

RESEARCH ARTICLE

Couples and parenting dynamics during Covid-19 pandemic: A systematic review of the literature

Maria Leonor Sentieiro^{1,2,3*}, Luana Cunha Ferreira^{1,3}, Mariana Pires de Miranda⁴, Beatriz Araújo Vitória^{1,2,3}

1 Faculty of Psychology, University of Lisbon, Lisbon, Portugal, **2** Faculty of Psychology, University of Coimbra, Coimbra, Portugal, **3** CICPSI, Faculdade de Psicologia, Universidade de Lisboa, Alameda da Universidade, Lisboa, Portugal, **4** Ispa—Instituto Universitário, Lisbon, Portugal

* leonor_sentieiro@hotmail.com



OPEN ACCESS

Citation: Sentieiro ML, Cunha Ferreira L, Pires de Miranda M, Araújo Vitória B (2025) Couples and parenting dynamics during Covid-19 pandemic: A systematic review of the literature. PLoS ONE 20(2): e0315417. <https://doi.org/10.1371/journal.pone.0315417>

Editor: Chrysanthi Lioupi, University of Nicosia, CYPRUS

Received: February 7, 2024

Accepted: November 26, 2024

Published: February 18, 2025

Copyright: © 2025 Sentieiro et al. This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Data Availability Statement: Most of relevant data are within the manuscript and its [Supporting Information](#) files (Table 1 presents the relevant findings of each study). This is a systematic review of the literature, the data is available on the selected articles, referenced at the end of the manuscript.

Funding: This work received Portuguese national funding from FCT – Fundação para a Ciência e a Tecnologia, I.P, through the Research Center for Psychological Science of the Faculty of

Abstract

The COVID-19 pandemic constituted a public health crisis bound to impact couples, parents, and families globally. However, the literature on the impacts of COVID-19 in families is not yet integrated. This systematic review aims to (1) provide an overview of how the COVID-19 pandemic potentially changed family systems, especially the couples and parenting dynamics, as well as (2) integrate inconsistent findings, and, finally, (3) define new avenues for research and clinical practice. Inclusion and exclusion criteria were defined for this review. The data was collected in bibliographic databases using a combination of keywords. The study includes empirical research published in English, Spanish, Italian, or Portuguese, appearing in peer-reviewed journals, focusing on the impact of the COVID-19 pandemic on the functioning of different-gender or same-gender couples, married or cohabitating, or cohabitating parents with children aged 2 to 18, between April 2020 and December 2023. Within 381 articles, 58 studies met the inclusion criteria, which 50 were quantitative, four qualitative, and four mixed methods studies. A qualitative thematic analysis of the reviewed articles identified 12 categories that were organized by stress sources, mediators, and outcomes. There is consistent evidence across the literature showing some sources of stress during COVID-19, such as Gender Inequalities (e.g., Unequal Division of Household Duties and Lack of Support for Mothers), and External Stress. Also, we identified some themes on the mediators such as Coping Strategies (e.g., Dyadic Support, Communication as a Mediator and Adaptation to New Daily Routines) and finally as outcomes, Lower Psychological Well-Being, and Relational Growth. However, some inconsistencies were found in Relationship (In) Satisfaction, Sexual Functioning and Communication as an Outcome. Explorations of moderators showed that these inconsistencies should be understood in reference to (1) quality assessment (2) coping and (3) income. After conducting a comprehensive analysis of inconsistencies, our study revealed no notable differences in either relationship satisfaction or sexual frequency before and after the COVID-19 pandemic. Notably, a decline in sexual satisfaction was observed during the COVID-19 period. No conclusive associations were identified between income, relationship satisfaction, sexual satisfaction, sexual frequency, and stress related to COVID-19. Nonetheless, our observations

Psychology, University of Lisbon (UID/04527: Centro de Investigação em Ciência Psicológica).

Competing interests: The authors have declared that no competing interests exist.

indicated that individuals with moderate or high income, in conjunction with the implementation of effective coping strategies, exhibited a diminished impact of COVID-19-related stress on both relationship satisfaction and sexual functioning. Future studies should focus on a dyadic perspective at various stages of the family cycle, including longitudinal perspectives, as well as studies focused on the role of dyadic coping during times of crises. Findings must be considered with caution because not all studies had equal methodological rigor.

Introduction

On the 18th of March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic and a global public health emergency. Strict isolation measures were implemented worldwide to prevent the spread of the virus, resulting in lengthy lockdowns and social distancing measures impacting individuals, families, and society. Forced cohabitation led families to alter their dyadic and family-level dynamics. The objectives of this systematic review are to (a) describe relevant changes; (b) integrate inconsistent findings, and ultimately (c) define new avenues for both research and clinical practice.

The family system and stress

The family system is a self-regulating system, that maintains stability through negative feedback and enables change through positive feedback [1]. A family consists of subsystems with specific roles and boundaries [2], like conjugality or parenting, and that adapts continually to maintain stability and allow change [2], underlying the importance of communication between family members [3].

The classic family life cycle starts with single adults forming couples, progressing through stages such as families without children, families with young children, and families with adolescents [4–6].

In this literature review, we will particularly focus on three of the life cycles: families without children, families with young children and families with adolescents, as differences in household type during the lockdowns show that couples with children and lone parents were described as more materially vulnerable and subjectively constrained [7]. Across time, the family undergoes distinct cycles, steered by expected challenges and specificities that are inherent in its growth, in which families with adolescents require more flexibility in the family boundaries to accommodate their children's independence while caring for the older generation [6].

However, there are also changes that families must cope with that go beyond the expected developmental process, such as coping with external stressors. Ecological Systems Theory [8] helps to understand the complex and multisystemic interplay between family system and subsystems, the societal and chronological contexts. This theory includes the microsystem (immediate environment), mesosystem (interactions between microsystems), exosystem (indirectly affecting environments), macrosystem (cultural and societal context) and chronosystem (temporal context) [8].

Applying Bronfenbrenner's framework aids to understanding the COVID-19 pandemic's impact on families [9] on the living system that is a family [10]. This review starts by describing the specific contextual developments that took place during lockdowns in households composed of couples and families with children, living in forced cohabitation.

The pandemic context

China was the first country to declare confinement in late February 2020, followed by several Asian countries. In Europe, the first localized lockdown took place on late February in Italy, followed by several of other countries in March 2020. In the American continent, localized lockdown also started from the middle of March. Most confinement periods lasted until March 2021.

The pandemic exacerbated pre-existing inequalities in accessing healthcare [11–13], unemployment [14, 15], financial instability [16–19] and confinement stress [20–22].

Families were forced into prolonged cohabitation for long periods [23]. Emotional cohabitation, whether with partners or family of origin, became crucial, as pre-pandemic research indicated complex consequences during catastrophes [24]. Research on the pandemic's impact on families focused on three areas: (a) identifying risks and challenges [7, 21, 25, 26], (b) factors enabling positive vs. negative adaptation to the crisis [27–30], (c) changes in mental health [31–37] and relationship dynamics [38–43].

The present research follows a similar structure: stressors, processes and outcomes. We start with level one, focusing on stressors—COVID-19 blurred boundaries between home and work [44], as well as limited global travel [45], affecting family and extended family contact, with increased risk of prolonged grief [46] and adolescents [47], as well as parents juggled remote work and homeschooling [45, 48, 49].

The second level explores the processes of family adaptation, that requires a complex interplay between stressors, available resources at individual, relational and family levels, and the family's appraisal of these stressors [50, 51], influenced by coping models [50–53] and resources [54]. Research with families focused (a) not only on individual models [55] and individual strategies (e.g., problem solving or emotional coping), (b) but also on relational models [56–58] and on the dyadic strategies established by the couple (e.g., problem-focused, or emotion-focused dyadic support), (c) and on community resources [59–61].

Finally, the third level encompasses a wide range of outcomes—family members experienced psychopathology [32], such as anxiety [35], depression [36, 37], post-traumatic stress, lower levels of quality of life and general stress [37], increased worry, lack of attention and irritability [31, 33, 34]. Additionally, evaluation of family relations [40–42], in which the literature we find highlights into family resilience with an increase of positive family dynamics [62] to negative consequences [40, 42], ranging from difficulty in eating behaviours or in physical activity [63], to accounts of interpersonal violence [64, 65].

Inconsistencies in data and insufficient literature integration were address by several reviewers, on psychological impact [66] and in specific groups [67]. This study identifies a gap in the literature on COVID-19's impact on families, focusing on vulnerable households: couples and families in forced cohabitation.

Method

The present study is a systematic review of the literature that aims to [1] provide an overview of how the COVID-19 pandemic potentially changed family systems, especially the couples and parenting dynamics, as well as [2] integrate inconsistent findings, and, finally, [3] define new avenues for research and clinical practice. To explore the hypothesis of the study quality, we conducted a quality assessment (QuaDS) assessing the theoretical framework, methodology, research design and sample characteristics. We undertook a systematic review of the literature that did not focus on meta-analysis results, given the unavailability of data and heterogeneity of design.

Inclusion and exclusion criteria

Following the systematic reviews guidelines outlined by CRD (2009), articles must satisfy the following inclusion criteria to qualify for this review: (a) published in English, Spanish, Italian or Portuguese, because it is the languages known by the research team; (b) published in a journal with peer review; (c) designed as empirical studies (either quantitative, qualitative or mixed methods); (d) targeting the impact of COVID-19 pandemic on couples functioning with different-gender couples or same-gender couples, married or living together; or with cohabitating parents (at least 90% of the sample) with children between 2 and 18 years old and (f) published between April 2020 to December 2023. The study excluded four types of studies: (a) those involving parents of children with chronic illnesses or prior conditions, due to the added stressors and unique dynamics; (b) parents of newborns born during the COVID-19 pandemic, as this does not align with the aim of comprehending the transition to parenthood; (c) studies with less than 10 participants, to ensure the accuracy and validity of data and its accuracy; and (d) studies that investigate the outcomes of family or couple therapy, as the aim is not to investigate the seeking of professional help by families and couples.

Procedure

To identify relevant literature for our review, we conducted a systematic literature search across four databases following the guidelines of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (2020) [68–70] statement and the Centre for Reviews and Dissemination (CRD) (2009) protocol [71, 72]. Various strategies were utilized to retrieve applicable studies, ensuring a comprehensive review of the literature. First, a computerized search of bibliographic databases PubMed, EBSCO, Google Scholar, and Web of Science was conducted using the following search combinations for the title and abstract: "Couples" AND "COVID-19 Pandemic"; "Romantic Relationships" AND "COVID-19 Pandemic"; "Marital Satisfaction" AND "COVID-19 Pandemic"; "Parental Functioning" AND "COVID-19 Pandemic"; "Parenting" AND "COVID-19 Pandemic"; "Family" AND "COVID-19 Pandemic". In this review, specific journals were not directly consulted for literature related to the review. Instead, we utilized comprehensive databases described above to ensure a wide-ranging and unbiased collection of relevant studies.

A search query was conducted in the Web of Science (Clarivate, 2022) online database to identify relevant studies. This decision was based on a two-step approach. First, a review of similar literature revealed that using multiple databases is the most common practice to ensure comprehensive topic coverage. Second, during the query design phase, extensive trial tests were performed on both Scopus and Web of Science. Web of science consistently produced results that better matched our query criteria, making it a more suitable choice for our review. Therefore, we decided to focus exclusively on Web of science.

Study selection: Decision marking

The first step on the decision making involved entering the keywords into online data bases. Before screening, we removed the duplicate records. Subsequently, the titles of the articles were reviewed and based on their relevance, they were either advanced to the next stage or excluded. Following this title-based selection, the abstracts were thoroughly read to assess whether they met the inclusion criteria of our systematic review. After this dual stage screening process, which involved both title and abstract evaluation, the remaining articles were full to ensure they satisfied all the inclusion criteria for the study (See Fig 1 in S1 Fig). Articles were removed if including having less than 90% of couples living together or having divorced

parents. Fifty-eight articles were selected for final comprehensive analysis after a careful review of all remaining articles and analysis of their full texts (See Fig 1 in S1 Fig).

Data collection process

Data extraction was performed by reviewing general study information (author name, article title, citation, type of publication, geographical area, and funding source), study characteristics (aim/objectives of the study, study design, study inclusion and exclusion criteria and recruitment procedures) and participant characteristics (age, gender, ethnicity, marital and cohabitation status, number of children). The method and instruments of each study were analysed for accuracy. After selecting the final articles, authors carefully reviewed the selected and relevant articles, extracted the data, and organised the relevant information. The final evidence table is presented in Table 1 - in this section, we present the author's name and year of publication, the number of participants in each study, the study design, the geographical area, the data collection time and the main findings.

Results

Overall mapping of the papers

We start this section by describing an outline map of the overall findings with respect to study methodology, location, and article quality. As for the design of the research, quantitative studies were the majority, but qualitative studies, and mixed-method studies were also included (See Table 1). Of the quantitative studies, the majority were cross-sectional, and few were longitudinal. As for the qualitative studies, all were cross-sectional [45, 92, 97, 99] and the data collection instruments used were mostly individual semi-structured interviews [92, 99], dyadic interviews [45] and open-ended questions [97]. Regarding mixed-method studies, on the qualitative section some authors used individual semi-structured interviews [90, 102, 121] and on the quantitative section questionnaires were the most common instruments [81, 90, 102, 121]. Studies were longitudinal [90, 121] and were cross-sectional [81, 102].

According to geographical distribution, most studies were conducted in Asia ($n = 19$) and America ($n = 20$), followed by Europe ($n = 13$), Oceania ($n = 4$) and Africa ($n = 2$). The total number of participants across all the studies were $n = 45572$.

Quality assessment results

Due to the novelty of couple and family research in association with COVID-19, studies were still scattered and showed great heterogeneity in terms of study design. Therefore, the Quality Assessment with Diverse Studies (QuADS) [128, 129] was applied to prevent bias and provide a clear indication of the strength of evidence and standards for future research. Studies were not excluded from this review based on quality, as there were no predefined inclusion and exclusion criteria. All studies were reported, and quality was assessed using 13 items and graded from zero to three.

Following Harrison and colleagues' (2021) guidelines [128], the quality analysis of the articles was conducted in two phases. In the first phase, two authors performed an individual and independent quality analysis of the studies ($n = 43$) (See S1–S3 Tables). In this phase, the authors first selected five studies to perform the quality assessment independently and discussed the application of criteria. Once a common understanding was reached, authors independently reviewed all remaining articles. As the levels of agreement were found to be high, in a second phase, only the main author conducted the quality analysis of the studies ($n = 15$).

Table 1. Summary of baseline characteristics and outcomes of included studies.

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
<i>Ascigil et al. (2023) [73]</i> (Reference Number)	USA Canada	<i>n</i> = 1873 (Study 1) <i>n</i> = 618 (Study 2)	April 2020 (T1) to May 2021 (T6)	Quantitative Study Longitudinal	A variation on relationship satisfaction was found—when conflict and irritation is present in the relationship, satisfaction changes; positive relational processes were associated with prior week satisfaction; high relationship satisfaction was consistently linked to factors such as feeling appreciative and being satisfied with partner quality time at the baseline. Dyadic coping played a more significant role in prior week relationship satisfaction.
<i>Banaei et al. (2021) [74]</i>	Iran	<i>n</i> = 317	April 1st to April 20th, 2020	Quantitative Study Cross-Sectional	COVID-19 pandemic had a significant impact on marital satisfaction. Sexual satisfaction, physical symptoms, anxiety and insomnia, social dysfunction, and depression can significantly affect marital satisfaction during the COVID-19 pandemic.
<i>Bar-Kalifa et al. (2022) [75]</i>	Israel	<i>n</i> = 144	April 30th to June 2nd, 2020	Quantitative Study Cross-Sectional	Stress related to COVID-19 pandemic is associated with lower daily positive mood and higher negative mood. Negative dyadic coping (DC) was associated with lower relational satisfaction and positive DC had a direct effect on relational outcomes. Also, negative DC intensified negative humour and it was found to be more consequential to relational outcomes than positive DC.
<i>Bar-Shachar et al. (2022) [76]</i>	Israel	<i>n</i> = 239	April 12th and April 27th, 2020	Quantitative Study Cross Sectional	Higher levels of relationship satisfaction were associated with increased support and reduced negative behaviours. No significant differences were found before and after covid-19 lockdown. Women reported higher levels of perceived partner support behaviours. Both attachment orientations were associated with lower relationship satisfaction
<i>Bretaña et al. (2023) [77]</i>	Spain	<i>n</i> = 549	10th April and 20th April, 2020	Quantitative Study Cross Sectional	Avoidantly attached individuals' relationship satisfaction was affected during the confinement, this decrease being explained by strategies used by them and perceived also in their partners during the conflict. Our study has also shed light on the association between some protective factors, like the role of positive problem-solving in relationship satisfaction.
<i>Budiartini (2021) [78]</i>	Indonesia	<i>n</i> = 242	October to November, 2020	Quantitative Study Cross-Sectional	COVID-19 stress did not affect the marital quality in Bali.
<i>Carlson et al. (2020) [79]</i>	United States of America (USA)	<i>n</i> = 1025	April 2020	Quantitative Study Cross-Sectional	There was an overall increase in domestic responsibilities for mothers, as well as an increase in fathers' contributions. Both mothers and fathers report a general shift toward more egalitarian divisions of household labor.
<i>Carvalho & Matias (2023) [80]</i>	Portugal	<i>n</i> = 210	April to June 2020	Quantitative Study Cross Sectional	The study revealed that although the levels of parental exhaustion and relationship quality were not excessively high, there were indications that parental exhaustion contributed to a decrease in relationship satisfaction and an increase in conflict. It is worth noting that positive forms of dyadic coping were identified as moderators, mitigating only the negative impacts on conflict frequency. Couple relationships as being characterized by medium levels of conflict frequency and above average levels of relationship satisfaction.
<i>Chakraborty et al. (2020) [81]</i>	India	<i>n</i> = 119 <i>n</i> = 12	April to July 2020	Mixed-Method Study Cross-Sectional	Psychological distress impacted negatively relational quality in terms of conflict, criticism, pressure, dominance, resentment, exclusion, and relative power. The positive impact of psychological distress was observed in terms of affection, emotional support, reliable alliance, satisfaction, approval, and companionship. In terms of psycho-social strategies couples identified conflict resolution, self-introspection, inter-communication improvement and developed a sense of obligation. Also, professional help and recognizing stressors and plan for action as environmental strategies.

(Continued)

Table 1. (Continued)

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
<i>Chung et al. (2020) [82]</i>	Singapore	<i>n</i> = 258	22nd April to 5th, 2020	Quantitative Study Cross Sectional	The study revealed that parenting stress played a significant mediating role in the relationship between the perceived impact of COVID-19 and parent-child closeness, as well as harsh parenting. The impact of COVID-19 and stay-at-home orders was linked to increased parenting stress, which, in turn, had a negative effect on parenting. This impact was observed through changes in the way parents interacted with their children, including an increase in the use of harsh parenting techniques.
<i>Craig & Churchill (2021) [83]</i>	Australia	<i>n</i> = 1536	7th May to 30th May, 2020	Quantitative Study Cross-Sectional	Unpaid work increased and paid work decreased slightly. Mothers did more childcare than fathers, however, fathers contributed more to childcare comparing to before COVID-19 pandemic. More mothers than fathers were dissatisfied with work-family balance and partner's share comparing to before COVID-19 pandemic.
<i>Donato et al. (2021) [84]</i>	Italy	<i>n</i> = 1823	30th March to 7th April, 2020	Quantitative Study Cross-Sectional	COVID-19 pandemic concerns reflected on poorer psychological well-being (PWB), stress communication and dyadic coping (DC) responses. Stress communication was positively correlated with DC responses but negatively with PWB. DC was positively correlated with PWB. Both satisfied and dissatisfied partners showed similar levels on COVID-19 concerns. Dissatisfied couples showed less explicit stress communication and lower PWB.
<i>El Akmal et al. (2021) [85]</i>	Indonesia	<i>n</i> = 330	Not Available	Quantitative Study Cross-Sectional	Job stress had a negative impact on marital satisfaction and work-life balance had a positive impact of marital satisfaction. Work-life balance influenced marital satisfaction and job stress.
<i>Feinberg et al. (2022) [86]</i>	USA	<i>n</i> = 129	April and May 2020	Quantitative Study Longitudinal	We found large deteriorations from before the pandemic to the first months of the pandemic in child internalizing and externalizing problems and parent depression, and a moderate decline in coparenting quality. Smaller changes were found for parent anxiety and parenting quality. Mothers and families with lower levels of income were at particular risk for deterioration in wellbeing.
<i>Fleming & Franzese (2021) [87]</i>	USA	<i>n</i> = 782	April 3 to May 22, 2020	Quantitative Study Cross-Sectional	Higher relationship satisfaction during COVID-19 lockdown was related to higher sexual satisfaction, lower relationship invalidation, not having children in the home, higher perceived fairness of relationship power. However, higher thoughts of separation were related to younger age, higher verbal aggression, higher relationship invalidation and lower relationship satisfaction.
<i>From et al. (2023) [88]</i>	USA Canada	<i>n</i> = 600	From April 2020 to May 2021	Quantitative Longitudinal	The study found correlation between similarity in general concern about the pandemic and lower overall relationship quality. Notably, this similarity in concern was also linked to a reduced perception of the pandemic as a source of conflict in the relationship. The participants reported some changes in the relationship satisfaction comparing to before the pandemic.
<i>Hanetz-Gamliel et al. (2021) [89]</i>	Israel	<i>n</i> = 141	Mid-March until the end of April 2020	Quantitative Study Cross-Sectional	Maternal anxiety and hostile parenting behavior mediated the associations between lack of support, negative perceptions about the health and economic threats of COVID-19, and children's behavior problems. These findings showed the importance of mothers' mental health and parenting behaviors for children's socioemotional adaptation in the context of COVID-19.
<i>Hank & Steinback 2021 [90]</i>	Germany	<i>n</i> = 3108	Mid-May through early-July 2020	Mixed-Method Study Longitudinal	Results showed that the "traditional" division of housework was the most common arrangement, that decreased 4% during corona virus pandemic. Male contributions increased during the pandemic. The division of labor remained stable in almost 60 percent of the couples. Results showed that when male partner's working hours increased, the housework done by women also increased (but not childcare). If the men working hours decreased, the female contribution also decreased both in childcare and housework.

(Continued)

Table 1. (Continued)

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
<i>Hiraoka & Tomoda (2020) [91]</i>	Japan	<i>n</i> = 353	29th to 30th April	Quantitative Study Cross-Sectional	There was a significant increase in parenting stress.
<i>Hood et al. (2021) [92]</i>	Australia	<i>n</i> = 30	End of July 2020	Qualitative study Cross-Sectional	Family relationships improved, parental stress increased and there was a reflection on family schedules. Almost a third of mothers described an improved relationship with their children, some participants described changes to their family interactions including more time engaging in home-based family activities. Also, several participants perceived the lockdown as overwhelming and stressful due to uncertainty about the future, having children at home and not being able to leave the house. Many of the mothers reported feeling isolated and alone.
<i>Hudde et al. (2021) [93]</i>	United Kingdom (UK)	<i>n</i> = 6438	April to September 2020	Quantitative Study Longitudinal	Women, especially those with less egalitarian attitudes, spent twice as many hours on housework in some point in time. Women with more egalitarian attitudes reported smaller changes in housework and men with more egalitarian attitudes increased their time spent on housework. Both men and women spent more hours doing housework during COVID-19 pandemic. In all couples, the pandemic increased gender equality in housework in all couples. The authors found no evidence that pre-crisis gender role affected changes in both genders' contributions to housework during the lockdown.
<i>Idsoe et al. (2021) [94]</i>	Norway	<i>n</i> = 294	Spring, 2020	Quantitative Study Longitudinal	Family activities during lockdown did not impact the pandemic stress levels—9.5% of the mothers and 10.2% of the fathers scored for stress symptoms.
<i>Jiang et al. (2021) [95]</i>	China	<i>n</i> = 108	February to March 2020	Quantitative Study Cross-sectional	Greater daily positive support from their partners is related to greater daily feelings of gratitude and less daily stress during COVID-19 lockdown.
<i>Jones & Thesis (2021) [96]</i>	USA	<i>n</i> = 302	April through June of 2020	Dyadic Quantitative Study Cross-Sectional	Relational uncertainty due to COVID-19 pandemic and partner interference were positively associated with relational turbulence. The relational turbulence was associated with more severe irritations, more aggressive and less open relational communication, which can deteriorate relationship quality over time.
<i>Jones et al. (2021) [97]</i>	USA	<i>n</i> = 302	April 2020	Qualitative Study Cross-Sectional	A small number of participants reported no effect of COVID-19 on their relationship. Changes in interdependence processes (i.e., establishment of new routines at home, work and relationships; division of household duties and childcare) as well as both positive and negative changes in physical and emotional intimacy. Also, the study reported negative emotions such as feelings of anxiety, uncertainty, tension, irritation, frustration, sadness, depression, and stress. The study also found changes in communication behavior (frequency and quality).
<i>Karagöz et al. (2020) [98]</i>	Turkey	<i>n</i> = 245	May 2020	Quantitative Study Cross-sectional	Sexual function scores during pandemic were lower. Also, anxiety, depression, and stress perception increased during COVID-19 period which also increased sexual dysfunctions in both male and female. Females had more anxiety and depression symptoms and stress perception than males in the pandemic period and were significantly lower during the pandemic than in the preceding period.
<i>Kolo et al. (2021) [99]</i>	Nigeria	<i>n</i> = 10		Qualitative Cross-Sectional	There was a major challenge in the adaptation due to the rapid changes and challenges associated with uncertainty. Participants report the impact in terms of daily routines, home-school, working from home, more household duties, lack of support from day care, changes in sleep, spiritual changes and not being able to visit the loved ones. The study also alights some key-aspects that helped the couples balance work-life: prioritizing, scheduling and time management. The study also reported that it was difficult to balance work-family life due to work activities, stress and mental strains.

(Continued)

Table 1. (Continued)

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
Lee et al. (2021) [61]	USA	n = 291	March and April 2020	Quantitative Study Longitudinal	Couples' disagreement and verbal fighting scores increased from Time 1 to Time 2, but disagreements related to COVID-19 and physical fighting did not. Couples with higher levels of dyadic coping reported fewer fights and disagreements on average. Dyadic coping did not buffer participants from increases in relationship conflict. More days spent in lockdown was associated with increases in disagreements related to COVID-19.
Li & Samp (2021) [100]	USA	n = 411	April 1st and May 1st, 2020	Quantitative Study Cross-Sectional	Higher perceived threat of COVID-19 predicted more complaint avoidance, which in turn predicted lower relationship satisfaction and higher anxiety, depression, and substance use. Men reported lower relationship satisfaction, more withhold complaints and higher anxiety, depression, and substance use comparing to women. Bisexual individuals reported greater levels of negative pandemic impacts, perceived threat of COVID-19, intentions to terminate the relationships, anxiety, depression, and substance use than lesbian and gay participants. Lesbian participants reported higher relationship satisfaction than other groups.
McRae (2021) [101]	New Zealand	n = 362	26th March to 28th April, 2020	Quantitative Study Cross-Sectional	During lockdown, parent's distress predicted an increase on harsh parenting, however, this effect buffered with partner support. Also, predicted a decrease in responsive parenting and parent-child relationship quality which buffered with coparenting. This means that partner support and cooperative coparenting were key-aspects during COVID-19 lockdown to help families navigate stressful and uncertain times.
Mousavi (2020) [102]	Iran	n = 213	February to mid-April 2020	Mixed-Method Study Cross-Sectional	The effect of lockdown on marital satisfaction and parental burnout was not significant in parents. Fathers had higher psychological well-being than mothers.
Mutang et al. (2022) [103]	Malaysia	n = 334	September and December 2020	Quantitative Study Cross Sectional	The study found that participants' relationship quality improved during the lockdown compared to before the lockdown, namely on commitment, trust, passion, love, and sex components. Stress factors were identified as financial problems, restricted movement, and fear of COVID-19 infection. The stress, depression and anxiety levels were high during the covid-19 lockdown.
Neff et al. (2021) [104]	USA	n = 191	W1 = 16th April to 21st May 2020 W2 = 17th November to 20th December	Quantitative Study Longitudinal	Women, but not men, who were more blaming of the pandemic exhibited reduced stress spillover during the COVID-19 outbreak. Participants were relatively satisfied in their relationship and reported low levels of daily stress.
Nuru & Bruess (2021) [45]	USA	n = 108	September 2020 to January, 2021	Qualitative Study Cross-Sectional	By engaging in an intentional communicative practice during COVID-19 crisis, couples navigated the COVID-19 pandemic through a dynamic, interwoven processes of negotiating, cultivating, accepting, and inviting (re)construction of their relationship cultures.
Omar et al. (2021) [105]	Egypt	n = 696	30th March to 30th June, 2020	Quantitative Study Cross-Sectional	COVID-19 pandemic was associated with lower sexual satisfaction in both genders. Females however, suffered more anxiety and depression and thereby greater risk of sexual function difficulties and sexual dissatisfaction. Sexual Dynamics Psychological Well-Being
Osur et al. (2021) [106]	Kenya	n = 194	15th to 30th September, 2020	Quantitative Study Cross-Sectional	Sexual satisfaction during the COVID-19 pandemic decreased.
Özlü et al. (2021) [107]	Turkey	n = 329	May and June 2020	Quantitative Study Cross-Sectional	The frequency of sexual intercourse during COVID-19 pandemic decreased for both men and women. Participants had a moderate level of quality of sexual life.

(Continued)

Table 1. (Continued)

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
<i>Panzeri et al. (2020) [108]</i>	Italy	<i>n</i> = 124	11th April to 5th May 2020	Quantitative Study Cross-Sectional	Most couples did not perceive any differences in their sexuality. Some female participants reported a decrease in sexual satisfaction, pleasure, sexual desire and arousal because of worry, lack of privacy and stress. Also, participants experienced more anxiety, depression, and stress. This means that personal emotions and psychological difficulties during the lockdown had an impact on participants' sexual life, more than specific aspects related to the couple's relationship.
<i>Partington et al. (2022) [109]</i>	USA	<i>n</i> = 449	September and October 2020	Quantitative Study Cross Sectional	This study found that 28% of the families struggled during COVID-19 pandemic and that 15% were distressed during this period. The remaining families were satisfied and adapted to this crisis. Family's adaptation during COVID-19 changed according to (1) financial background; (2) partner's contribution to household tasks; (3) coping strategies such as cognitive appraisal and (4) child's temperament. These findings underscore the multidimensional nature of coping and well-being during COVID-19.
<i>Quezada Berumen et al. (2020) [110]</i>	México	<i>n</i> = 101	18th May to 25th May, 2020	Quantitative Study Cross-Sectional	The higher marital satisfaction the less impact during COVID-19 lockdown in several areas of the person's life, such as tranquility, happiness, health, physical condition, and emotional well-being.
<i>Rodríguez-Domínguez (2021) [111]</i>	Spain	<i>n</i> = 342	April 14th to 29th, 2020	Quantitative Study Cross-Sectional	Significant levels of anxiety were associated with poorer dyadic adjustment and a decrease in the perceived quality of relationships since the start of lockdown. Also, increased partner conflict seems to be an important predictor of dyadic adjustment and relationship quality during social isolation. Also, this study suggested that the pandemic had negatively affect the mental health of the population, in particular women.
<i>Schmid et al. (2021) [112]</i>	Germany	<i>n</i> = 781	Mid-May through early July 2020.	Quantitative Study Cross-Sectional	40% of the participants report relationship satisfaction decrease for men and women, 20% increase in relationship satisfaction and 40% remained stable in relationship satisfaction.
<i>Sels et al. (2022) [113]</i>	Belgian	<i>n</i> = 679	From May to August 2020	Cross sectional Quantitative	Parental status was the primary influence on individual and relational well-being, with no significant differences based on gender or sexual orientation. Non-parents reported higher relational well-being than parents, while individuals without children reported a greater increase in perceived depression. Longer-term relationships were associated with lower relational well-being, although this relationship was explained by other factors.
<i>Seok et al. (2021) [114]</i>	Malaysia	<i>n</i> = 124	Not Available	Quantitative Study Cross-Sectional	No significant differences in relationship quality on the couples before and during quarantine except higher trust sub-scale. The Couples that demonstrated lower satisfaction toward their spouses also showed higher commitment, passion, and love in their relationship.
<i>Shockley et al. (2021) [115]</i>	USA	<i>n</i> = 668	T1 = 18th– 23rd March 2020 T2 = 7th– 18th May 2020	Quantitative Study Longitudinal	36.6% of the sample were using strategies in which women did more or all childcare, 18.9% not gendered and 44.5% of the sample used egalitarian strategies. Also, when women did more childcare reported lower well-being and performance at work. Lastly, results show that egalitarian strategies best preserved wives and husband well-being and allowed both to maintain good job performance.
<i>Soares et al. (2021) [65]</i>	USA	<i>n</i> = 1799	30th April– 26th May	Quantitative Study Cross-Sectional	Women spent more time on household duties and childcare during COVID-19 pandemic than men.

(Continued)

Table 1. (Continued)

Authors/Year	Country	Sample	Data Collection	Study Design	Main Findings
<i>James et al. (2022)</i> [116]	USA	<i>n</i> = 734	September and October of 2020	Quantitative Study Cross sectional	There was a decline in relationship satisfaction compared to pre-pandemic reports. This decrease was more pronounced among white individuals, women, less involved parents, and those with higher levels of depressive symptoms. Higher relationship satisfaction was associated with greater support for family policy, particularly in men. At higher levels of relationship satisfaction, men and women showed similar levels of support for family policy. However, at lower levels, women exhibited notably higher support. These findings suggest that the COVID-19 pandemic may have worsened pre-existing social inequalities, particularly those related to significant socioeconomic disparities.
<i>Spinelli et al. (2020)</i> [117]	Italy	<i>n</i> = 810	2nd– 7th April, 2020	Quantitative Study Longitudinal	Household chaos predicted higher levels of parenting stress, which was associated with less effective emotion regulation in children through the mediating role of parental involvement.
<i>Tan (2021)</i> [118]	Singapore	<i>n</i> = 409	May 2020 (T1) June 2020 (T2)	Quantitative Study Longitudinal	Compared to pre-pandemic levels, the proportion of participants not having marital sex within a week remained stable while weekly sexual frequency increased, with more evenly distributed sexual activity on weekdays and weekends. Stress, fatigue, and marital satisfaction levels predicted probability of non-activity and sexual frequency.
<i>Tomohiro (2021)</i> [119]	Japan	<i>n</i> = 4882	April, May, August, and December 2020	Quantitative Study Longitudinal	Participants working from home, childcare and household duties increased significantly regardless the gender. There was a decrease on household duties and childcare hours in December 2020 comparing to lockdown period. Increases in household duties, childcare and leisure hours were observed among those who continued to work from home in December 2020 compared to their pre-pandemic levels.
<i>Turliuc & Candel (2021)</i> [120]	Romany	<i>n</i> = 144	T1 – 16th March, 2020 T2 – 15th May, 2020	Quantitative Study Longitudinal	Higher levels of external stress were associated with lower marital satisfaction for women with higher socioeconomic status (SES).
<i>Vowels et al. (2021)</i> [121]	UK	<i>n</i> = 200	March 30th, 2020, and April 21st, 2020,	Mixed-Method Study Longitudinal	Partner's support was important to thrive during COVID-19 pandemic. Higher relational support predicted better goal outcomes. The qualitative analyses revealed partners use direct and indirect forms of emotional and instrumental support toward goal pursuit.
<i>Waddell et al. (2021)</i> [122]	New Zealand	<i>n</i> = 314	8th to 27th April, 2020	Quantitative Study Longitudinal	Women did more of the parenting and housework that increased relationship problems and decreased relationship satisfaction. Men engaged in more paid work and personal time during the lockdown. Both men and women equally perceived that the relative labor in these domains was unfair.
<i>Weber et al. (2020)</i> [123]	USA	<i>n</i> = 332	2nd May to 11th May, 2020	Quantitative Study Cross-Sectional	In general couples functioning remained the same or improved comparing before COVID-19 pandemic. Also, communication improved while fun in the relationships decreased.
<i>Williamson (2020)</i> [124]	USA	<i>n</i> = 654	December 2019, March, and April 2020	Quantitative Study Longitudinal	Relationship satisfaction and causal attributions did not change over time, but responsibility attributions decreased on average. There were small moderation effects of relationship coping and conflict during the pandemic, revealing that satisfaction increased, and maladaptive attributions decreased in couples with more positive functioning and satisfaction decreased and maladaptive attributions increased in couples with lower functioning.
<i>Wong et al. (2022)</i> [125]	USA	<i>n</i> = 1642	September 2020 and January 2021	Longitudinal Quantitative	66% of participants reported no change in the quality of their relationships during the pandemic. 22.8% noted an improvement, while 10.5% reported a decline.
<i>Zamarro & Prados (2021)</i> [126]	USA	<i>n</i> = 3980	10th March to 22nd July, 2020	Quantitative Study Longitudinal	Women spent more time than men in the provision of childcare during the COVID-19 crisis, even while still working. Also, psychological distress emerged in mothers and women without school-age children in the household in early April.
<i>Zhang et al. (2021)</i> [127]	China	<i>n</i> = 1139	March, 2020	Quantitative Study Cross-Sectional	Most of the participants (69.7%) reported no changes on sexual intercourse, sex lives or emotional bonding during COVID-19 pandemic.

<https://doi.org/10.1371/journal.pone.0315417.t001>

The final percentage of study quality is presented, ranging from low quality to very good quality (See [S1–S3 Tables](#)).

Articles were analysed through NVIVO12, and 13 codes were identified, corresponding to each item and the subcodes according to the score (for example, if an article scored 1 on item 5, it would go to the subcode identified). Articles were evaluated as demonstrating very good (75% to 100%), good (50–75%), medium (25% to 50%) and low quality (0 to 25%). Finally, an interrater analysis was carried on using percent agreement index [129] which showed 91.48% of ratings between the two authors was the same. Most of the studies were classified as good, ten as very good and six as medium (See [S1–S3 Tables](#)).

Thematic analysis results

A qualitative analysis was conducted to identify main themes from key findings in the reviewed articles, following Braun and Clarke's (2006) thematic analysis approach [130]. In a first moment, data was analysed through hierarchical organisation of initial codes. Initial codes were created inspired by Bronfenbrenner's Ecological Systems Theory [8], depicting the systems affected by Covid-19—microsystem, mesosystem, macrosystem, exosystem and chronosystem. We also integrated the Stress Model Process [51] in the organization of themes, based on the three elements of stress: 1) sources, 2) mediators, and 3) outcomes. Each code was subdivided and organised into sub-codes. During the second round of data analysis, greater flexibility was enabled in generating the codes using open coding [131, 132]. This involves generating categories in an open and line-by-line manner based on the data, whilst constantly questioning the information presented [132]. After modifying the codes, an inter-categorical analysis was initiated, followed by axial coding involving continuous comparison between categories [132]. Furthermore, the interactions between category dimensions were explored, resulting in the renaming, and identification of new relationships, and even new categories. We also constructed cognitive maps to categorise and formulate new connections that became apparent. Ultimately, the systematic coding facilitated the identification of a range of categories and subcategories regarding the data, to address the research inquiries.

The thorough literature review allowed a categorization of the key domains that appear to have influenced parenting and couples functioning during the COVID-19 pandemic. Nine categories were identified through the thematic analysis. The classification of stress themes based on their sources, mediators, outcomes, and the corresponding systems in which they occurred (See [S4 Table](#)). In the following section, we describe the themes organized by stress elements, beginning with the themes that arose as stress sources. Subsequently, we outline the themes that acted as mediators and finally, the themes that surfaced as outcomes.

Themes on stress sources as result of COVID-19 pandemic

Two stress sources categories were identified—Gender Inequalities ($n = 14$) and External Stress ($n = 15$). The Gender Inequalities category is within the macrosystem of the couple, affected by domestic and parental duties and social norms, including two subcategories. The first subcategory named Unequal Division of Household Duties ($n = 11$), refers to an unequal sharing of household management tasks and parental responsibilities in providing primary care for children. The second subcategory named Lack of Support in Maternity ($n = 3$), defined as the absence of support, particularly with regards to childcare and social isolation. Regarding the External Stress ($n = 15$), emerged as well in the macrosystem and is known as the emotional strain and mental tension experienced by couples and parents in adverse and demanding circumstances such as the COVID-19 pandemic. The categories are detailed below.

Unequal division of household duties ($n = 11$)

The distribution of household duties during the COVID-19 pandemic was evaluated in eleven studies [65, 79, 83, 90, 93, 97, 99, 115, 119, 122, 126]. Since the onset of the COVID-19 pandemic crisis, a noticeable change in the division of housework and childcare [99] was observed. On the one hand, one of the emerging points within this category, as indicated by seven studies, was the gender differences between men and women in the allocation of household work during the COVID-19 outbreak [65, 79, 83, 90, 93, 115, 126]. While there was an increase in fathers' involvement in domestic tasks, particularly in task allocation, mothers continued to provide more housework and childcare than fathers [65, 79, 83, 90, 93, 115, 122, 126]. The overwhelming domestic and parental burden, in both genders, was reflected in reduced satisfaction [126] and well-being, as well as in work performance [115]—We found an impact of working remotely [119] in family dynamics [99].

Lack of support for mothers ($n = 3$)

The lack of support for mothers during the pandemic led to feelings of loneliness, isolation, and inadequate support [89, 92, 99]. On one hand, the significance of support systems in parenting practices was evident [92, 99] and on the other hand, a link was observed with more hostile parenting practices and more negative attitudes towards the pandemic [89].

External stress ($n = 15$)

Elevated stress levels were identified and had a negative impact in dyadic dynamics [75, 81, 89, 91, 92, 94, 99, 101, 104, 117, 120], such as a decline in daily positive mood and an upswing in negative mood amongst couples [75]. The consequences of external stress were not exclusive to couples, as we will mention in the section after.

Focusing on parental stress [80, 82, 86, 89, 91, 92, 101, 109, 117], we identified some contributing factors: (a) household disorganization and chaos [117] and (b) the perception of the pandemic as overwhelming and burdensome [92]. The consequence of parental stress includes (a) a reduction on engagement in their children's activities; (b) less attention and fewer time spent together; (c) more harsh parenting [82]; (d) less responsive parenting [117] and (e) more conflict in the intimate relationship [80]—those results in a decline in emotional regulation among children [86, 117], more work-family conflict and less balance [99] and parent depression [86].

Themes on the mediators during COVID-19 pandemic

Coping Strategies ($n = 21$) emerged in the mesosystem, as dyadic coping skills, such as Dyadic Support ($n = 14$), Communication as Mediator ($n = 4$) and Adaptation to New Daily Routines ($n = 3$). Dyadic Support is characterised by one partner helping the other to cope with and overcome problems or challenges, including those caused by COVID-19. Communication as a Mediator ($n = 3$) is defined as the process by which couples send and receive information, verbal or non-verbal, within the relationship. Adaptation to New Daily Routines ($n = 3$), that describes the main day-to-day changes and transformations in couple and parenting dynamics during the COVID-19 pandemic.

Coping strategies ($n = 21$)

As for the coping mechanisms recognized in the themes, we will first consider dyadic support, before turning our attention to communication and finally to strategies to adapt to new routines imposed by the COVID-19 pandemic.

Dyadic support ($n = 14$)

Dyadic support was considered a pivotal element in aiding families to cope with the demanding and precarious circumstances posed by the COVID-19 pandemic [111] whilst also proving to be vital for personal development throughout the pandemic period [121]. On the one hand, positive dyadic support reflected on less dyadic conflicts [61, 80], more relationship satisfaction [73, 76, 77, 124], increased gratitude within the relationship, and on more quality in the relationship through the reduction of reducing anxiety levels caused by confinement [95, 111], promoting psychological well-being [75]. On the contrary, negative dyadic coping had a negative impact on relational satisfaction [75, 91, 120] as it accentuated negative mood and had a greater impact on relationships compared to positive dyadic coping [84].

Communication as mediator ($n = 3$)

Communication emerged as pivotal for couples to handle challenges during the COVID-19 and as a tactic to manage conflict resolution [81, 85], defined as an inter-communication as a psychosocial strategy during conflict management, such as allocating sufficient time for enjoyable active learning [81], negotiating, accepting, and nurturing their relationship cultures [45].

Adaptation to new daily routines ($n = 3$)

Some changes imposed by the COVID-19 pandemic included the establishment of new routines at home [97, 99] as well as a change in family schedules [92]. Jones [97] found changes in dependency processes, such as the establishment of new routines at home. Kolo and colleagues [99] found that participants reported the impact of the COVID-19 pandemic in terms of daily routines, and Hood et al. [92] showed that family schedules changed.

Themes on outcomes effects because of COVID-19

Focusing on the outcomes from the COVID-19 pandemic, we found Lower Psychological Well-Being ($n = 20$), as particularly salient in the microsystem, as it reflects individual emotional distress. At the mesosystemic level of the couple, categories such as Relationship (In) Satisfaction ($n = 21$), Sexual Functioning ($n = 10$), and Communication as an Outcome ($n = 4$) have emerged. The Relationship (In) Satisfaction is referred interaction patterns exhibited by couples that affect their satisfaction. The Sexual Functioning category represents the perception of the couples on several sexual dynamics, such as frequency, intimacy, desire, satisfaction, arousal, pleasure, and individual practices (e.g., masturbation). Finally, Communication as a Process is defined as a dimension of the couple that was affected by the pandemic in both positive and negative ways. Relational Growth in the Chronosystem ($n = 4$) emerged as the ability of couples to bounce back and surmount challenges and obstacles during the COVID-19 pandemic.

Lower psychological well-being ($n = 20$)

Several studies demonstrated psychological difficulties during the COVID-19 crisis [65, 61, 74, 81, 84, 86, 89, 97–100, 102, 103, 108, 110, 111, 113–115, 126]. We also found gender differences in individual well-being, with women reporting inferior levels of well-being [65, 74, 98, 102, 108, 111, 126], especially in women with children [86, 102, 115, 126].

Furthermore, it became evident that these dynamics were reflected in relations, sexual dynamics, and parental interactions. Concerning to relationship dynamics, we found a positive relationship between individual well-being and relationship quality [74, 81], particularly among women [74], that highlight the importance of individual well-being in relation to relationship dynamics [110, 114].

Focusing on the interinfluences between personal well-being and sexual dynamics, some studies have found a negative impact of psychological distress on sexual dysfunctions [98], on pleasure, desire, and arousal [108]. Conversely, elevated levels of personal well-being were reflected in the quality, intimacy, and passion within sexual relationships [114]. Finally, some studies found higher maternal anxiety [89], less relational well-being [113], and poorer parenting behaviours, including those that are hostile [89], as well as parenting being the primary influence on individual and relational well-being [113].

Relationship (In) satisfaction ($n = 21$)

Several studies examined the levels of satisfaction among couples during the COVID-19 pandemic [73, 74, 77–78, 80, 85, 87, 88, 100, 102–104, 110, 112, 114, 116, 122–125], however the results were not consistent. Focusing on the studies that focused on relationship satisfaction before and after the pandemic, some studies suggested that the COVID-19 pandemic did not affect the satisfaction levels of couples [76, 78, 102, 104, 114, 123–125] and three studies found a decline in relationship satisfaction during the COVID-19 crisis [77, 112, 116]. Two studies found that changes in relationship satisfaction that varied according to relational processes [73] and to the perception of the pandemic as a source of conflict in the relationship [88]. Other studies found high levels of marital satisfaction, namely on relationship quality [103], although not comparing the pre- and post-pandemic periods [80, 85, 100, 110]. Others found that couples were moderately satisfied with their relationship [74, 120, 123]. Some factors were identified as moderators: sexual satisfaction, relationship validation, not having children, perception of fairness in the power dynamics on the relationship, social functioning, not having physical or sleep problems [74, 87], high levels of income [120] and doing activities together as a couple [103].

Sexual functioning ($n = 10$)

Ten studies analysed couples' sexual experiences during the COVID-19 pandemic [74, 87, 97, 98, 105–108, 118, 127], but focused on different domains. At an individual level, there was an increase in individual sexual practices both in men and women, but higher in men [98].

At the relationship level, we found a positive impact of sexual satisfaction on relational satisfaction during the COVID-19 pandemic [74, 87]. One of the findings indicated a decrease in sexual satisfaction compared to the pre-pandemic period [98, 105, 106], particularly among women [108], because of the lower levels of well-being being associated with a higher risk of sexual difficulties [105, 118]. Factors contributing to moderate levels of sexual satisfaction included lower relationship invalidation, no children in the home and higher perceived fairness of relationship power [87].

In terms of sexual frequency, one study found a decrease [107] and two studies found no differences before and after the pandemic [74, 127] and one study found an increase on weekly sexual frequency [118]. Two studies reported no changes in sexual desire, arousal, and orgasm [108, 127] comparing to before the pandemic.

In terms of quality of sexual life, one study found a moderate level of quality reported in women and it was influenced by age, education of the spouse as well as the sexual frequency before and during the COVID-19 pandemic [107]. The study suggested that couples with university degrees and specifically women whose partner had a university degree had higher levels of quality of sexual life. Men with a nuclear family had higher levels of quality of sexual life.

Concerning intimacy, one study found both positive and negative changes in intimacy, in which participants described having both more and less time to connect [97] and other found no differences on emotional bonding during COVID-19 pandemic [127].

Communication as an outcome ($n = 4$)

Some studies have reported changes in the quality and frequency of communication in couples and families during the COVID-19 pandemic. On the one hand, two studies found a decrease in the communication quality, in a more and less communicative engagement with the partner, as well as more negative and more positive valence of conversations [97] such as severe irritation and less open and more aggressive communication, affected relationship quality over time [96]. On the other hand, other study found that communication improved during the COVID-19 pandemic [123], possibly due to fewer external demands such as commuting and travelling in couples with children. Another study found that COVID-19 pandemic concerns were reflected in couples' stress communication, which was positively correlated with dyadic coping responses, but negatively correlated with psychological well-being [84].

Relational growth ($n = 4$)

During the COVID-19 pandemic, couples engaged in dynamic processes of negotiation and reconstruction [45], highlighting the importance of coping strategies as promoters of resilience, such as creating new rituals to express care towards their partner [45, 81]. One factor contributing to the relationship satisfaction was attributing any relationship issues to external factors [104]. This led to a decrease in spillover processes, resulting in higher levels of marital satisfaction and fewer negative behaviours.

Furthermore, Chakraborty et al. [81] discovered that psychological distress can have a beneficial effect on a couple's adjustment during a crisis by promoting affection, emotional support, reliable alliance, satisfaction, approval, and companionship, thereby enhancing relational resilience [81]. More importantly, the study determined psycho-social methods for dealing with COVID-19 challenges, such as communication for conflict resolution, offering emotional support, and respecting personal space. Additionally, self-introspection through dialogue and self-realisation, along with inter-communication improvement through active listening and making time for leisure activities, were identified. Finally, Kolo et al. [99] highlighted the importance of prioritisation, scheduling and time management as crucial factors that aided couples in balancing work and life. These findings imply that these elements could offer valuable insights for interventions aimed at supporting couples during a family crisis [99].

Integrating inconsistent results

Given the aims of this literature review, the inconsistent findings are discussed in terms of the quality of the papers and the moderating variables. There are three categories where we describe inconsistent results, all of which are presented as outcomes of the process and included as part of the mesosystem: Relationship (In) Satisfaction, Sexual Functioning, and Communication as an Outcome.

Aim 1. Quality assessment

We first started by crossing the studies with different results against the quality matrix. From the studies reporting good or very good quality, we observed that some changes were identified in relationship (in) satisfaction. On the one hand, the studies reporting good quality found no disparities in relationship satisfaction before and after the COVID-19 pandemic (7 out of 8), fewer studies found a decrease in relationship satisfaction (3 out of 3), other studies found high levels of satisfaction (3 out of 5) and finally other studies found moderate levels (2 out of 2). A pattern was identified, with seven studies reporting both good methodological quality and no changes in relationship satisfaction during the pandemic (See Table 6 in S4 Table).

Despite different record of the changes on sexual functioning (both positive and negative changes), most of the studies were classified as of good quality. Several dimensions of sexual functioning have been identified, including sexual satisfaction and sexual frequency. We identified a pattern and observed that sexual satisfaction (3 out of 4) decreased during COVID-19, and that sexual frequency did not change (3 out of 5) (See Table 7 in S4 Table).

Finally, as to communication as an outcome, a pattern was identified, with the one study reporting a positive impact being of lower quality than the two that reported a decrease in communication ((See Table 8 in S4 Table). As observed during the pandemic there was a negative impact on the level of communication.

Aim 2. Moderators

To further explore underlying factors of the inconsistent findings as to couple (in) satisfaction, sexual satisfaction, and communication as an output we will consider two possible hidden moderators. Considering social reports on the economic impact [133, 134] of the COVID-19 pandemic, we will explore the moderating effect of income—a macro variable of the pandemic—on these three categories of mesosystem outcomes. We will also consider the role of coping as a crucial process for crisis intervention at a secondary level.

As to relationship satisfaction, we identified several papers that have information of family income, coping strategies, or both (See Table 9 in S4 Table). We found no clear contribution of income in explaining variations in relationship satisfaction when couples were exposed to COVID-19 pandemic stress—some studies reported that income did not moderate slopes in relationship satisfaction [124], others identified financial problems as a stress factor [103], other did not report any changes in income during the pandemic [74, 80, 125] and further reported high- or average-income families [73, 102, 104]. Moving to our second moderator, seven studies showed that coping strategies (positive or negative) do moderate the relationship between pandemic stressors and relationship satisfaction, thus leading to different relationship outcomes. Finally, in three studies that included information on both coping and income [73, 80, 102], we find that the presence of moderate or high income and the development of coping strategies minimized the impact of COVID-19 stress on relationship satisfaction.

Next, we will present the studies with sexual functioning as a dependent variable which refer information on income, coping or both (See Table 10 in S4 Table). We found no clear relationship between income and sexual functioning. On the one hand, one study found that low levels of sexual satisfaction were linked to economic losses [98], but other study found no relationship between sexual satisfaction [105] and income. In contrast, moderate levels of sexual satisfaction have been associated with higher income [87]. On the other hand, when no differences in sexual frequency were observed, some studies found that couples tended to have a high income or no changes to the income, and high educational levels [74, 127], and one study found no significant differences [118]. Furthermore, three studies measured both coping, income, and sexual functioning. It appears that the presence of coping strategies and moderate to high income indeed moderated the impact of stress imposed by the pandemic and sexual dynamics [87, 97, 98].

Finally, as to the theme Communication as an Outcome, the only study that have an inconsistent and positive effect of COVID-19 pandemic on communication did not record income and/or coping strategies, so that we cannot move forward in our analysis (See Table 11 in S4 Table).

Discussion

To our knowledge, this is the first systematic review to explore the impact of Covid-19 pandemic on couples and parenting worldwide. From 58 studies across the world, there were 12

themes that interconnected challenges, coping strategies and the impact on parenting and couples during this moment of crisis.

This systematic review of the literature aimed to 1) describe and synthesize the main changes in individual, relationship, and family dynamics during the pandemic; 2) integrate the inconsistent findings and 3) define new routes for research and clinical practice.

Regarding our first goal (to describe the existing thematizes on couples and parenting dynamics during the COVID-19 pandemic), we identified Gender Inequalities and Lack of Support for Mothers relating to how domestic and childcare tasks are divided. This is of particular importance because gender inequalities arise from traditional family models that are structured and operate according to gender roles. This overload of domestic work for women has been described in the literature [135, 136], as a “gender care gap” [137], with repercussions not only on individual well-being [138, 139] but also on the quality of their relationships [140]. We suggest that clinicians should systematically address the division of labour and work-family balance, emphasizing that equitable sharing of responsibilities and improving communication can enhance relationship satisfaction. Additionally, it is important to develop appropriate interventions for mothers, who are a vulnerable group, to address the different dimensions of their overload and risk of mental health issues. This can be achieved by creating programs that offer parental support and reduce psychological distress, hopefully mitigating some of the negative effects of gender inequality. Future investigations should focus on the intersectionality of gender with other factors such as race, socioeconomic status, and single parenthood during crises to understand the unique challenges faced by these groups. This finding also highlights the urgency for the development of more effective support systems, including mental health services, workplace policies, social support networks and community resources. This multifaceted approach advocates for systemic change by targeting policy changes and promoting cultural shifts.

In addition to the stress caused by gender inequalities, external challenges led to high levels of stress in couples and families. Stress can corrode or strengthen relational bonds [141], depending on the resources available [142], on the perception of the situation and on the stress factors [143], that reflect either on maladaptation or relational growth and resilience [143]. In this sense, dyadic support is a significant and relevant aspect highlighted in this review due to existing reduced levels of wellbeing among participants. With effective resources, a period of crisis might carry the potential for positive transformation and present an opportunity for improvement in couples, by building resilience, problem-solving and adaptive skills. Couples can use a crisis as a catalyst for positive change and as a chance to address relational challenges. We believe that the interaction between stress, gender inequalities, and external challenges (e.g., the COVID-19 pandemic) within families depends on the resources available within the dyad. The outcome of this interaction is influenced by how effectively these resources are utilized.

Intimate relationships serve as a context for emotional support and space to alleviate psychological distress, consequently promoting mental and physical health for both family members and couples [144–146]. Also, it is considered a crucial mechanism for overcoming challenges [147] aiding in managing and dealing with stressful situations in a dynamic and reciprocal process [51]. By employing positive coping strategies, relational growth was achieved. We consider that family therapists and other family intervenors focus on positive communication skills and assist couples in building an emotionally supportive relational context, which involves both support and stress communication. Since dyadic support becomes particularly important during times of stress, we also believe it is crucial to help couples develop stress management techniques that address both relational and individual stress. Additionally, dyadic support often includes problem-solving skills to address conflicts

effectively. Relational growth can emerge from crises, such as the COVID-19 pandemic, when couples foster mutual support and recognize their progress together. Acknowledging families as competent is central to reinforcing positive behaviours and utilizing available resources within the family. Furthermore, since dyadic support is a modifiable dimension, it should be a focus of clinical intervention. Accordingly, therapists can work on changing patterns of dyadic support, communication, validation, and emotional regulation during stressful times. As mentioned before, we found low levels of psychological well-being. Extensive studies conducted during the pandemic have also reported psychological difficulties [31, 33–37]. In the absence of coping strategies and dyadic support, we found a bi-directional relationship between psychological difficulties and couple dynamics [148, 149], also described in the academic field, specifically in parenting [150–152] but also in sexuality [153, 154]. Conversely, insufficient relational satisfaction is reflected in an individual's well-being [149, 155] and relationship dissatisfaction was found to be strongly linked with emotional distress in both genders [156]. A new aspect that comes to light in this analysis is the effect on work and performance, as previously explored in other research studies [157] and during the COVID-19 pandemic [158]. We believe that this result is a reflection on the gender inequalities and parental overload, as we identify gender-specific challenges, discussed before. Political measures include supportive workplace policies by targeting work-family balance to alleviate the pressure on women and mothers.

Concerning our second goal (integrate inconsistent findings), we found conclusive associations were identified between income, relationship satisfaction, sexual satisfaction, sexual frequency, and stress related to COVID-19. Nonetheless, our observations indicated that individuals with moderate or high income, in conjunction with the implementation of effective coping strategies, exhibited a diminished impact of COVID-19-related stress on both relationship satisfaction and sexual functioning. The effect of coping on the relationship between stressors and marital satisfaction, has been described in the literature as a strong predictor of marital satisfaction [159–161] that confirms our findings. The investigations about relationship between sexual functioning and dyadic coping found that positive dyadic coping has a positive effect on sexual outcomes [161–164].

Regarding income, although we did not find any clear relationship, some studies report that low income can reflect on more fluctuations in marital satisfaction [165], as middle-income couples report both more psychological well-being and dyadic adjustment [166], exerting an important role in marital satisfaction [167–169]. Some factors may contribute to the negative impact of low income on marital satisfaction, namely financial stress [170, 171], financial dependency and difficulties in managing daily life. One possible reason for not finding a moderating effect could be that the families in the study samples maintained their income during the pandemic and may have incurred fewer financial expenses due to lockdown measures, which could have reduced the pressure on the families. Additionally, it is important to note that the primary objective of the studies in this review was not to examine the relationship between income, relational variables, and pandemic-related stress. This socioeconomic vulnerability should be target by public policies to develop support for lower-income individuals and make mental health services available. This can be achieved with public health initiatives as well as workplace policies to improve better work-family balance, as described before, that can be beneficial regardless of income. In the future, academic research should examine how variations in income levels affect the efficacy of different coping strategies and their impact on relationship satisfaction and sexual functioning. Understanding these nuances should better inform targeted therapeutic interventions and policy measures.

Focusing on our third aim (to define new avenues for research and clinical practice), we identified relevant key points: 1) it is essential to identify sources of stress and resources

available within families (e.g. coping strategies or socio-demographic characteristics); 2) it is crucial to assess and promote equal sharing of household tasks, as this promotes individual, relational and family well-being and adjustment [172] as well as work-family balance; 3) positive dyadic skills play a central role in the adjustment process and promote resilience and 4) individual well-being needs to be assessed and considered in couple and family therapy.

Regarding the methodological findings, our study included few qualitative studies, so we believe that is important to develop more qualitative studies to capture the perceptions, meanings, and construction of the COVID-19 pandemic experience as a couple and parent, using dyadic interviews. Future investigations should focus on the perspective of both members of the couple and parents at different stages of the family cycle, including longitudinal studies—as all the qualitative studies were cross-sectional. Also, dyadic qualitative studies are greatly needed to understand better the strategies developed to manage childcare demands, division of house duties, and work demands and their respective perception of impact on couple and family quality and satisfaction.

From our perspective, caution should be exercised when considering the findings of the current systematic literature review due to certain limitations. Initially, our study's research criteria were confined to online databases in peer-reviewed journals as we believed that these publications are more trustworthy and have undergone a thorough review process. Consequently, only peer-reviewed articles were incorporated to ensure that the review's quality was upheld. Secondly, it is important to recognize the findings while bearing in mind that not all studies had equal methodological rigor.

Conclusion

Couples and parents faced multiple challenges during this worldwide crisis, which varied according to their individual contexts and living conditions, affecting their individual, relational and family well-being. Our review explores the impact of COVID-19 on these dynamics, which are complex and multifaced. With appropriate resources and strategies, families can transform a period of crisis into an opportunity for growth and change. These resources constitute protective factors for the well-being of couples and families, mitigating difficulties and allowing couples to build new meaning, strategies and relational dynamics. It is necessary to reflect on the risk factors (e.g., unequal household duties, low psychological well-being or poor communication) and the urgent need for intervention and prevention in the future contexts of vulnerability and stress. This includes developing communication skills within dyadic support dynamics, establishing self-care routines, prioritizing mental health, and implementing measures to promote gender equality.

Besides identifying the negative and positive impact of COVID-19 pandemic on relational dynamics, we also identify that significant research gaps remain, particularly regarding marginalized groups. This review identifies strategies to help families cope with crises and prevent some of the relational and individual impacts. To our knowledge, this is the first systematic review that mapped the dynamics of cohabitating families during the COVID-19 pandemic. This review may serve to guide professionals intervening with couples and families, as it identified key areas of prevention and intervention.

Supporting information

S1 Checklist. Prisma statement checklist.
(DOCX)

S1 Fig. Fig 1. PRISMA flowchart for study selection.
(PDF)

S1 Table. Table 1. Quality assessment for selected studies—quality assessment for diverse studies.

(DOCX)

S2 Table. Table 2. Quality assessment for selected studies—Quality Assessment for Diverse Studies (QuADS) (2 judges).

(DOCX)

S3 Table. Table 3. Quality assessment judge 1 and Table 4. Quality Assessment Judge 2.

(DOCX)

S4 Table. Table 5. Thematic analysis categories by elements of stress and systems, Table 6. relationship satisfaction and quality assessment, **Table 7.** Sexual Functioning and Quality Assessment, **Table 8.** Communication as an Outcome and Quality Assessment, Table 9. Income and Coping on Relationship Satisfaction, **Table 10.** Income and Coping on Sexual Functioning and **Table 11.** Income and Coping on Communication as an Outcome.

(DOCX)

S5 Table. Table 12. Inclusion criteria for studies targeting couples and **Table 13.** Inclusion Criteria for Studies Targeting Parents.

(DOCX)

S6 Table. Table 14. Excluded reports for the systematic review of the literature.

(DOCX)

Acknowledgments

The authors are responsible for the consent and writing of the paper.

Author Contributions

Conceptualization: Maria Leonor Sentieiro, Luana Cunha Ferreira, Mariana Pires de Miranda.

Data curation: Maria Leonor Sentieiro.

Formal analysis: Maria Leonor Sentieiro, Mariana Pires de Miranda, Beatriz Araújo Vitória.

Funding acquisition: Maria Leonor Sentieiro.

Investigation: Maria Leonor Sentieiro.

Methodology: Maria Leonor Sentieiro, Luana Cunha Ferreira.

Project administration: Maria Leonor Sentieiro.

Resources: Maria Leonor Sentieiro.

Software: Maria Leonor Sentieiro.

Supervision: Luana Cunha Ferreira, Mariana Pires de Miranda.

Validation: Maria Leonor Sentieiro, Luana Cunha Ferreira, Mariana Pires de Miranda.

Visualization: Maria Leonor Sentieiro, Mariana Pires de Miranda.

Writing – original draft: Maria Leonor Sentieiro.

Writing – review & editing: Luana Cunha Ferreira, Mariana Pires de Miranda, Beatriz Araújo Vitória.

References

1. Watzlawick P, Beavin JH. Some formal aspects of communication. *American Behavioral Scientist* [Internet]. 1967 Apr 1; 10(8):4–8. Available from: <https://doi.org/10.1177/0002764201000802>
2. Minuchin S. Families and family therapy. In: Harvard University Press eBooks [Internet]. 1974. Available from: <https://doi.org/10.4159/9780674041127>
3. Palazzoli MS, Boscolo L, Cecchin GF, Prata G. Family Rituals A Powerful Tool in Family Therapy. *Family Process* [Internet]. 1977 Dec 1; 16(4):445–53. Available from: <https://doi.org/10.1111/j.1545-5300.1977.00445.x> PMID: 590473
4. Carter EA, McGoldrick M. The Changing Family Life Cycle: A framework for family therapy [Internet]. 1989. Available from: <https://ci.nii.ac.jp/ncid/BA05016464>
5. Relvas AP. O Ciclo Vital da Família. *Revista Portuguesa De Filosofia* [Internet]. 1997 Jan 1; 53(1). Available from: <https://philpapers.org/rec/RELOCV>
6. Carter EA, McGoldrick M. The expanded family life Cycle: individual, family, and social perspectives [Internet]. 1998. Available from: <https://ci.nii.ac.jp/ncid/BB25106705>
7. Gouveia R, Ramos V, Wall K. Household diversity and the impacts of COVID-19 on families in Portugal. *Frontiers in Sociology* [Internet]. 2021 Oct 22; 6. Available from: <https://doi.org/10.3389/fsoc.2021.736714> PMID: 34746295
8. Bronfenbrenner U, Morris PA. The bioecological model of human development. *Handbook of child psychology*. 2007 Jun 1;1.
9. Navarro Góngora J. Algunas reflexiones sobre la atención psicológica en la pandemia de la Covid-19. *Mosaico: Revista De La Federación Española De Asociaciones De Terapia Familiar = Journal of the Spanish Federation of Family Therapy Associations.*, 2021; 77:29–48.
10. Von Bertalanffy L. AN OUTLINE OF GENERAL SYSTEM THEORY. *The British Journal for the Philosophy of Science* [Internet]. 1950 Aug 1; 1(2):134–65. Available from: <https://doi.org/10.1093/bjps/i.2.134>
11. Bamba C, Riordan R, Ford J, Matthews FE. The COVID-19 pandemic and health inequalities. *Journal of Epidemiology and Community Health* [Internet]. 2020 Jun 13; jech-214401. Available from: <https://doi.org/10.1136/jech-2020-214401> PMID: 32535550
12. Mishra V, Seyedzenouzi G, Almohtadi A, Chowdhury T, Khashkhusha A, Axiaq A, et al. Health inequalities during COVID-19 and their effects on morbidity and mortality. *Journal of Healthcare Leadership* [Internet]. 2021 Jan 1; Volume 13:19–26. Available from: <https://doi.org/10.2147/JHL.S270175> PMID: 33500676
13. Stennett M, Tsakos G. The impact of the COVID-19 pandemic on oral health inequalities and access to oral healthcare in England. *British Dental Journal* [Internet]. 2022 Jan 28; 232(2):109–14. Available from: <https://doi.org/10.1038/s41415-021-3718-0> PMID: 35091614
14. Ahmad M, Khan YA, Jiang C, Kazmi SJH, Abbas SZ. The impact of COVID-19 on unemployment rate: An intelligent based unemployment rate prediction in selected countries of Europe. *International Journal of Finance & Economics* [Internet]. 2021 Jan 12; 28(1):528–43. Available from: <https://doi.org/10.1002/ijfe.2434>
15. Tetlow G, Pope Dalton. Coronavirus and unemployment. Institute for Government; 2020 May.
16. Bodrud-Doza Md, Shammi M, Bahlman L, Islam ARMdT, Rahman MdM. Psychosocial and Socio-Economic crisis in Bangladesh due to COVID-19 Pandemic: A Perception-Based Assessment. *Frontiers in Public Health* [Internet]. 2020 Jun 26; 8. Available from: <https://doi.org/10.3389/fpubh.2020.00341>
17. Fraenkel P, Cho WL. Reaching Up, Down, In, and Around: Couple and Family Coping During the Coronavirus Pandemic. *Family Process* [Internet]. 2020 Aug 9; 59(3):847–64. Available from: <https://doi.org/10.1111/famp.12570> PMID: 32589265
18. Villatoro AP, Wagner KM, De Snyder VS, Walsdorf AA, Valdez CR. Economic and social consequences of COVID-19 and mental health burden among Latinx young adults during the 2020 pandemic. *Journal of Latinx Psychology* [Internet]. 2022 Feb 1; 10(1):25–38. Available from: <https://doi.org/10.1037/lat0000195> PMID: 38283106
19. Whitehead M, Taylor-Robinson D, Barr B. Poverty, health, and covid-19. *BMJ* [Internet]. 2021 Feb 12; n376. Available from: <https://doi.org/10.1136/bmj.n376> PMID: 33579719
20. García-Rodríguez MT, Juanatey-Rodríguez I, Seijo-Bestilleiro R, González-Martín C. Psycho-emotional distress in children and adolescents in relation to COVID-19 confinement and pandemic: A systematized review. *Italian Journal of Pediatrics* [Internet]. 2023 Apr 15; 49(1). Available from: <https://doi.org/10.1186/s13052-023-01450-7>

21. Prime H, Wade M, Browne DT. Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist* [Internet]. 2020 Jul 1; 75(5):631–43. Available from: <https://doi.org/10.1037/amp0000660> PMID: 32437181
22. Odriozola-González P, Planchuelo-Gómez Á, Muñiz MJ, De Luis-García R. Psychological symptoms of the outbreak of the COVID-19 confinement in Spain. *Journal of Health Psychology* [Internet]. 2020 Oct 30; 27(4):825–35. Available from: <https://doi.org/10.1177/1359105320967086> PMID: 33124471
23. Mari E, Frascchetti A, Lausi G, Pizzo A, Baldi M, Paoli E, et al. Forced Cohabitation during Coronavirus Lockdown in Italy: A Study on Coping, Stress and Emotions among Different Family Patterns. *Journal of Clinical Medicine* [Internet]. 2020 Dec 1; 9(12):3906. Available from: <https://doi.org/10.3390/jcm9123906> PMID: 33272002
24. Lowe SR, Rhodes JE, Scoglio A a J. Changes in marital and partner relationships in the aftermath of Hurricane Katrina. *Psychology of Women Quarterly* [Internet]. 2012 Feb 2; 36(3):286–300. Available from: <https://doi.org/10.1177/0361684311434307>
25. Kene P. Mental health implications of the COVID-19 pandemic in India. *Psychological Trauma: Theory, Research, Practice, and Policy* [Internet]. 2020 Sep 1; 12(6):585–7. Available from: <https://doi.org/10.1037/tra0000750> PMID: 32757578
26. Bonaccorsi G, Pierri F, Cinelli M, Flori A, Galeazzi A, Porcelli F, et al. Economic and social consequences of human mobility restrictions under COVID-19. *Proceedings of the National Academy of Sciences of the United States of America* [Internet]. 2020 Jun 18; 117(27):15530–5. Available from: <https://doi.org/10.1073/pnas.2007658117> PMID: 32554604
27. Cusinato M, Iannattone S, Spoto A, Poli M, Moretti C, Gatta M, et al. Stress, Resilience, and Well-Being in Italian Children and Their Parents during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health* [Internet]. 2020 Nov 10; 17(22):8297. Available from: <https://doi.org/10.3390/ijerph17228297> PMID: 33182661
28. Lee WE, Park SW, Weinberger DM, Olson DR, Simonsen L, Grenfell BT, et al. Direct and indirect mortality impacts of the COVID-19 pandemic in the United States, March 1, 2020, to January 1, 2022. *eLife* [Internet]. 2023 Feb 22; 12. Available from: <https://doi.org/10.7554/eLife.77562> PMID: 36811598
29. Ayuso L, Requena F, Jiménez-Rodríguez O, Khamis N. The effects of COVID-19 confinement on the Spanish family: adaptation or change? *Journal of Comparative Family Studies* [Internet]. 2020 Oct 1; 51(3–4):274–87. Available from: <https://doi.org/10.3138/jcfs.51.3-4.004>
30. Chan ACY, Piehler TF, Ho GWK. Resilience and mental health during the COVID-19 pandemic: Findings from Minnesota and Hong Kong. *Journal of Affective Disorders* [Internet]. 2021 Dec 1; 295:771–80. Available from: <https://doi.org/10.1016/j.jad.2021.08.144> PMID: 34517251
31. Ezpeleta L, Navarro JB, De La Osa N, Trepate E, Penelo E. Life Conditions during COVID-19 Lockdown and Mental Health in Spanish Adolescents. *International Journal of Environmental Research and Public Health* [Internet]. 2020 Oct 7; 17(19):7327. Available from: <https://doi.org/10.3390/ijerph17197327> PMID: 33036461
32. Huffman EM, Athanasiadis DI, Anton NE, Haskett LA, Doster DL, Stefanidis D, et al. How resilient is your team? Exploring healthcare providers' well-being during the COVID-19 pandemic. *The American Journal of Surgery* [Internet]. 2020 Sep 12; 221(2):277–84. Available from: <https://doi.org/10.1016/j.amjsurg.2020.09.005> PMID: 32994041
33. Jiao W, Wang LN, Liu J, Fang SF, Jiao FY, Pettoello-Mantovani M, et al. Behavioral and Emotional Disorders in Children during the COVID-19 Epidemic. *The Journal of Pediatrics* [Internet]. 2020 Jun 1; 221:264–266.e1. Available from: <https://doi.org/10.1016/j.jpeds.2020.03.013> PMID: 32248989
34. Orgilés M, Morales A, Delvecchio E, Mazzeschi C, Espada JP. Immediate psychological effects of the COVID-19 quarantine in youth from Italy and Spain. *Frontiers in Psychology* [Internet]. 2020 Nov 6; 11. Available from: <https://doi.org/10.3389/fpsyg.2020.579038> PMID: 33240167
35. Ravens-Sieberer U, Kaman A, Erhart M, Otto C, Devine J, Löffler C, et al. Quality of life and mental health in children and adolescents during the first year of the COVID-19 pandemic: results of a two-wave nationwide population-based study. *European Child & Adolescent Psychiatry* [Internet]. 2021 Oct 12; 32(4):575–88. Available from: <https://doi.org/10.1007/s00787-021-01889-1> PMID: 34636964
36. Wang Y, Shi L, Que JY, Lu Q, Liu L, Lu ZA, et al. The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic. *Molecular Psychiatry* [Internet]. 2021 Jan 22; 26(9):4813–22. Available from: <https://doi.org/10.1038/s41380-021-01019-y> PMID: 33483692
37. Xiong J, Lipsitz O, Nasri F, Lui LMW, Gill H, Phan L, et al. Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders* [Internet]. 2020 Dec 1; 277:55–64. Available from: <https://doi.org/10.1016/j.jad.2020.08.001> PMID: 32799105
38. Günther-Bel C, Puigdesens AV, Carratala E, Torras-Garat S, Testor CP. A mixed-method study of individual, couple, and parental functioning during the state-regulated COVID-19 lockdown in Spain.

- Family Process [Internet]. 2020 Aug 29; 59(3):1060–79. Available from: <https://doi.org/10.1111/famp.12585> PMID: 32678461
39. Luetke M, Hensel DJ, Herbenick D, Rosenberg M. Romantic relationship conflict due to the COVID-19 pandemic and changes in intimate and sexual behaviors in a nationally representative sample of American adults. *Journal of Sex & Marital Therapy* [Internet]. 2020 Sep 3; 46(8):747–62. Available from: <https://doi.org/10.1080/0092623x.2020.1810185>
 40. Eleuteri S, Alessi F, Petruccelli F, Saladino V. The global impact of the COVID-19 pandemic on individuals' and couples' sexuality. *Frontiers in Psychology* [Internet]. 2022 Jan 6;12. Available from: <https://doi.org/10.3389/fpsyg.2021.798260> PMID: 35069392
 41. Sequeira J. Adaptação e resiliência familiar na crise. Reflexões em torno da pandemia COVID 19. In: Congresso (Inter) Nacional Conversas de Psicologia, Coimbra, Portugal 2020.
 42. Batista A, Sotero L, Major, Rebelo B, Relvas, editors. Impacto(s) da COVID-19 nas relações parentais e conjugais. CES—Universidade de Coimbra, Portugal
 43. Pietromonaco PR, Overall NC. Applying relationship science to evaluate how the COVID-19 pandemic may impact couples' relationships. *American Psychologist* [Internet]. 2021 Apr 1; 76(3):438–50. Available from: <https://doi.org/10.1037/amp0000714> PMID: 32700937
 44. Medina HRB, Aguirre RC, Coello-Montecel D, Ochoa P, Paredes-Aguirre MI. The Influence of Work–Family Conflict on Burnout during the COVID-19 Pandemic: The Effect of Teleworking Overload. *International Journal of Environmental Research and Public Health* [Internet]. 2021 Sep 30; 18(19):10302. Available from: <https://doi.org/10.3390/ijerph181910302> PMID: 34639602
 45. Nuru AK, Bruess CJ. Exploring how couples navigate the COVID-19 pandemic using Wefulness Theory. *Journal of Social and Personal Relationships* [Internet]. 2021 Aug 6; 38(10):2838–62. Available from: <https://doi.org/10.1177/02654075211037742>
 46. Goveas JS, Shear MK. Grief and the COVID-19 pandemic in older adults. *American Journal of Geriatric Psychiatry* [Internet]. 2020 Oct 1; 28(10):1119–25. Available from: <https://doi.org/10.1016/j.jagp.2020.06.021> PMID: 32709542
 47. Weinstock L, Dunda D, Harrington H, Nelson H. It's Complicated—Adolescent grief in the time of COvid-19. *Frontiers in Psychiatry* [Internet]. 2021 Feb 23; 12. Available from: <https://doi.org/10.3389/fpsyg.2021.638940> PMID: 33708148
 48. American Psychological Association. Stress in America 2020: Stress in the time of COVID-19. <https://www.apa.org/topics/covid-19> [Internet]. 2020 May [cited 2021 Mar 7]; Available from: <https://www.apa.org/news/press/releases/stress/2020/stress-in-america-covid-19>
 49. Khan T. Parents' experiences of home-schooling amid COVID-19 school closures, in London, England. *Journal of Early Childhood Research* [Internet]. 2022 May 25; 20(4):580–94. Available from: <https://doi.org/10.1177/1476718x221098666>
 50. Lazarus RS PhD, Folkman S PhD. *Stress, appraisal, and coping*. Springer Publishing Company; 1984.
 51. Pearlin LI, Bierman A. Current Issues and Future Directions in Research into the Stress Process. In: *Handbooks of sociology and social research* [Internet]. 2012. p. 325–40. Available from: https://doi.org/10.1007/978-94-007-4276-5_16
 52. Folkman S. The case for positive emotions in the stress process. *Anxiety, stress, and coping*. 2008 Jan 1; 21(1):3–14. <https://doi.org/10.1080/10615800701740457> PMID: 18027121
 53. Lazarus RS. Emotions and interpersonal relationships: Toward a person-centered conceptualization of emotions and coping. *Journal of personality*. 2006 Feb; 74(1):9–46. <https://doi.org/10.1111/j.1467-6494.2005.00368.x> PMID: 16451225
 54. McCubbin MA, McCubbin HI. Theoretical orientations to family stress and coping. *Treating Stress in Families* [Internet]. 1989 Jan 1; Available from: <https://psycnet.apa.org/record/1989-97469-001>
 55. Stanisławski K. The coping circumplex model: an integrative model of the structure of coping with stress. *Frontiers in Psychology* [Internet]. 2019 Apr 16; 10. Available from: <https://doi.org/10.3389/fpsyg.2019.00694>
 56. Coyne JC, Smith DA. Couples coping with a myocardial infarction: a contextual perspective on wives' distress. *Journal of personality and social psychology*. 1991 Sep; 61(3):404. <https://doi.org/10.1037//0022-3514.61.3.404> PMID: 1941511
 57. Bodenmann G. Dyadic coping and its significance for marital functioning. In: *American Psychological Association eBooks* [Internet]. 2005. p. 33–49. Available from: <https://doi.org/10.1037/11031-002>
 58. Falconier MK, Kuhn R. Dyadic Coping in Couples: A conceptual integration and a review of the Empirical literature. *Frontiers in Psychology* [Internet]. 2019 Mar 26; 10. Available from: <https://doi.org/10.3389/fpsyg.2019.00571> PMID: 30971968

59. Beja MJ, Pires De Miranda M. Intervenção em Catástrofe: A Inevitabilidade de uma Leitura Sistémica. In: Manual de Terapia Familiar—Teoria, Avaliação e Intervenção Sistémica. 1st ed. Factor; 2021. p. 225–36.
60. Carney MA, Chess D, Rascón-Canales M. “There Would Be More Black Spaces”: Care/giving Cartographies during COVID-19. *Medical Anthropology Quarterly* [Internet]. 2022 Oct 17; 36(4):442–62. Available from: <https://doi.org/10.1111/maq.12732> PMID: 36250638
61. Lee SJ, Ward KP, Rodriguez CM. Longitudinal Analysis of Short-term changes in relationship Conflict during COVID-19: A risk and Resilience perspective. *Journal of Interpersonal Violence* [Internet]. 2021 Apr 18; 37(15–16):NP14239–61. Available from: <https://doi.org/10.1177/08862605211006359> PMID: 33866855
62. Salvaterra F, Chora M. Relatório de investigação. Research Gate. Available from: https://www.researchgate.net/profile/Fernanda-Salvaterra2/publication/350838001_Relatorio_de_investigacao_O_que_pensam_e_o_que_sentem_as_familias_em_isolamento_social_Fase_I_Instituto_de_Apoio_a_Crianca/links/60757a7aa5c0b34b72a907c9/Relatorio-de-investigacao-O-que-pensam-e-o-que-sentem-as-familias-em-isolamento-social-Fase-I-Instituto-de-Apoio-a-Crianca.pdf
63. Nguyen TT, Nguyen MH, Pham TT, Le VTT, Nguyen TT, Luong TC, et al. Negative impacts of COVID-19 induced lockdown on changes in eating behavior, physical activity, and mental health as modified by digital healthy diet literacy and eHealth literacy. *Frontiers in Nutrition* [Internet]. 2021 Nov 12;8. Available from: <https://doi.org/10.3389/fnut.2021.774328> PMID: 34869540
64. Arenas-Arroyo E, Fernández-Kranz D, Nollenberger N. Intimate partner violence under forced cohabitation and economic stress: Evidence from the COVID-19 pandemic. *Journal of Public Economics* [Internet]. 2021 Feb 1; 194:104350. Available from: <https://doi.org/10.1016/j.jpubeco.2020.104350> PMID: 35702337
65. Agüero JM. COVID-19 and the rise of intimate partner violence. *World Development* [Internet]. 2020 Sep 29; 137:105217. Available from: <https://doi.org/10.1016/j.worlddev.2020.105217> PMID: 33012955
66. Prati G, Mancini AD. The psychological impact of COVID-19 pandemic lockdowns: a review and meta-analysis of longitudinal studies and natural experiments. *Psychological Medicine* [Internet]. 2021 Jan 1; 51(2):201–11. Available from: <https://doi.org/10.1017/S0033291721000015> PMID: 33436130
67. Sun P, Wang M, Song T, Wang Y, Luo J, Chen L, et al. The Psychological Impact of COVID-19 Pandemic on Health Care Workers: A Systematic Review and Meta-Analysis. *Frontiers in Psychology* [Internet]. 2021 Jul 8; 12. Available from: <https://doi.org/10.3389/fpsyg.2021.626547> PMID: 34305703
68. PRISMA [Internet]. Available from: <http://prisma-statement.org/prismastatement/Checklist.aspx> PRISMA [Internet]. Available from: <http://prisma-statement.org/prismastatement/Checklist.aspx>
69. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann T, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* [Internet]. 2021 Mar 29; n71. Available from: <https://doi.org/10.1136/bmj.n71>
70. Liberati A, Altman DG, Tetzlaff J, Mulrow CD, Gøtzsche PC, Ioannidis JPA, et al. The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies that Evaluate Health Care Interventions: Explanation and Elaboration. *PLOS Medicine* [Internet]. 2009 Jul 21; 6(7): e1000100. Available from: <https://doi.org/10.1371/journal.pmed.1000100> PMID: 19621070
71. University of York. Systematic Reviews. Centre for Reviews and Dissemination. University of York; 2008.
72. Booth AL, Wright K, Outhwaite H. Centre for Reviews and Dissemination databases: Value, content, and developments. *International Journal of Technology Assessment in Health Care* [Internet]. 2010 Oct 1; 26(4):470–2. Available from: <https://doi.org/10.1017/S0266462310000978> PMID: 20923587
73. Ascigil E, Luerksen A, Gonzalez R, Gordon AM. Predictors of relationship satisfaction during the COVID-19 pandemic. *Social and Personality Psychology Compass* [Internet]. 2023 Aug 28; 17(11). Available from: <https://doi.org/10.1111/spc3.12881>
74. Banaei M, Safarzadeh S, Moridi A, Dordeh M, Dashti S, Abdi F, et al. Associated Factors of marital satisfaction in Iranian women during the COVID-19 pandemic: a Population-Based study. *Shiraz E Medical Journal* [Internet]. 2021 Aug 4; 22(11). Available from: <https://doi.org/10.5812/semj.112434>
75. Bar-Kalifa E, Randall AK, Perelman Y. Daily dyadic coping during COVID-19 among Israeli couples. *Emotion* [Internet]. 2022 Dec 1; 22(8):1713–22. Available from: <https://doi.org/10.1037/emo0000971> PMID: 34516177
76. Bar-Shachar Y, Lopata S, Bar-Kalifa E. Relationship satisfaction during COVID-19: The role of partners’ perceived support and attachment. *Family Relations* [Internet]. 2022 Aug 29; 72(1):105–21. Available from: <https://doi.org/10.1111/fare.12767> PMID: 36246206
77. Bretaña I, Alonso-Arbiol I, Kittel KK, Landa SU. “I can’t escape!”: Avoidantly attached individuals’ conflict resolution and relationship satisfaction before and during the COVID-19 lockdown. *PsyCh Journal*

- [Internet]. 2023 May 24; 12(3):430–42. Available from: <https://doi.org/10.1002/pchj.646> PMID: 37224873
78. Budiartini NN. Effect of Covid-19 related Stress on Marital Quality during Covid-19 Pandemic. *Psychological Research and Intervention* [Internet]. 2021 Aug 27; 4(1):9–18. Available from: <https://doi.org/10.21831/pri.v4i1.43287>
 79. Carlson DL, Petts RJ, Pepin JR. Changes in US Parents' Domestic Labor During the Early Days of the COVID-19 Pandemic. *Sociological Inquiry* [Internet]. 2021 Sep 26; 92(3):1217–44. Available from: <https://doi.org/10.1111/soin.12459> PMID: 34908600
 80. Carvalho MS, Matias M. Parental exhaustion during COVID-19 pandemic: links to relationship outcomes and dyadic coping. *Current Psychology* [Internet]. 2023 May 16; Available from: <https://doi.org/10.1007/s12144-023-04658-2> PMID: 37359694
 81. Chakraborty U, Pandey MK, Mishra DC, Mishra NK, Bapte A. Original Research Article_Impact of psychological distress due to COVID-19 pandemic on spouse interpersonal relationships. *Indian Journal of Mental Health* [Internet]. 2020 Dec 15; 8(2):192. Available from: <https://doi.org/10.30877/ijmh.8.2.2021.192-199>
 82. Chung G, Lanier P, Wong PT h. Mediating Effects of Parental Stress on Harsh Parenting and Parent-Child Relationship during Coronavirus (COVID-19) Pandemic in Singapore. *Journal of Family Violence* [Internet]. 2020 Sep 2; 37(5):801–12. Available from: <https://doi.org/10.1007/s10896-020-00200-1> PMID: 32895601
 83. Craig L, Churchill B. Dual-earner parent couples' work and care during COVID-19. *Gender, Work & Organization* [Internet]. 2020 Jul 24; 28(S1):66–79. Available from: <https://doi.org/10.1111/gwao.12497> PMID: 32837023
 84. Donato S, Parise M, Pagani AF, Lanz M, Regalia C, Rosnati R, et al. Together Against COVID-19 Concerns: The Role of the Dyadic Coping Process for Partners' Psychological Well-Being During the Pandemic. *Frontiers in Psychology* [Internet]. 2021 Jan 7; 11. Available from: <https://doi.org/10.3389/fpsyg.2020.578395> PMID: 33488449
 85. El Akmal M, Marpaung W, Manurung YS, Mirza R. Work from home during the pandemic & work-life balance: Married working woman perspective. *International Research Journal of Advanced Engineering and Science*. 2021; 6(2):1–5.
 86. Feinberg ME, Mogle J, Lee JK, Tornello SL, Hostetler ML, Cifelli JA, et al. Impact of the COVID-19 pandemic on parent, child, and family functioning. *Family Process* [Internet]. 2021 Apr 8; 61(1):361–74. Available from: <https://doi.org/10.1111/famp.12649> PMID: 33830510
 87. Fleming CJE, Franzese AT. Should I stay or should I go? Evaluating intimate relationship outcomes during the 2020 pandemic shutdown. *Couple and Family Psychology* [Internet]. 2021 Sep 1; 10(3):158–67. Available from: <https://doi.org/10.1037/cfp0000169>
 88. From A, Luerssen A, Gordon AM. Both overwhelmed or in it together? Similarity in COVID-19-related stress and romantic relationship quality. *Social and Personality Psychology Compass* [Internet]. 2023 May 19; 17(8). Available from: <https://doi.org/10.1111/spc3.12789>
 89. Hanetz-Gamliel K, Levy S, Dollberg D. Mediation of Mothers' Anxiety and Parenting in Children's Behavior Problems during COVID-19. *Journal of Child and Family Studies* [Internet]. 2021 Sep 23; 30(11):2732–43. Available from: <https://doi.org/10.1007/s10826-021-02115-x> PMID: 34584394
 90. Hank K, Steinbach A. The virus changed everything, didn't it? Couples' division of housework and childcare before and during the Corona crisis. *Journal of Family Research* [Internet]. 2021 Apr 12; 33(1):99–114. Available from: <https://doi.org/10.20377/jfr-488>
 91. Hiraoka D, Tomoda A. Relationship between parenting stress and school closures due to the COVID-19 pandemic. *Psychiatry and Clinical Neurosciences* [Internet]. 2020 Jul 3; 74(9):497–8. Available from: <https://doi.org/10.1111/pcn.13088> PMID: 32779846
 92. Hood R, Zabatiero J, Silva D, Zubrick SR, Straker L. "Coronavirus Changed the Rules on Everything": Parent Perspectives on How the COVID-19 Pandemic Influenced Family Routines, Relationships and Technology Use in Families with Infants. *International Journal of Environmental Research and Public Health* [Internet]. 2021 Dec 6; 18(23):12865. Available from: <https://doi.org/10.3390/ijerph182312865> PMID: 34886591
 93. Hudde A, Hank K, Jacob M. Gender Role Attitudes Cannot Explain How British Couples Responded to Increased Housework Demands during the COVID-19 Pandemic. *Socius* [Internet]. 2021 Jan 1; 7:237802312110643. Available from: <https://doi.org/10.1177/23780231211064395>
 94. Idsøe T, Dyregrov A, Janson H, Nærde A. Pandemic-Related stress symptoms among Norwegian parents of adolescents in grades 6 to 8. *Frontiers in Psychiatry* [Internet]. 2021 Oct 6; 12. Available from: <https://doi.org/10.3389/fpsyg.2021.701782> PMID: 34690827

95. Jiang D, Chiu MM, Liu S. Daily positive support, and perceived stress during COVID-19 outbreak: The role of daily gratitude within couples. *Journal of Happiness Studies* [Internet]. 2021 Apr 18; 23(1):65–79. Available from: <https://doi.org/10.1007/s10902-021-00387-0> PMID: 33897277
96. Jones HE, Theiss JA. Relational turbulence during the COVID-19 pandemic: A longitudinal analysis of the reciprocal effects between relationship characteristics and outcomes of relational turbulence. *Journal of Social and Personal Relationships* [Internet]. 2021 Oct 1; 38(10):3033–58. Available from: <https://doi.org/10.1177/02654075211044491>
97. Jones HE, Yoon DB, Theiss JA, Austin JT, Lee LE. Assessing the effects of COVID-19 on romantic relationships and the coping strategies partners use to manage the stress of a pandemic. *Journal of Family Communication* [Internet]. 2021 May 24; 21(3):152–66. Available from: <https://doi.org/10.1080/15267431.2021.1927040>
98. Karagöz MA, Gül A, Borg C, Erhan İB, Uslu M, Ezer M, et al. Influence of COVID-19 pandemic on sexuality: a cross-sectional study among couples in Turkey. *International Journal of Impotence Research* [Internet]. 2020 Dec 16; 33(8):815–23. Available from: <https://doi.org/10.1038/s41443-020-00378-4> PMID: 33328620
99. Kolo VI, Osezua C, Osezua G, Aigbona C. COVID-19 upon Us: The Work-Family Experiences of Married Couples during the First Three Months of the Pandemic in Lagos, Nigeria. *Open Journal of Social Sciences* [Internet]. 2021 Jan 1; 09(10):1–21. Available from: <https://doi.org/10.4236/jss.2021.910001>
100. Li Y, Samp JA. The impact of the COVID-19 pandemic on same-sex couples' conflict avoidance, relational quality, and mental health. *Journal of Social and Personal Relationships* [Internet]. 2021 Mar 30; 38(6):1819–43. Available from: <https://doi.org/10.1177/02654075211006199>
101. McRae C, Overall NC, Henderson AME, Low RST, Chang VT. Parents' distress and poor parenting during a COVID-19 lockdown: The buffering effects of partner support and cooperative coparenting. *Developmental Psychology* [Internet]. 2021 Oct 1; 57(10):1623–32. Available from: <https://doi.org/10.1037/dev0001207> PMID: 34807685
102. Mousavi SF. Psychological Well-Being, Marital Satisfaction, and Parental Burnout in Iranian Parents: The Effect of home quarantine during COVID-19 outbreaks. *Frontiers in Psychology* [Internet]. 2020 Dec 3; 11. Available from: <https://doi.org/10.3389/fpsyg.2020.553880> PMID: 33343439
103. Mutang JA, Chua BS, Yee HK, Siau CS, Wider W, Ismail R. Stressors, Psychological States, and Relationship Quality among East Malaysian Adults with Partners Amid the COVID-19 Lockdown. *International Journal of Environmental Research and Public Health* [Internet]. 2022 Sep 7; 19(18):11258. Available from: <https://doi.org/10.3390/ijerph191811258> PMID: 36141527
104. Neff LA, Gleason MEJ, Crockett EE, Ciftci O. Blame the pandemic: buffering the association between stress and relationship quality during the COVID-19 pandemic. *Social Psychological and Personality Science* [Internet]. 2021 Jun 21; 13(2):522–32. Available from: <https://doi.org/10.1177/19485506211022813>
105. Omar SS, Dawood W, Eid N, Eldeeb D, Munir A, Arafat W. Psychological and sexual health during the COVID-19 pandemic in Egypt: Are women suffering more? *Sexual Medicine* [Internet]. 2021 Jan 9; 9(1):100295. Available from: <https://doi.org/10.1016/j.esxm.2020.100295> PMID: 33434851
106. Osur J, Ileri EM, Esho T. The effect of COVID-19 and its control measures on sexual satisfaction among married couples in Kenya. *Sexual Medicine* [Internet]. 2021 Mar 18; 9(3):100354. Available from: <https://doi.org/10.1016/j.esxm.2021.100354> PMID: 34077871
107. Özlü İ, Özlü ZK, Kılınc T, Demir ZY, Apay SE, Çelik AS, et al. Was the Quality of Sexual Life Affected during the COVID-19 Pandemic? *American Journal of Family Therapy* [Internet]. 2021 Jul 10; 50(5):475–90. Available from: <https://doi.org/10.1080/01926187.2021.1941418>
108. Panzeri M, Ferrucci R, Cozza A, Fontanesi L. Changes in sexuality and quality of couple relationship during the COVID-19 lockdown. *Frontiers in Psychology* [Internet]. 2020 Sep 29; 11. Available from: <https://doi.org/10.3389/fpsyg.2020.565823> PMID: 33132969
109. Partington LC, Mashash M, Hastings PD. Family thriving during COVID-19 and the Benefits for Children's Well-Being. *Frontiers in Psychology* [Internet]. 2022 May 12; 13. Available from: <https://doi.org/10.3389/fpsyg.2022.879195> PMID: 35645847
110. Del Carmen Quezada Berumen L, Hernández RL, González-Ramírez MT. Couple satisfaction and impact of confinement by COVID-19 pandemic in Mexico. *Interacciones* [Internet]. 2020 Sep 27; Available from: <https://doi.org/10.24016/2020.v6n3.173>
111. Rodríguez-Domínguez C, Carrascal-Caputto B, Durán M. Anxiety and intimate relationships in times of lockdown due to COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy* [Internet]. 2022 Feb 1; 14(2):237–46. Available from: <https://doi.org/10.1037/tra0001094> PMID: 34472945
112. Schmid L, Wörn J, Hank K, Sawatzki B, Walper S. Changes in employment and relationship satisfaction in times of the COVID-19 pandemic: Evidence from the German family Panel. *European Societies*

- [Internet]. 2020 Oct 30; 23(sup1):S743–58. Available from: <https://doi.org/10.1080/14616696.2020.1836385>
113. Sels L, Galdiolo S, Gaugue J, Géonet M, Verhelst P, Chiarolanza C, et al. Intimate Relationships in Times of COVID-19: A Descriptive Study of Belgian Partners and their Perceived Well-Being. *Psychologica Belgica* [Internet]. 2022 Jan 1; 62(1):1–16. Available from: <https://doi.org/10.5334/pb.1088> PMID: 35087676
 114. Seok CB, Ching SS, Yun LW, Fitriana M, Khan R. PSYCHOLOGICAL DISTRESS, RELATIONSHIP QUALITY AND WELL-BEING IN TIME OF COVID-19 PANDEMIC MOVEMENT CONTROL ORDER ENACTMENT AMONG COUPLES IN MALAYSIA. *Psychological Applications and Trends 2021* [Internet]. 2021 Apr 23; Available from: <https://doi.org/10.36315/2021inpact046>
 115. Shockley KM, Clark MA, Dodd HR, King EB. Work-family strategies during COVID-19: Examining gender dynamics among dual-earner couples with young children. *Journal of Applied Psychology* [Internet]. 2021 Jan 1; 106(1):15–28. Available from: <https://doi.org/10.1037/apl0000857> PMID: 33151705
 116. James SL, Brik AB, Jorgensen-Wells MA, Esteinou R, Acero IDM, Mesurado B, et al. Relationship quality and support for family policy during the COVID-19 pandemic. *Family Relations* [Internet]. 2022 May 30; 71(4):1367–84. Available from: <https://doi.org/10.1111/fare.12705> PMID: 35936017
 117. Spinelli M, Lionetti F, Setti A, Fasolo M. Parenting Stress during the COVID-19 Outbreak: Socioeconomic and environmental risk factors and implications for Children Emotion Regulation. *Family Process* [Internet]. 2020 Sep 28; 60(2):639–53. Available from: <https://doi.org/10.1111/famp.12601> PMID: 32985703
 118. Tan PL. Changes in Frequency and Patterns of Marital Sexual Activity During COVID-19: Evidence from Longitudinal Data Prior to, During and After Lockdown in Singapore. *The Journal of Sexual Medicine* [Internet]. 2021 Dec 12; 19(2):188–200. Available from: <https://doi.org/10.1016/j.jsxm.2021.12.004> PMID: 35058151
 119. Tomohiro T. Working from home and work-life balance during COVID-19: the latest changes and challenges in Japan. *Japan Labor Issues*. 2021 Aug; 5(33):21–33.
 120. Turluc MN, Candel OS. Not all in the same boat. Socioeconomic differences in marital stress and satisfaction during the COVID-19 pandemic. *Frontiers in Psychology* [Internet]. 2021 Mar 31; 12. Available from: <https://doi.org/10.3389/fpsyg.2021.635148> PMID: 33868101
 121. Vowels LM, Mark KP. Relationship and sexual satisfaction: a longitudinal actor-partner interdependence model approach. *Sexual and Relationship Therapy* [Internet]. 2018 Apr 9; 35(1):46–59. Available from: <https://doi.org/10.1080/14681994.2018.1441991>
 122. Waddell N, Overall NC, Chang VT, Hammond MD. Gendered division of labor during a nationwide COVID-19 lockdown: Implications for relationship problems and satisfaction. *Journal of Social and Personal Relationships* [Internet]. 2021 Mar 2; 38(6):1759–81. Available from: <https://doi.org/10.1177/0265407521996476>
 123. Weber DM, Wojda AK, Carrino EA, Baucom DH. Love in the time of COVID-19: A brief report on relationship and individual functioning among committed couples in the United States while under shelter-in-place orders. *Family Process* [Internet]. 2021 Jul 27; 60(4):1381–8. Available from: <https://doi.org/10.1111/famp.12700> PMID: 34315187
 124. Williamson HC. Early effects of the COVID-19 pandemic on relationship satisfaction and attributions. *Psychological Science* [Internet]. 2020 Nov 5; 31(12):1479–87. Available from: <https://doi.org/10.1177/0956797620972688> PMID: 33151125
 125. Wong JS, Zhong S, Liu H. Relationship quality change among partnered older adults during the COVID-19 pandemic. *The Journals of Gerontology: Series B* [Internet]. 2022 Sep 19; 78(2):352–8. Available from: <https://doi.org/10.1093/geronb/gbac140>
 126. Zamarro G, Prados MJ. Gender differences in couples' division of childcare, work and mental health during COVID-19. *Review of Economics of the Household* [Internet]. 2021 Jan 16; 19(1):11–40. Available from: <https://doi.org/10.1007/s11150-020-09534-7> PMID: 33488316
 127. Zhang Y, Wen C, Zhang Y, Luo X, Feei Z. The impact of mental health and stress concerns on relationship and sexuality amidst the COVID-19 lockdown. *The Journal of Sexual Medicine* [Internet]. 2021 Jun 27; 18(11):1843–50. Available from: <https://doi.org/10.1016/j.jsxm.2021.06.013> PMID: 34535368
 128. Harrison R, Jones B, Gardner P, Lawton R. Quality assessment with diverse studies (QuADS): an appraisal tool for methodological and reporting quality in systematic reviews of mixed- or multi-method studies. *BMC Health Services Research* [Internet]. 2021 Feb 15; 21(1). Available from: <https://doi.org/10.1186/s12913-021-06122-y>
 129. Gisev N, Bell J, Chen T. Interrater agreement, and interrater reliability: Key concepts, approaches, and applications. *Research in Social and Administrative Pharmacy* [Internet]. 2013 May 1; 9(3):330–8. Available from: <https://doi.org/10.1016/j.sapharm.2012.04.004> PMID: 22695215

130. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* [Internet]. 2006 Jan 1; 3(2):77–101. Available from: <https://doi.org/10.1191/1478088706qp063oa>
131. Strauss AL, Corbin JM. *Grounded theory in practice*. SAGE; 1997.
132. Charmaz K. *Constructing grounded theory*. SAGE; 2014.
133. Magalhães P., Gouveia R., Costa-Lopes R., Silva P. A. e (2020). O Impacto Social da Pandemia. Estudo ICS/ISCTE Covid-19. Instituto de Ciências Sociais da Universidade de Lisboa e Instituto Universitário de Lisboa. <http://hdl.handle.net/10451/42911><http://hdl.handle.net/10451/42911>
134. European Foundation for the Improvement of Living and Working Conditions. Living, working and COVID-19 (Update April 2021): Mental health and trust decline across EU as pandemic enters another year [Internet]. Office of the European Union; [cited 2022 Aug 4]. Available from: <https://www.eurofound.europa.eu/en/publications/2021/living-working-and-covid-19-update-april-2021-mental-health-and-trust-decline>
135. Stafford R, Backman EV, Dibona P. The Division of Labor among Cohabiting and Married Couples. *Journal of Marriage and Family* [Internet]. 1977 Feb 1; 39(1):43. Available from: <https://doi.org/10.2307/351061>
136. Ferrant G, Thim A. Measuring women's economic empowerment: Time use data and gender inequality. *OECD Development Policy Papers* [Internet]. 2019 Jan 1; Available from: <https://ideas.repec.org/p/oec/dcdcaab/16-en.html>
137. Kitterød RH. The organisation and division of caregiving work among parents in Norway. Evidence from focus groups with full-time working mothers and fathers. Report from the Gender Pay Gap and Gender Care Gap Project.
138. De Sousa Pinho P, De Araújo TM. Associação entre sobrecarga doméstica e transtornos mentais comuns em mulheres. *Revista Brasileira De Epidemiologia* [Internet]. 2012 Sep 1; 15(3):560–72. Available from: <https://doi.org/10.1590/s1415-790x2012000300010>
139. Polachek AJ, Wallace JE. Unfair to me or unfair to my spouse: Men's and women's perceptions of domestic equity and how they relate to mental and physical health. *Marriage & Family Review* [Internet]. 2015 Apr 3; 51(3):205–28. Available from: <https://doi.org/10.1080/01494929.2015.1031420>
140. Faulkner RA, Davey M, Davey A. Gender-Related Predictors of change in marital satisfaction and marital conflict. *American Journal of Family Therapy* [Internet]. 2005 Jan 1; 33(1):61–83. Available from: <https://doi.org/10.1080/01926180590889211>
141. Randall A. K., & Bodenmann G. (2017). Stress and its associations with relationship satisfaction. *Current opinion in psychology*, 13, 96–106. <https://doi.org/10.1016/j.copsy.2016.05.010> PMID: [28813303](https://pubmed.ncbi.nlm.nih.gov/28813303/)
142. McCubbin HI, Patterson JM. The family stress process: The double ABCX model of adjustment and adaptation. In *Social stress and the family 2014* Apr 23 (pp. 7–37). Routledge.
143. Walsh F. The concept of family resilience: Crisis and challenge. *Family process*. 1996 Sep; 35(3):261–81. <https://doi.org/10.1111/j.1545-5300.1996.00261.x> PMID: [9111709](https://pubmed.ncbi.nlm.nih.gov/9111709/)
144. Zaider TI, Heimberg RG, Iida M. Anxiety disorders and intimate relationships: A study of daily processes in couples. *Journal of Abnormal Psychology* [Internet]. 2010 Feb 1; 119(1):163–73. Available from: <https://doi.org/10.1037/a0018473> PMID: [20141253](https://pubmed.ncbi.nlm.nih.gov/20141253/)
145. Cutrona CE. Social support as a determinant of marital quality: The interplay of negative and supportive behaviors. In *Handbook of social support and the family 1996* (pp. 173–194). Boston, MA: Springer US.
146. Austin KW, Kane HS, Williams DD, Ackerman RA. Emotional approach coping and daily support behavior in romantic relationships. *Journal of Social and Personal Relationships* [Internet]. 2021 Dec 7; 39(3):526–48. Available from: <https://doi.org/10.1177/02654075211041657>
147. Randall AK, Bodenmann G. The role of stress on close relationships and marital satisfaction. *Clinical psychology review*. 2009 Mar 1; 29(2):105–15. <https://doi.org/10.1016/j.cpr.2008.10.004> PMID: [19167139](https://pubmed.ncbi.nlm.nih.gov/19167139/)
148. Goldfarb MR, Trudel G, Boyer R, Prévaille M. Marital relationship and psychological distress: Its correlates and treatments. *Sexual and relationship therapy*. 2007 Feb 1; 22(1):109–26. Available from: <https://doi.org/10.1080/14681990600861040>
149. Overbeek G, Vollebergh W, de Graaf R, Scholte R, de Kemp R, Engels R. Longitudinal associations of marital quality and marital dissolution with the incidence of DSM-III-R disorders. *Journal of Family Psychology*. 2006 Jun; 20(2):284–91. Available from: <https://doi.org/10.1037/0893-3200.20.2.284> PMID: [16756404](https://pubmed.ncbi.nlm.nih.gov/16756404/)
150. Borré A, Kliewer W. Parental strain, mental health problems, and parenting practices: A longitudinal study. *Personality and Individual Differences* [Internet]. 2014 Oct 1; 68:93–7. Available from: <https://doi.org/10.1016/j.paid.2014.04.014> PMID: [24976666](https://pubmed.ncbi.nlm.nih.gov/24976666/)

151. Peng B, Hu N, Yu H, Han-Shi X, Luo J. Parenting style and adolescent Mental Health: The chain Mediating effects of Self-Esteem and Psychological Inflexibility. *Frontiers in Psychology* [Internet]. 2021 Oct 13; 12. Available from: <https://doi.org/10.3389/fpsyg.2021.738170> PMID: 34721210
152. Gulenc A, Butler E, Sarkadi A, Hiscock H. Paternal psychological distress, parenting, and child behaviour: A population based, cross-sectional study. *Child: Care, Health and Development* [Internet]. 2018 Aug 29; 44(6):892–900. Available from: <https://doi.org/10.1111/cch.12607> PMID: 30155910
153. Bradford A, Meston CM. The impact of anxiety on sexual arousal in women. *Behaviour research and therapy*. 2006 Aug 1; 44(8):1067–77. <https://doi.org/10.1016/j.brat.2005.08.006> PMID: 16199003
154. Laurent SM, Simons AD. Sexual dysfunction in depression and anxiety: conceptualizing sexual dysfunction as part of an internalizing dimension. *Clinical psychology review*. 2009 Nov 1; 29(7):573–85. Available from: <https://doi.org/10.1016/j.cpr.2009.06.007> PMID: 19632022
155. Trudel G, Goldfarb MR. Marital and sexual functioning and dysfunctioning, depression and anxiety. *Sexologies*. 2010 Jul 1; 19(3):137–42. Available from: <https://doi.org/10.1016/j.sexol.2009.12.009>
156. Røsland GM, Slinning K, Eberhard-Gran M, Røysamb E, Tambs K. The buffering effect of relationship satisfaction on emotional distress in couples. *BMC public health*. 2012 Jan 22; 12(1). Available from: <https://doi.org/10.1186/1471-2458-12-66> PMID: 22264243
157. Salgado JF, Blanco S, Moscoso S. Subjective well-being and job performance: Testing of a suppressor effect. *Revista de Psicología del Trabajo y de las Organizaciones*. 2019; 35(2):93–102. Available from: <https://doi.org/10.5093/jwop2019a9>
158. Xiao Y, Becerik-Gerber B, Lucas G, Roll SC. Impacts of Working from home during COVID-19 Pandemic on Physical and Mental Well-Being of Office Workstation Users. *Journal of Occupational and Environmental Medicine* [Internet]. 2020 Nov 23; 63(3):181–90. Available from: <https://doi.org/10.1097/jom.0000000000002097>
159. Falconier MK, Jackson JB, Hilpert P, Bodenmann G. Dyadic coping and relationship satisfaction: A meta-analysis. *Clinical Psychology Review* [Internet]. 2015 Jul 29; 42:28–46. Available from: <https://doi.org/10.1016/j.cpr.2015.07.002> PMID: 26295276
160. Genç E, Su Y, Turhan Z. The mediating role of dyadic coping on the effects of COVID-19 and relationship satisfaction among Turkish Couples. *The American Journal of Family Therapy*. 2023 Aug 8; 51(4):421–39. Available from: <https://doi.org/10.1080/01926187.2021.1984338>
161. Randall AK, Tao C, Leon G, Duran ND. Couples' co-regulation dynamics as a function of perceived partner dyadic coping. *Anxiety, Stress, & Coping*. 2021 Nov 2; 34(6):597–611. Available from: <https://doi.org/10.1080/10615806.2021.1912740> PMID: 33834918
162. Wawrziczny É, Nandrino J, Constant E, Doba K. Characterizing the determinants of sexual dissatisfaction among heterosexuals: The specific role of dyadic coping. *Scandinavian Journal of Psychology* [Internet]. 2021 Jun 28; 62(5):763–73. Available from: <https://doi.org/10.1111/sjop.12759> PMID: 34180071
163. Tutelman PR, Dawson SJ, Schwenck GC, Rosen NO. A Longitudinal Examination of Common Dyadic Coping and Sexual Distress in New Parent Couples during the Transition to Parenthood. *Family Process* [Internet]. 2021 Apr 30; 61(1):278–93. Available from: <https://doi.org/10.1111/famp.12661> PMID: 33928639
164. Bodenmann G, Atkins DC, Schär M, Poffet V. The association between daily stress and sexual activity. *Journal of Family Psychology* [Internet]. 2010 Jan 1; 24(3):271–9. Available from: <https://doi.org/10.1037/a0019365> PMID: 20545400
165. Jackson GL, Krull JL, Bradbury TN, Karney BR. Household income and trajectories of marital satisfaction in early marriage. *Journal of Marriage and Family*. 2017 Jun; 79(3):690–704. Available from: <https://doi.org/10.1111/jomf.12394> PMID: 28603296
166. Dakin J, Wampler R. Money doesn't buy happiness, but it helps: Marital satisfaction, psychological distress, and demographic differences between low-and middle-income clinic couples. *The American Journal of Family Therapy*. 2008 Jul 2; 36(4):300–11. Available from: <https://doi.org/10.1080/01926180701647512>
167. Cai Y, Li Q. The Role of Relative Income in Determining Marital Satisfaction for Husband and Wife in China. *Journal of Family and Economic Issues*. 2023 May 10:1–1.
168. Zhang H, Tao T. Marital happiness, and psychosocial mechanisms in Low-Income Chinese families. *Illness, Crisis, & Loss* [Internet]. 2018 May 10; Available from: <https://doi.org/10.1177/1054137318773083>
169. Obradović J, Čudina-Obradović M. MARITAL PARTNERS' INCOME AS a DETERMINANT OF MARRIAGE QUALITY. *Društvena Istraživanja: Časopis Za Opća Društvena Pitanja* [Internet]. 2006 Apr 30; 15:117–39. Available from: <https://hrcak.srce.hr/18113>

170. Kelley HH, LeBaron AB, Hill EJ. Financial stress and marital quality: The moderating influence of couple communication. *Journal of Financial Therapy* [Internet]. 2018 Jan 1; 9(2). Available from: <https://doi.org/10.4148/1944-9771.1176>
171. Archuleta KL, Britt SL, Tonn TJ, Grable JE. Financial satisfaction and financial stressors in marital satisfaction. *Psychological reports*. 2011 Apr; 108(2):563–76. Available from: <https://doi.org/10.2466/07.21.PR0.108.2.563-576> PMID: 21675570
172. Nourani S, Seraj F, Shakeri MT, Mokhber N. The relationship between Gender-Role beliefs, household labor division and marital satisfaction in couples. *Journal of Holistic Nursing and Midwifery* [Internet]. 2019 Jan 1; 29(1):301–7. Available from: <https://doi.org/10.29252/hnmj.29.1.301>