the point of view of the children of my spouse, and that's it. To have also heard on the other side, mothers who were separated and who lived behind the scenes also of the not blended family. So that's the example I can find. Here.

Q: Ok thank you. And what would be your needs today, regarding parenting support?

A: it's true that I look a little more sure, what I expected at the beginning, it was conferences, finally I no longer know what format it can be, but on the children, on the education of children, which in the end I expected to have, and there was not. A few questions about the different ages, the problems that can be encountered on different ages of children, so from time to time I, there were videoconferences, so I followed one, and then I saw that there was another. And then it's true that from time to time, I said to myself that, it's also interesting, because

videoconferences with the facilitator are also nice, but I really find that the added value of his workshops is was the support group aspect, and I realised that there were few support groups in our societies. So, afterwards it's true that I don't have a particular need here, but if it can also be a similar format where there is a little contribution, but also exchanges, it's always interesting.

Q: Ok. And how do you estimate the long-term effects of the workshops? What do you have left of the practices?

A: No, maybe not in the long term. Or maybe the longer term effects, it's vague the link, it would be to be more curious, about how other moms I can meet, experience certain things, to take a little more time to discuss when I left the crèche, because I found it rich. And that I find that it's something that I didn't necessarily do, and I find it interesting.

Q: Okay. So, in your opinion, in what way have these workshops enabled a different management of stressful situations or generating strong emotions?

A: I have an example that comes back to me, the exercise that I had done there on the nanny, there was a concern for a nanny that I was looking for my child, and in fact I had to say "no" to her. In short, it caused me a lot of problems. The exercise was to imagine what was going to be said, and I know that I had said that the person is not finding work, and I know that the facilitator had said, " could that happen" No one because nanies have a lot of work. And that was it, this exercise that had marked me, because there it was a tool, more about the anxieties that one can have, situations that pose problems, to look realistically, the worst likely consequence. The worst probable consequence is never as bad as one which we imagine. It had helped me. And suddenly I had managed to overcome my little problem to talk to this nanny, that's true, it allowed me to be more confident and less anxious

Q: Okay. Thank you. For example, if a child freaks out in a store, how do you handle the situation?

A: Oh, then there?! I don't remember that we had such practical situations. So, there I really have to answer that I put in a situation? Well, I would be very annoyed! Maybe that's the strength of the support group, all the moms have experienced that! I think I would be less stressed by the gaze of other people around, anyway everyone experiences that. People who have children experience this, so it would weigh me less. I would l try to sort myself out, to understand where the problem comes from, to see what is causing the anger, that's it.

Q: Ok. Do you observe a difference in the expression of your emotions, and do you have an example?

A: No, no, not too much difference, I am someone who is rather emotional, and who has rather trouble really controlling his emotions, managing them, I still have so much trouble with it.

Q: Okay. For example, when you feel anger, how did you express it before the intervention, before the workshops, and how do you express it today?

A: the anger, if I'm angry, well I scream, well it depends on who it's and for what reason. But I will perhaps be less demanding, that is to say, I will explain. If I shout in front of my child, for example, to tell him but "well, mom, she shouted, she is not well". Or after, maybe I'll go and say something to him afterwards. Maybe I accept more than and many times we can't handle everything, but maybe talking about it is already better than saying nothing at all. Maybe that's what I'll remember. I might say a word about it: "well mum is there she didn't keep calm, she was angry because of this and because that, she should have kept calm, well it happens". Maybe take the liberty of saying (laughs): "well, I'm not perfect".

Q: Thank you. Do you think this intervention allowed you to better understand your emotions and do you have an example?

A: No I don't find it, on the understanding of emotions no. I really think that might be my weak point. As much on the mechanism of emotions, maybe it gives tools for understanding, why such and such a thing, causes anger to spring up, sadness to spring up, I don't know, I find that

the tools do not make it possible to understand it. I'm still surprised why there are things that don't affect me at all, and I don't find that it really helps to understand it. I haven't made any progress on understanding why there are things that I feel strongly, and others that I don't feel too strongly.

Q: Ok. Can you tell me how you regulate your emotions?

A: I'm going to blow. When it's going too much, when I feel it going up, I'm going to take a breath. Take a little walk. Walk Out. Finally, when there are people, when there is my spouse who accepts at a given moment, for example on crying, at a given moment I agree to tell myself when I no longer support them. Well, there I put my son in his room, in his bed, and then and then I need to calm down, to go on the terrace. So, when it's really too strong, maybe that's the thing I find.

Q: Ok. Can you regulate emotions better? Following the workshops, do you feel that you better understand your children's emotions and reactions?

A: The reactions of my children, not because I did not have the impression that we had too many tools on this. That's maybe what I missed, we worked more, at least me what I remember, the, our emotions, to us. Afterwards maybe the emotions of children are the same, work is the same, and in any case I no longer have the impression of understanding my son's emotions.

Q: Can you tell me how you react to your children's emotions?

A: Well, I'm quite welcoming, on emotions since I have quite a few too. I have the impression that, on the other hand, that's what it's there for, to have the capacity to welcome emotions, as they are, and not to be too disturbed. So, I try to receive them, to receive them, that doesn't mean that I accept everything, at least to hear them, anger, jealousy, things that are perhaps more complicated to hear. If I also know that there was something, if there was a very practical tool that I had applied, with therefore the daughter of my spouse, who had worked superbly well

I did that, and I saw that it worked well: "Oh I see you're angry". Things like that. And she said: "well yes I'm angry because that and that", and in fact in 5 minutes later her anger had fallen against the boyfriend who had made fun of her. It was a bit the objective of the exercise to do that, it had worked superbly well. And then I know that I had done it again, and she said to me: "stop repeating what I say". It didn't work at all (laughs). So here it is, but no, I try to welcome them in general, I manage to welcome them.

Q: Ok. And do you observe a difference in the expression of your needs, and do you have an example?

A: yes, that's a thing, we actually had a course on non-violent communication. It's really something that I don't like. This way of expressing one's needs, I'm reluctant to that, really. So, I never applied it, I don't like it. I find it too much, I don't know, too tame and too robotic, for me it's not at all spontaneous, so I didn't apply it. So, I don't feel like I've changed the way I express my needs, it's natural, with the words that come to me at the time, as it comes, I'm not too brutal in the way of express myself, that's it. So, yes, on the other hand, it didn't annoy this exercise ah, really non-violent communication, I am surrounded by people who use non-violent communication, and that annoys me.

Q: For example, when you need to take time for yourself, how did you show it before the workshops, and how do you show it today?

A: Well I need to take time for myself, and I need to take time for myself. Me on that I go to the simplicity. That is to say that in general it doesn't bother me to say things clearly, my needs, afterwards they are achievable given the context or not, but I don't necessarily have a problem with that, I don't I have no problem expressing them, afterwards I can hear that they are not satisfied either. I mean they are not absolutely satisfied. But I'm going to keep it simple.

Q: Ok. And do you think that this intervention allowed you to better identify your own needs?

A: No. I don't think it will allow me to better identify my own needs. I don't think it was going that deep.

Q: Okay. Did you participate in the workshops before the March lockdown? The one from last year? That's right? Do you feel that the contributions of these workshops have been useful to you in managing this difficult period, do you have an example?

A: No, it didn't help me. No, so I have no example, but it won't necessarily help.

Q: Ok, the interview is almost over. Do you have any other comments, remarks to make, on these workshops that you followed, whether concerning the organisation, concerning the content, concerning the usefulness?

A: No, I believe that the questions allowed me to really express myself on what I had thought. Afterwards, it was a real question, there are still some tools that I have left, but as I say, at least as far as I'm concerned, it's above all the richness of the exchanges that brought me. And suddenly I found it interesting, and well, I hope that when she told us that there was research work behind it, it would be good if there was no confusion, trying to be able to link, which makes what and what was useful and how.

Q: Okay. So, in the end, how satisfied were you with this workshop? I'm going to ask you to actually give a number on a scale from 0, which means you're not at all satisfied, to 10, which means you're completely satisfied.

A: 8 I would say.

Q: Okay. And would you recommend this workshop to a friend? Still on a scale of 0 I wouldn't recommend at all to 10 I would totally recommend.

A: Yes, I would recommend nine. 9 / 10.

Participant 9 (P9)

Q: I'm just going to ask you how did you experience participating in the workshops?

A: Well, it was kind of like a break for me, because I was on maternity leave at the time, so it allowed me to take some time to think about myself. In the end, it was a way of questioning myself, reflecting, taking a step back. So it was really precious.

Q: What do you think of these workshops : the duration, format, schedules?

A: So the schedules suited me yes, it was on Fridays morning, it suited me because I was on maternity leave. Afterwards, if I had been at work, it would have been impossible to be able to have this schedule. So, the schedule suited me well in that period of my life, but today it wouldn't have been possible. The duration of the workshops, I think it was interesting, because there was really a need to share our reflections, and the duration of the workshops I think was good. There was a third question, I did not remember.

Q: The format ?

A: The format, and the idea of being in a group, was very rich. I appreciated a group format. There were beautiful exchanges, and at the same time there is this question of disparity in the group. In the group, we didn't all have the same path, the same reflection on parenthood, the same level, it may be a bad word, but in any case, the same relationship to parenthood, the same reflections. There were participants with whom I felt much more connected to share thoughts, and others with whom I felt completely out of step. I don't know if this matches your question...

Q: Yes, quite!

A: This is what comes to me spontaneously.

Q: So how did you experience the organisation and the functioning of the group?

A: So finally, I have already answered this question a little, I found it very rich on certain themes and a little more complicated with others. There was a participant who, in my opinion, had major personal difficulties, that is to say that she was in a situation which was already very complicated, and it sometimes took up space, on the exchanges of group. That is to say that she

needed to tell her story, but it took up more space than the others so sometimes it was a bit unbalanced. But otherwise, it was above all very precious. Apart from this aspect, it was especially rich to listen to what was difficult for others and that for us it was not difficult, and to talk about our difficulties and realise that for others, these things could be much easier to manage, to realise the part that was linked to ourselves. The format was suitable.

Q: Okay. So, in your opinion, how clear and understandable was the information given in these workshops?

A: I've never had a problem, it's always been clear and understandable to me. The first session, I have a memory of saying to myself "it's going to go slowly", and then in fact it really accelerated, accelerated in terms of content. It is true that the first sessions were more to start with basics, which seemed to me perhaps easily attainable. And when we were talking about disparity in levels in the group, there are people for whom the basics were really essential, to come back to that, on what are emotions. What do emotions mean? There are things that seemed obvious to me, but it was interesting to come back to them. So the content was always very clear, there's never been a problem. No problem on that side.

Q: Ok, and what are the exercises that you managed to put in place between sessions?

A: So I couldn't manage the meditations, I never managed to do any. I think that I tried to identify the emotions which I was receiving. That is to say, when I'm angry, say "well, I'm angry", and take the time to breathe. To ask myself "but what made me angry? Which sentence? I tried to make a kind of pause, when the emotion comes, not to get angry right away. Instead, I tried to find out, what triggered the emotion. Take this time for the break before or after, sometimes I do it afterwards, I continue to do that, that is to say, I got really angry, something happened, and I try to go see after what really triggered this emotion. When did it hit and where did it hit? So that I use. After the meditations, I don't have time, I know it exists, that means that if I need it, I could be brought to do it. The one that was easy and that I liked was cardiac

coherence, quite effective in a short time, if I'm going to do it again it would be that one. But I didn't do it. Well, I don't.

Q: Okay. What were your expectations before starting the workshops?

A: It was a long time ago! Because for me it was in 2019, it's been almost 2 years! My expectations before starting the workshops, I think it was ultimately taking this time, stepping back, thinking, trying to step aside a bit, which I don't necessarily take the time to do on a daily basis, to reflect on my parental practices. To make the overflows perhaps less frequent, because when it overflows, that's tiring. It takes up a bit too much space. That was it, it was taking the step aside, and seeing what I could still work on, improve, to be the best possible in my parenthood.

Q: Okay, so do you think these workshops met your expectations?

A: Yes, that's definitely what I remember, this break, the fact of having reflected, the fact of having consolidated things, it had a really soothing side, of gaining serenity. There was a positive side to also see everything that we are already doing well, that we are completely within the normality in parenting in the end. Well, yes, it definitely met my expectations.

Q: Okay. So what do you think of the content of the sessions?

A: The content seemed clear and understandable to me, with the side that is growing in power, in progression. Afterwards, what was interesting is that everyone drew from it the elements that interested them according to the sessions. I have the impression of having had a lot of enrichment in the last sessions and a little less in the first ones, but well, that was me and I can see that in the group, it was important to go up gradually and start again, starting with the basics.

Q: Do you have an example? Of content that interested you, you said towards the end?

A: The first sessions I really remember that we started from anger, that is to say how much we feel it physically, and these were things that I had in mind, on the other hand the last sessions we were more like saying "well, what are you saying about anger? » The values, for example,

the feeling that we have reached our values, and all that was how we can respond to them, in a lasting way, or in an immediate way. When you're angry, what I learned is that you can do things very quickly, when you're stressed, drink a beer and watch a movie, but we're not going to solve the problem. And how can we calmly regulate, and I remember it was very clear, and I had really appreciated to make the difference, between making something of this emotion, and taking charge of it, or just set it aside for a while. There is a difference when I digest the emotion, where I put it aside. And that I really appreciated.

Q: Okay. Thank you. How did you experience the theoretical contributions that are in these workshops?

A: Well I really liked the theoretical contributions, I have good memories of them, finally in what I am returning to you, I have good memories of them. The part where we explain how we were able to understand certain things, and then there's how we integrate it into our daily lives, but I found that very interesting.

Q: Ok do you have an example?

A: The meaning of emotions for example: the anger that comes to affect our values, and we have to try to find what value, in what we felt affected, the fear that comes to protect us. Afterwards I learned to recognise the emotion of disgust, maybe because it's an emotion that I had little awareness of feeling, and finally I realised that I feel it more often than I thought. In particular with certain people, I feel toxic in fact. I feel that my body tells me "you are not well when you are there and you step back, we are going to see someone else". These theoretical contributions are interesting for better understanding what we can analyse in what we feel. Ok we feel that but what does it mean?

Q: And now concerning the exercises, which were proposed in these, in these workshops, do you think that they are accessible?

A: For me I found it accessible. I never felt that the exercise was too difficult for me, I never felt that it was always something accessible to me. After all, as I told you at the beginning, with big disparities in the group. Finally, there was really a person who was out of step with the group, and for whom the exercises were very quickly incomprehensible. We felt that she was blocking, despite the explanations: she had no possibility of going beyond the emotion. She used to say "I'm angry because my son isn't sleeping", and then that's it. There may not be other things that can make you angry too the fact that I know I'm going to be tired the next day, or that my husband doesn't help me, it wasn't accessible. We stayed at "it's my son who makes me angry". The next step, of the exercise, which consisted of looking a little at what is around: "what can also make you angry? is anger against my son really something else? », it blocked despite the support and energy of Agatha. For me in any case, the exercises are quite accessible, for this participant it was complicated but she was overwhelmed with emotions.

Q: Okay. So, what information did you find useful in these workshops?

A: I feel like I'm looping back. Well, nothing new, the theoretical side and the exercises that we could then analyse the following week and see how, how each had experienced the exercises, what we had done with them.

Q: So after the workshops, what was the impact on your general well-being?

A: I think it had a little soothing side. I don't think it wasn't huge either because I wasn't going there because I was in pain, I was going there to continue to progress. So, there was an impact, a soothing side, on the side it still helped me to take a step back even more, but it didn't change my life either. Which is to say, it felt good, it continued to help me progress without it fundamentally being something that upset my balance. It did me a little good.

Q: Okay. What difference did you notice in the management of your daily life after the workshops?

A: Then there's also the fact that it was 2 years ago, so I'm having a little trouble remembering exactly what difference I noticed. There may be things yes, I no longer realise that there was a difference. I think what I remember and what I know comes from the workshops is the fact more of asking myself and trying to understand even better what the emotion wanted to tell me. What happened too quickly in my head and that I didn't have time to really capture, and that if I ask myself maybe I can go back to observing, capturing the emotion, this kind of thought pattern that left very quickly. "He's not sleeping so I'm going to be tired tomorrow, I'm going to be angry at work, I will be tired at work". You're trying to catch this thing that's going through your brain really fast. That's it, but I may not remember very well what made the difference at that time.

Q: Following the workshops, are there tools that you used where and do you have an example?

A: I feel like it's the same questions. I get lost. So I haven't used the meditation tools, the tools for thinking about emotions, nothing new compared to what I told you. There are no other tools that I particularly remember.

Q: In what context do you use the strategies learned during the workshops and do you have an example?

A: As I was telling you, when I try to reflect afterwards, when I felt that my emotion was very strong, to try to reflect afterwards on why it was very strong. And that I'm going to use, so here it is. I've been thinking about something lately, when my eldest daughter eats really bad food, it pisses me off, I get angrier than I should have. After all I asked myself, I said to myself "well why did that make me angry? » and I try to think « what does that send back to me? ". Finally, I have the impression that it's something that I ramble on, I have the impression that it's something where she is not progressing, and suddenly I try to think about it a little by saying to myself " how could I do otherwise, does it really matter, or do I have to let her have her disgusting t-shirt? ". She is 8 and a half years old yes, she is tall. So here it is, it's going to help

me a little, try to ask myself, how can we do otherwise, is it important? What can I tell her? How or What? why does it bother me so much that she wears a very dirty t-shirt? This kind of thing, is it so serious this kind of situation? And I will ask myself afterwards and say to myself "could you have done it differently? what made you angry? » and to understand it better, I said to myself « well, it will be a shame for her, in front of her friend, to have the t-shirt all dirty ». But actually, her friend didn't care, so that was my interpretation about what a friend might have thought seeing my daughter with her t-shirt full of tomato sauce.

Q: What difference do you see in the relationship with your children following the workshops, and with the co-parent, and do you have an example?

A: As I tell you, I don't remember any real big differences, either with my children or with my husband. I'm in a relationship with a man, we're married. No doubt, as we're quite old, it wasn't a big difference in the way of life, I don't remember any big changes. I find it difficult to answer this question yes, I think it is done gradually, with different contributions. We built our parenthood both on our family stories, both on what we wanted to be as parents, both on the books we were able to read, both on this workshop. But I would say basically it hasn't changed. Maybe a year and a half ago, I would have known better what had made the difference, today I don't remember anything fundamentally different.

Q: And what would your needs be today in terms of parenting support?

A: Well if I think about it: I have 3 children, my eldest daughter will turn 9 years old in two weeks. The questions we ask ourselves are that we can feel the pre-teen slowly dawning, we feel that there will be other problems. In particular on the relationship with the parents, on letting her make her choices even if we would not have made the same ones. That's good, it's her life, it's not ours. I realise that there will undoubtedly be a stage where I will need other benchmarks. What made our daily life in early childhood will be different for the teenager, for the teenager she will become very soon. For my son who is 5 years old, he is the one who has

a little less self-confidence. And we try to work on this aspect, maybe that there would always be things to improve on how to help him. In fact, there are phases when he does good, and we feel that there are times when he is less well and that he needs to assert himself, to express more his anger, and it is true that it is tiring. We are not overwhelmed, we are not helpless, even if it is tiring. And after my youngest who is 2 years old, she has no difficulty, I think she's lucky to be the 3rd, it's going well. She's cool, we know how to manage her, that is to say that when she gets angry, we're used to it now, it's no longer something that puts us in difficulty. She doesn't put us in difficulty, she's a normal child who gets angry, who wants very specific things at 2 years old, but clearly, she doesn't ask us any questions. I would say that the thing, today we are perhaps a little more in search of information, it is adolescence. We feel that it's going to happen, and with the place of screens, in the sense that these are things where we can't rely on the way we were brought up, we're going to invent things about parenthood. Screens, smartphones. How do we let it happen? Do we leave the access to it or not? this is where we look today for information. The question of sexuality, how to talk with her about it early enough? but at the same time not to talk about it too soon? here we are a bit in there. These are ultimately the questions which we are going to seek information today.

Q: How do you estimate the long-term effects of the workshops? What do you have left of the practices?

A: It's very difficult to know again what was the part of this workshop? There were many other things at the same time? Was it the fact of having a long maternity leave, because for my two other children I immediately returned to work after 10 weeks, because I had not authorised myself, I couldn't take longer breaks? And with the 3rd child I had a very long maternity leave, it was also a rather interesting period I was able to stop myself for several months with a baby to take care of, so I do not know how to answer this question. I can't even describe what the impact of this workshop really was, concretely what it changed for me. I know that I'm good in

my parenthood today, I know that I'm calm with that, that it's very rare that I feel exhausted, I feel like a very good mother, I'm happy to how I am as a mother, of course it had an impact, but which one, I find it hard to say, I find it difficult to separate the place of each enrichment that I have had.

Q: Thank you. Ok, so we're going to come back to the emotions again. In your opinion, how have these workshops enabled a different management of stressful situations or generating strong emotions?

A: It's really taking a step back. It's trying to step aside even more, to try not to take the emotion like a wave in the face, and by undergoing it but try to say well ok, I took this wave, but why did it come so hard, and what did it mean beyond the situation? What can you understand beyond the little 2-year-old, the 2-year-old who doesn't want to go in the bath and screams and well, what do you make of that? How you can respond so that it goes well rather than "now it is like that". So no, I don't even know the question anymore.

Q: For example, if a child has a tantrum in a store, how do you handle the situation?

A: So, for my two big ones, I try to project myself. My 2 older children are not at all difficult, so for the 8-and-a-half-year-old and the 5-year-old there are things, they will want to, I imagine the scene. We're in front of the candies and they want some, it happens anyway, it's too tempting, we'll quickly transform it into the imagination or into desires, we'll project, we'll say: "well when it's your birthday which ones we can buy? ". I have no recent memory of crisis in stores. They have their desires, they will be able to express them, there will be things, but it has never risen, it is not going into crisis. The little one, 2 years old, she will have more trouble, have trouble dealing with words, with the imagination. I can imagine the scene: she's going to get angry because she wants to have a chocolate, I can even see her taking it and trying to run away. With her we will be able to be just only on no. No, it's like that. I think I'm pretty calm with that. Even if it will make her scream, I am quiet. She's going to scream, and that's how it

is. The scene in a store, I tell you with the two big ones, it's rather good times to go to the stores with them, they're going to help us well, they're going to tell us what they want, they choose the vegetables. Chocolates if they want them, ok, at the checkout, but we're not going to be in the imagination anymore, we're going to see how much it costs, can they pay for it with their pocket money, we're going to be in there, in any case it is not at all something traumatic. And the little one, if she needs to scream, to have her fit, if that's how she wants to tell us that she really wants it, well we'll let her scream. It doesn't bother me, and then as soon as we're out, I'll try to entertain her with something else. And then it's an age when very very quickly, they forget that they were angry. I don't know what they do with it, but it passes very very quickly from laughter to tears. Or I'll give her something to carry, the carton of milk, and sometimes that'll be enough for her to forget that what she wanted was the chocolate that was there. So no, that's fine, it doesn't scare me. The crisis in the store doesn't scare me.

Q: Do you observe a difference in the expression of your emotions, and do you have an example?

A: So the difference that I noticed. I think what I remember most is that the more children you have, the less you are worried. I say us at the level of the couple, it has certainly enabled us to acquire more self-confidence, in our couple, in our ability to become parents, and it is true that we are lucky to have children who are nice. We have fun with them, we share a lot of things, they enrich us, they teach us a lot of things. Today I want to say above all that we are lucky, I am lucky to be in a relationship with my husband, do I really see more difference compared to before, I don't know, but I am more and more serene, and in the pleasure of being a parent. It's really nice how it feels, afterwards there are times, it's not always like that, there are times when I'm tired, in any case there's also a lot of pleasure that takes over fatigue and difficulties. The joy, the pleasure: we have a lot of fun, and despite a year that has been very special with confinement, I am a doctor, so I have worked a lot, a lot. My husband is not at all in the medical

profession, so the schools, at the beginning, did not take the children, because we were a mixed couple, which meant that I had enormous days of work, and I returned to home, my husband had been confined all day with the three officially working remotely but it was absolutely not working remotely. So, it was very very very particular in terms of, emotional fatigue, at the work level it was a hard year. I experiences a professional harassment, we managed to get my boss fired, it was a very intense year but despite that I also brought a lot good with my children. The children were not an additional source of stress, rather a richness to be parents in this period: they teach us daily to be there, day by day. Well, we're confined, well it doesn't matter, we're going to have fun inside, and we're going to put carpets, and we're going to make huts, fights, games.

Q: Next I have a question about anger, but as you have already answered well, I will skip it. Can you tell us how you regulate your emotions?

A: So the things that make me feel good is talking about it, talking about it with my husband. It's really something, we're really going to take that time in the evening, afterwards, it's a hot bath. When I have a day with tensions, when all the children are in bed, I will quickly go home, I will quickly take a bath. I read books, but then the least intellectual possible. During the worst periods of confinement, I was reading Harlequins, for my brain it was a form of meditation. I red my love story where I knew that it was going to end well, and I understood all the words, I didn't even have to think, and I had my time in my bath with my Harlequin, I could relax. And also, I do sew when I have time, and there's something very meditative for me in sewing. I'm focused on my pins, my pattern, my stuff, and I'm present, because I have to concentrate on something very manual, and that helps me. So, I would say that there are different ways to understand what I experienced, it will really be the exchanges with my husband, or the periods when I am on my bike, and I try to better understand what I I feel, especially when I go to work, or I come back from work. In my professional practice, we have the analysis of the practice, it

is really apart, it is for questions related to work, but for questions related to personal life, it is really the exchanges with my husband, exchanges with friends, and then really when I managed to understand where it came from, so the side of understanding the emotion, of analysing them, it's either alone or with a friend, either with my husband, and then after the really feel lighter, and well the very intellectual readings, and the sewing. Sport makes me feel good too, but I can't find the time to do it, clearly, I can't. You have to go out there, in addition to the curfew, the rules, so I don't practice sports. This is the thing that would do me good, if I'm going to set myself a goal it would be to do that, but I can't do it, so I do sewing.

Q: Great. And do you have the feeling of better understand the emotions and reactions of your children following this intervention?

A: following the intervention I don't know, most of the time we manage to understand what they wanted to tell us, even if sometimes it's not easy, that is to say I think back to a scene lately, my eldest daughter is a Harry Potter fan. We talked about that, and so I sewed her a Harry Potter pillowcase, so far here and so we put it in the wash, the first time because the fabric came from the store. And my son walks up to the machine and takes the Harry Potter pillowcase, throws it on the floor. My 5-year-old son. And what is it? The time to understand, and the time to tell me ok what does he meant, to breathe, and I told him but in fact, you feel jealousy Oscar, is that it? And in fact, that was it, and he just wanted to tell me that he was jealous and that he too would have liked to have a head on a pillow. I have the impression that today I manage to do it, in certain situations, without getting angry and saying, "but don't throw it on the floor, we just washed it!" and to say to me what is happening? It's not, his reaction, it's not usual, he's trying to say something, and maybe he can't immediately find the words he would like to say it. So that no, I have the impression of getting there from time to time, there are times when we crash, I have the impression that with children we have several chances. So, if we messed up, we could also come back, then say is that it? Did it help me? Of course, it had an

impact, but after which exactly, what did it consolidate, what did it open up, as a new way of thinking, I have a little difficulty in exactly making the difference. The impact of these workshops in relation to a journey, in relation to the impact of being on maternity leave, in relation to the impact of continuing to enlarge the family, with the third. So, I know it had an impact, but I can't say exactly if that's what made me change my way of dealing with children. In any case, I am very satisfied today with the way I manage to manage most of their emotions, and then sometimes there are still some situations that are beyond me, and I take time to understand better. There are situations like the one I'm telling you about with the pillowcase where I'm happy to have quickly understood what he wanted to tell me and the scene lasted 2-3 minutes. Well, there's the big one who screams because her brother threw her pillowcase, the second one who screams and then the time to calm everyone down, in fact it works very well. In fact, I sew another pillowcase.

Q: Did you notice a difference in the expression of your needs? Do you have an example?

A: Difference, I don't know, how it's going today. How is the expression of my needs going today? In any case with my husband, we are very attentive to the needs of the other and really we are on a co-parenting mode. This is something that marked me in the groups, because we are both lucky to operate in a mode of not one who is more in charge of the children than the other. I was surprised by the sentences of "my husband helps me". Me, my husband, he doesn't help me, we work together! There's no sentence "my husband helps me with the children" even for me is unthinkable, we do things together, but he doesn't help me! It's not my responsibility, it's not he doesn't help me at home, we do, well, we take care of the house together and we take care of the children together. And it's true that I was impressed in the workshops by the differences that there could be between some of us on the role of fathers. In any case, we listen to each other with my husband on each other's needs, and I'm telling you here, for example, about this particular year when there was a need for a major professional commitment on my

part, that's not never posed a problem. He chained a month and a half with the 3 children confined at home who were 8, 5 and one and he never said to me « but ***, stop working ». Because he understood the need I had to respond to my work, and at the same time he understood that I was tired when I got home, and we are listening to each other's needs. And in the same way, if he needs to go away for 3-4 days for work, to go play sports, it doesn't pose any difficulty, it's really a reciprocal pattern.

Q: And so do you think that the intervention allowed you to better identify your own needs? do you have an example?

A: Did it allow me to better identify my own needs? Better I don't know, can I identify my needs? Most of the time, sometimes I get tricked but, in fact, the risk I have is that my needs will often come later, there is a hierarchy. There are the needs of the children, which come first, then there is my professional commitment, and then behind it I try to see what I want. And that's kind of my job, I think it's been a very special year for that. Because the children needed to be surrounded, reassured, precisely to be in their child's place and not to be put in the front line of all the concerns, the anxieties, that society lived. In terms of my work, there were great needs in terms of time, in terms of emotional load. I am a palliative care doctor; I take care of the end of life. We had a lot of activity. I take care of the end of life at homes and in nursing homes and it was a big commitment. And the difficulty is indeed, in a year like this, not to forget my own needs. I think it hasn't been easy, I think if I had to look at the last year that has passed, I'm very proud of how I've been as a mother, I'm very proud of how I've been as a professional, I may have forgotten myself a little bit. Of the energy I had, there was little left. So that's the point that I have to keep on improving, not to forget myself, even if, it's in phases, for example, since I really pointed this out in February, I've planned 2 weekends. Well, this weekend, this Sunday, I'm only going to spend the day with a friend, we're leaving the children with my husband. In April I'm going to spend the weekend with one of my best friends who is in Marseille, precisely

to have moments that belong to me as a woman and not as a mother. Because I pay attention to it even if I know that it could have been the trap of the last year, not to be attentive enough to this part of who I am. Am I getting there? I try to improve myself. Did it help the workshops? No doubt especially when you see the others. I find that seeing other people, seeing how they ask for help, and not getting stacked in my thoughts.

Q: When you participated in the workshops, was it long before the March lockdown?

A: It was, I would say, from April - we were in 2019 - to September, and the appointment at 6 months was to be in February-March. And it was this meeting that was supposed to be in video and finally I couldn't attend, it was no longer my priority. That's it, so it was well before confinement.

Q: Ok, so there was a change in the format of the workshops, well it was just the appointment at 6 months. Do you feel that the contributions of the workshops have been useful in managing this difficult period of confinement and deconfinement?

A: I already mentioned that.

So inevitably, being calm in my parenthood was essential, to be comfortable with the children's emotions, to take the time to welcome them, to take the time. The confinement, I tell you it was very complicated because there was this gap between me who worked like crazy and my husband who was with the 3 children all day. And who had the school program to follow, for the eldest daughter the son who was in middle section, and the one-year-old who was messing up, who didn't want to follow the school program. The deconfinements were especially very complicated for me, in terms of emotion, because we continued to see big waves of deaths, and there was really this discrepancy of saying "but we live in parallel worlds". Between people who just wanted to live again after periods of frustration and me who was still very much in death, in the dead, and me it was even more complicated times than confinement. Finally, the confinement, it was clear: "there are lots of deaths, and we are doing what is necessary". The

periods of deconfinement, the periods of vagueness like now, November, it was very hard times because I see a lot of dead people, and then there are people nearby who say "yeah, we're tired of the rules", and that makes me very emotional. I understand that we don't have the same positioning, that we don't experience the same thing, but these are complicated times for me. The children, we imposed rather strict rules on them, in terms of wearing a mask, in terms of cleaning hands, in line with my moral and professional values, and they integrated them very well. My 8-and-a-half-year-old daughter, she was one of the first among her friends to wear masks, so not necessarily at school but, and she asked me questions. I told her: "We can talk about it, in my job I see all day of the depth, all day of the consequences of this virus and it's too hard for me to imagine that we don't do the as much as possible to prevent these people from dying. Because I go to nursing homes, I examine people, I meet them and if I catch the virus, I can pass it to them. I can be the link that caused a lot of deaths, so I would like to have nothing to regret and to know that we did our best for that", and she understood it very well. Here, we had, my son caught the Covid at school, we had a first confinement in November-December of 15 days for him, then I ended up catching it in January, so we had a second confinement of 15 days. It was maybe a little hard at certain times because I was really bad, so we had some complicated times, but we got through it, well we took the time, each time, to explain. Our eldest daughter is a bit fed up with the PCR tests because she had symptoms in September, so she had a first one, when her brother had the Covid she had a first one then a 2nd one, me I had the Covid so she had another one so she got 5 tests already. But each time, we try to be there for her emotions and when she says she's fed up, we go anyway and then we try to see how we can make it less annoying for her, less difficult. The youngest she was twice in the test, anyway, once for her brother, once for me, before being able to return to the nursery.

Q: Well, we're coming to the end. There are 3 questions left. Quite simply, do you have any other comments, remarks to make on the workshops you have attended, concerning the organisation, content, usefulness, of the workshops?

A: What I remember is what I told you a bit at the beginning, it's the difficulty, when there are big discrepancies, I was going to say in psychological maturity, in relation to emotions, me there was this difficulty there on my workshop where the personal problem of one took all the place.

Q: How satisfied were you with the workshops, on a scale of 0 to 10? 0 corresponding to "not at all" and 10 "completely"?

A: I really found it very good, so I recommend it, 9.

The only downside is the one I told you about the difficulty of finding a group that is as homogeneous as possible. For example, there were only mothers who had a child, and it's true that on the issues of having several children, relationships between them, jealousies, things I, I had no particular echo of other moms. So, the richness of the exchanges with the small difficulty of how to find a more homogeneous group, and at the same time the heterogeneity is very interesting but in any case I felt a little bit alone on multiparity, and there was this participant who was really out of step, in my feelings about the group.

Q: You mentioned the advice to a friend, on a scale from 0 "not at all" to 10 "completely", would you recommend these workshops to a friend?

A: Yes, 10. I did recommend it in the place where I do sewing workshops. I recommend it completely.

Participant 10 (P10)

Q: How did you experience participating in the workshops?

A: I started a little late compared to the other participants so the first time I was very intimidated, very stressed. And in fact, it did me a lot of good. There were both aspects. The sharing of practices has really done me a lot of good and the theoretical contribution too. It was really beneficial.

Q: And what did you think of the duration, format, schedules of the workshops?

A: I think it was good for those who worked. I was off at that time, I didn't have the problem

Q: How did you experience the organisation and functioning of the group?

A: So, the organisation and the functioning. I liked the coordination there was between the young student and the other lady, I don't know exactly what position she had but it was very very rich in fact, they complemented each other really well. That was very interesting, the different perspectives they both brought in. The side where we were going to give our experience in relation to the tools or the questions that there had been the previous session, then the theoretical contribution embellished by the experience of the lady who was co-animating the group. And after the relaxation time at the end, which I think we enjoyed a lot too. It was a whole that was very interesting, very rich in fact.

Q: Okay. And are there any exercises that you managed to put in place between sessions?

A: Yes, I tried to do the exercises in between the sessions. I don't remember exactly but there were several contributions, for example, we had a session on managing emotions like anger, that's made a big impression on me, in fact. So, I've been trying to use it ever since. There is also a contribution about becoming aware of what actually happened and we tried to take a small step aside. "I have to do this" or "I can't put up with this because", I really reused it in fact and very often. There I have post-it at home, it's not "I must" but "I want to". This is something that also marked me enormously and that I even reuse today. Finally, there were really things that really marked, and I don't know if that changed and everything, because it's part of a whole, really in a dynamic on benevolent education, on understanding, finally, and I

am a teacher, so I have this two identities of a mum and also of a teacher, and then because I think that positive psychology is really something that speaks to me, with my nature too, who am I. So it's part of a whole, for example I'm in therapy, there's really a lot of things, with a sophrologist for the last few years, with all the positive relaxation aspect that in sophrology we can have, of which I can't tell you exactly how much is related to parenting training, but it interested me enormously, and it was undoubtedly a time in my life when I was really questioning about my son, particularly , how to help him, how to be good with him, especially in times when I was not necessarily very good. I think it also gave me keys to acceptance, or giving me time, or taking a small step aside to react better.

Q: Ok. So, did you have any expectations before starting these workshops? Did they meet your expectations?

A: So at the time, I took it on the fly, the workshop, I didn't necessarily have any expectations, I was really in a period when I wasn't well, I took everything what could bring me something good and the title of the workshops challenged me because it was really the state in which I felt tired not really with my son, I was a little overwhelmed at work. I had no expectations, but it really spoke to me, and I think it brought me a lot of things. I was really filled and resourced with sharing too, because it was only moms in fact, in the workshops. It touched me enormously, moved me, and made me feel good to realise that they struggled and sometimes 10 times more than me because they had grown up teenagers, and it was really very complicated. And I also found this exchange between mothers very rich with all exchanges with the group.

Q: Following these workshops, what was useful to you and was there an impact on your general well-being?

A: So that's what I was telling you earlier, the things that were useful to me. What I used was to really remove the notion of duty and take a sidestep towards the notion of pleasure: to go

shopping because I want to eat well, and not because I have to do it. Anger management, emotions like that a little strong, irritability, that helped me too. I don't necessarily always succeed, but I think it's in a corner of my head this awareness that if we wait a few seconds, because there was already this very simple delay technique to which anger corresponds. That's mainly what I remember but I'm sure if I read again my notes there will be other things, which will come back to me.

Q: Were you able to notice a difference in your daily life after managing these workshops? Do you see any differences in the relationships with your children? With the co-parent?

A: So, it would be difficult to say that it would only be the information that had effects, because as I told you, there was a set of things in my life that were in motion, let's say at that time. But it seems to me like coincidentally it happened at a time in my life when I needed these exchanges, this group and I think it brought me a lot, a lot yes. Afterwards is it the training that made me change in my behaviour as a parent, it would not be fair to say that. And I think that was part of it, and it did me a lot of good to have this time also back on myself as a parent, or as a teacher, a break time in fact where we is in reflective mode with other people, and it was very rich. I am waiting for one thing and that is that you offer me another training on parenting.

Q: And so, precisely today, what would be your needs regarding parenting support?

A: I have a child who has been diagnosed as high potential, so he is, he is 8 and a half years old, I took it very early because I saw other parents, and they had older teenagers who were barely diagnosed, and therefore they really struggled. But I would like to have something more specific perhaps on a daily basis and then in this shitty school system, excuse me I am part of it so I allow myself to say this, that we have, who accepts no difference from children in fact, how to help him, that's it. It would be something more specific now, which I actually want for me, for my case. Perhaps also something that would also answer questions of for example the criticisms that I often have, when I speak of benevolent education, of positive education, in fact

the people imagine that we are completely lax, and I have the problem with my ex-companion in fact, we are separated. He has absolutely no idea how I work with Tom, but he allows himself to estimate that if I am benevolent, I am lax. And he's not the only one. So maybe to have some answers, to feel better about how to educate in a benevolent way, by setting a framework. Because in fact kids like my son, they really need a framework, which I think I give, but that's a question I still have today.

Q: And so, you have already talked about it a bit, but how do you estimate the long-term effects of the workshops? What practice do you have left?

A: That's what I was telling you, yeah. I think that if you want long-term effects, you have to put your nose back in the courses. I would have liked to take the time to do it but I did not take the time, before this appointment, to get a little reminder shot. That's why I would love to be able to redo a session of 8 sessions, because you are a parent throughout your life, and the questions and developments also in relation to your own development, which change, and I would find it very interesting to have this kind of lifelong training as a parent.

Q: So, you've already answered that a bit too but how did these workshops enable you to deal differently with stressful situations, or situations generating strong emotions?

A: it's the sidestep in fact, I think, often. That's the greatest tool I've had, to step aside, to take the time to introspect too, to think about what's going on, what I feel, to welcome the emotion, and don't get overwhelmed.

Q: Okay. I'll give you an example: if a child has a tantrum in a store, how do you handle the situation?

A: I know that the problem, no doubt, it will be the way others look but precisely, I think I have made progress on this by telling myself that in this case, I could take it into my head into a corner of the store telling her that, by reminding her that no, frustration is part of learning, the no will be firmly laid down. It has happened to me before, having to say no, so it made other

customers smile, but it doesn't scare me in fact, maybe before, but it scared me more of having to say no to my son in front of other people.

Q: So, you have already talked about emotions and how you regulate them...following the intervention, do you feel that you better understand the emotions and reactions of your children?

A: Yes, I think little more. And in any case, I try to always go through verbalisation; that is to say, to make him rephrase to propose a rephrase to me, ask if that's what he feels, I think that now I systematically do that.

Q: Okay thank you. So, do you notice a difference in the expression of your needs? For example, if you need to take time for yourself, do you manifest it differently than before taking the training?

A: I'm not sure. Uh because in fact being in joint custody, it's a little different from other parents, that is to say that I am forced, every other week to have time for myself. I don't see my child, which leaves me time for myself. Afterwards, do I manage to take advantage of it? That's another question. I think it's the great drama of all mothers today, in fact, but it's not just related to the child. It seems to me that it's a little different when you're in shared custody, you necessarily have more time for yourself than. I don't think I can really answer the question, and I don't think I saw any difference before/after, at least not on this subject.

Q: Okay. And so, these workshops you followed them before the first confinement in March last year, right?

A: Yes, it was in the spring of 2019.

Q: So, do you feel that the contributions of these workshops have been useful to you in managing this difficult period?

A: In fact, I found myself almost two months with my son because my ex-companion justified that he was working so he couldn't take his child, so I'm not hiding from you that it was very complicated. In in fact, I let go of work, mainly [child's name], because that was really the

problem, making [child's name] work is always very complicated in fact. Because he does that very quickly and it's very hard to have him rewrite, to have him resume, to correct. So, it's a subject that's always a subject of conflict in fact, so from the moment I let go of that, in fact it's always the idea, I said to myself: "I have to do this to work". And from the moment we remove the imperative, the injunction, it goes much better. So afterwards I think I also tried a lot to go out, even if we weren't allowed, to breathe and to be outside, so that he let off steam and not be with me in fact. Because I found the times of two locked up permanently extremely difficult. So almost every afternoon, we were in the park and so it created a balance in this particular period. Afterwards, I had set up a file, not for follow-up but for valorisation with daily tasks it was nice because we put colours. I had done this in the form of a flower, I had to take up what the teacher had also proposed during the year, and we coloured in green when it was successful and there was to be a small reward at the end. We had tried to set up things like that, and I also remember that in the morning, I, because I also remember that in the morning, I prepared the aggregation. I had told him that between ten and twelve, every morning we had ritualised, because it helps a lot in fact, at least in periods like that when there are fewer executives school, we had given executives: from 10 to 12 it was a time of autonomy. I was locked in my room to work, and he was independent and that went relatively well overall. It really allowed me to have a breakaway where I had no worries for him, well I trusted him, it was quite interesting because he is often to do little stupid things, when we leave autonomy, and there it went relatively well. So here I put in place small strategies, to manage to keep what, but it's true that it was all so I can't say that it comes from the training that it doesn't come from the training but it's a set, I think it helped what.

Q: Ok. Thank you. We have almost done so these are the final questions. That is to know, do you have any comments, remarks to make on the workshops you have followed, whether concerning the organization, the content, the usefulness...?

A: Well no. We have to continue.

Maybe just the time, a little broader, what we said at the beginning, to leave a little more time, giving people more time to talk. I think is also difficult, because we had a mother who was extremely talkative, because in fact she needed to be in therapy and she shouldn't be, she was really in pain. So often she monopolised the speaking time, and at the same time I think it was very difficult, because she really needed to talk to this lady. So that's also maybe why we had this time problem. And that I think is something very complicated in the management of a group like that, it's giving a voice to everyone and not letting someone, who needs it, in fact, concretely, but taking it integrally.

Q: So, how satisfied were you with these workshops? On a scale...

A: Me it's more, more, more! (laughs)

Q: On a scale of 0 not at all to 10 absolutely, what would you say?

A: 10

Q: Okay, 10, great. And similarly, would you recommend these workshops to a friend, between 0 not at all and 10 absolutely?

A: Yes, 10. To all parents.

Participant 11 (P11)

Q: How did you experience participating in the workshops?

A: I think it was great, it was great to be able to talk to other moms. For me these few sessions were a resource place, and I was able to discuss some of my problems and I got tools to implement quite simply, and also to meet other mothers, other people it was very beneficial.

Q: Ok, so what you are telling me is that the fact that it was in a group, you appreciated

A: Yes. I really think there was a great group dynamic. Afterwards, it's true that there was a participant who I think she was really in pain at some point it might have taken up too much space, so we had to reframe things a little bit and we really felt her distress. But I think that each person brought something to the group, so it was a good experience.

Q: Okay yes. And in terms of format, schedules, organization, how did you experience it?

A: Well at the time I wasn't working full-time so I was available on Fridays, from memory it was from 10 a.m. to noon, or 9 a.m. to noon I don't know. So that left time to get organised in the morning with the little one and to go to college. And then there it was until noon, so it didn't take all day either so at the level of the organisation really good. I have nothing to say at the organisational level.

Q: And concerning the exercises, did you manage to put things in place between the sessions?

A: I'm not necessarily a very, very good student, but no, I haven't, apart from these little tools, or sometimes I tried to make connections, for example I had raised the issue that my son, when I was brushing my son's teeth, we had to put the video on at the time so that I could brush his teeth. And while exchanging we had said that it's not that bad, I have to agree to do it like that and not like I would like it to be. But afterwards, if not in terms of meditations, relaxations no, I haven't, very honestly, I haven't put that into practice.

Q: What blocked you to practice relaxations?

A: Maybe to take the time to ask myself and really go into this exercise, it's not yet an exercise, it's true that when we did that in a group it was pleasant but let's say that at some point, I have trouble staying in place. I'm sure meditation is beneficial, it's widely recognised yoga and all. It's just that, I need to be more interested in it and take the time to settle down and then maybe try to do that with my son.

Q: Ok. And what were your expectations before starting these workshops?

A: The curiosity, it's true that I quite like everything that is, studies, for example I took part in another study there which was done by the hospital during my pregnancy before, during, then until the child was 3 years old, so I also found it good to participate in these kind of studies. And then I said to myself that it could always bring me something more. And then also maybe to have a space to speak in benevolence, we are not judged, we are just there between mothers.

Q: And do you think these workshops satisfied what you needed?

A: Uh, yes, completely. Because I have, 'end, it's true that all that is a little psychology, all that, it's also themes that interest me and now being a mom I also try to understand well what are my needs , what are my child's needs and, 'end over the sessions we have addressed themes and in particular I am thinking of anger and it was something that spoke to me a lot so I think it's always good to be well here, trying to understand why there are emotions.

Q: And what other information could you find useful in these workshops? for the management of your daily life, your general well-being?

A: Stress management, well here we were talking about meditation, it's, these are tools, you just have to put them into practice, after that it goes back up the workshops, the other themes, there that come to me I don't know anymore the other themes we had covered. I had taken notes and then also I found that good. And then it's true that afterwards there was even a WhatsApp group that was created, so for a while we also exchanged between mothers. It is no longer very active, but I found it good too that we keep in touch. And there was also positive and non-violent communication, so it was also an important notion.

Q: And what might be the differences you see in the relationship with your child?

A: I don't think there is a before and after in the relationship with my son because I think there are problems, well, for example we separated with the dad so there is a context which is different, and I do not think that there was a miracle formula where with the workshops there was a before and an after. I think that that it was a help. I found it interesting also to contribute

to this study with volunteer parents. I always kept what we had seen together, it's somewhere in my head. I made myself a parenting workshop file and I know that one day I could go back to it and reread my notes.

Q: Okay. And what would be your needs today following these workshops, regarding parenting support?

A: It's true that now my son is in school. So that might be something about education and then maybe his new needs as a little boy in school, because that's another environment other than the nursery or the nanny, so there's also other questions, there is also the development of the child perhaps in this phase, from 2-3 years old and then, yeah no that's what I would say there, the same after, always a space to speak if we have concerns or, it is also for me a sharing of experiences so I find that it is always good to take, to have feedback from other people.

Q: And how do you estimate the long-term effects of the workshops?

A: I may be repeating myself but the ability to step back. In the sense that here is always something on my mind, I ask myself what I need, why do I feel the anger, what does it mean, I try to de-dramatize, to relieve guilt.

Q: In your opinion, how have these workshops enabled a different management of stressful situations or generating strong emotions?

A: It's true that maybe I'm not necessarily answering your question, but it comes to me I'll let you know it would be for example to organise via zoom or another network maybe just to say hello girls maybe to do a little reminder. But after that it's true that I have no specific examples, in the management of my emotions but once again I think that there are a lot of problems to solve, maybe just keep in mind that here we are all going through difficult things and that we have the resources within us to overcome them.

Q: Okay. And do you feel that the contributions of the workshops have been useful to you in managing the confinement?

A: So once again it's, I'm not a good example, no because in fact during confinement to be very sincere I was in dismissed from work here it was a tense period with my spouse at the time. So, the confinement no I experienced it very badly. I think I was in a state, where I could not use these tools because it was too much, I was doing really badly so it was necessary to go through a treatment.

Q: Ok, I understand. Before leaving, do you have any other comments to make on the workshops? concerning their organisation, their content, their usefulness?

A: Well for me it was a very lively formula, the exchanges, everyone had their space to speak, and so that was great. I liked a lot [psychologist's name], she was very gentle and calm, there were concrete examples, feedback, so that was great. Maybe having a dad in the group might have been good, but that's it. At the level of the organisation, I find really good.

Q: On a scale of 0 to 10, 0 not at all and 10 completely, how satisfied were you with these workshops?

A: I'm going to put 8 and a half or something like that, because there are always improvements to be found.

Q: What would be most important for you to improve in these workshops?

A: That would be the exercises, that would be to say to each other but after that it's also our responsibility to say to each other but maybe I don't know like a little coaching or small newsletter once a month or I don't know every 3, 4 months. Maybe a follow-up but well afterwards maybe that's not the point, it can't last for years and years.

Q: Still on a scale of 0 to 10, would you recommend these workshops to a friend?

A: 10 yes, I recommend it.