Review

Post-Traumatic Stress in Children and Adolescents during the COVID-19 Pandemic: A Meta-Analysis and Intervention Approaches to Ensure Mental Health and Well-Being

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Abstract: Background: Since the World Health Organization (WHO) declared the COVID-19 pandemic in March 2020, many measures have been taken to prevent the spread of the virus. Consequently, many minors have been confined to their homes and have had to subsequently adapt to countless protocol changes. These factors appear to have contributed to post-traumatic stress disorder (PTSD) in many children. Materials and Methods: The authors searched Medline through PubMed and other databases for studies published from 1 December 2019 to 31 December 2021 on the prevalence of PTSD in schoolchildren. The authors used a random-effects model to calculate the pooled prevalence of PTSD. Results: A total of six studies were included in this review. Our results show a pooled prevalence of PTSD of 14% in children and adolescents. Subgroup analyses identify a significantly higher prevalence of PTSD for studies conducted in China and a higher prevalence in boys. The prevalence of PTSD appeared independent of child age or the methodological rigor of the study. Conclusions: Our results suggest that a large number of children may be suffering from PTSD (post-traumatic stress disorder). Public health measures are thus needed to improve children's mental health during and after the pandemic, so that the suffering is mitigated to prevent long-lasting effects.

Keywords: post-traumatic stress disorder; COVID-19; children; adolescents; gender

1. Introduction

The COVID-19 pandemic brought a major halt to all educational systems in all countries around the world. Most schools closed in order to avoid contagion, and many switched to a non-face-to-face mode of study [1]. In the months following the pandemic, those schools gradually returned to regular education because, among other reasons, it was verified that their closure was directly affecting the welfare of children [2].

The WHO [3] states that this pandemic has had a disproportionate impact on children's physical and emotional state, and that for some children and young people, in all countries, these effects could be lifelong. In the first months of 2020 when lockdowns were declared all over the world, research has confirmed that being confined to their homes affected children's physical, psychological, social and academic well-being [4–8].

One of the Sustainable Development Goals (SDGs) of the 2030 Agenda [9] highlights the importance of ensuring the well-being and healthy lives of all citizens [10]. Furthermore, within this SDG, it has been highlighted that health emergencies, such as the one resulting from COVID-19, pose a global risk and that preparedness and specific intervention is vital [11].

This is why much research has been conducted on child and adolescent well-being during the pandemic. Among the most relevant variables analyzed from a psychoeducational approach are psychosocial variables: feelings of loneliness, a lack of social support, etc. [12–15]; physical variables that disrupt children's well-being: weight gain, a sedentary lifestyle, etc. [16]; academic variables: a lack of contact with teachers and students, difficulty following classes, etc. [17]; and greater economic fragility, concern for subsistence and poorer health habits [18].

However, within this framework of well-being [19], the impact on the mental state of childhood is especially relevant, as scientific evidence has found that emotional variables are among the most affected [13,20,21].

With regard to mental health, many authors have also asserted that the consequences of the pandemic have created a great uneasiness among children and adolescents, particularly with lockdowns and adjustments at school engendering emotions of loneliness, isolation, anxiety, and depression [12,22–24]. In addition, emergency e-learning [25,26] also required a readjustment to new forms of education, with an understandable decline in support from teachers, and disadvantages for children in more precarious situations [27,28]. Another problem for children is that their own parents may have been less mentally healthy, and may also have received more violence and abuse at home because they were confined with parents who are violent toward their children [29–31]. Children living in the most vulnerable contexts have school as a safe place for physical, psychological and social support [32].

Even so, it is known that these impacts on the health and well-being of children have continued to exist after the lockdowns because the restrictive measures have continued for months and years [33,34]. Even when they returned to school, children had to do so under strict hygiene measures and experienced continuously changing protocols according to the epidemiological situation of the pandemic [35,36].

This overall situation has brought suffering to children and adolescents, and has caused symptomatology such as fear, anxiety, depression, stress, general mental health problems, self-injury and suicidal thoughts [37]. Therefore, several studies point to the fact that this direct and indirect exposure to COVID-19 may also have contributed to post-traumatic stress among them [38].

Post-traumatic stress disorder (PTSD) often arises after having lived through a severely distressing event [39]. Symptoms often include the reactivation of reminders of the traumatic experience, over-awareness, negative feelings, and avoidance of events and locations that are reminders of the stressful event. There are several factors that make a child more vulnerable and psychologically distressed. These include poverty, loneliness, a lack of social or parental support, or previous mental health problems they may have had. On the other side, protective factors would be school attendance, family support, social and emotional skills, and peer support. Conversely, protective factors, such as school connectedness, parental support, problem solving, self-regulation skills, peer social support, perceived self-efficacy, and positive mother–child relationships can ameliorate the psychological impact of sudden and large-scale disruptions [40]. Therefore, the prevalence of this symptomatology will affect children and adolescents clinically, socially and academically, and sometimes may lead to post-traumatic stress disorder (PTSD). For the purpose of this meta-analysis, post-traumatic stress is used interchangeably with PTSD, as various validated measures and thresholds have been used without unbiased rates, making the line between the experience of post-traumatic stress and the occurrence of the complex disorder unclear.

Regarding the pandemic, a meta-analysis conducted with 23 studies, involving 57,927 children and adolescents, examined various mental health problems. However, only two studies explored post-traumatic stress [41]. The meta-analysis found that approximately 48.0% of youth aged 0–18 years had experienced post-traumatic stress, but there was a 95% confidence interval range between −25.4% and 121.4%, suggesting that there is very little utility to finding the 48%. Neither study gave adequate information on age or gender to make any claim in those regards. Additionally, this meta-analysis only looked at the period between December 2019 and September 2020 and therefore only had two papers from China and from the first Chinese lockdown period, which makes it still more difficult to generalize its findings. It is probably only now that we will begin to see the aftermath of the situation, as post-traumatic moments present unique challenges for rigorous research. Therefore, it is essential to have an up-to-date and more accurate picture of the problem. In the present work, a meta-analysis that assesses post-traumatic stress in childhood and adolescence has been carried out. More specifically, we will study whether there are differences between genders, ages and different countries. A systematic review will also be carried out on the interventions proposed in order to address the suffering and discomfort that children may have experienced.

2. Materials and Methods

The present meta-analysis follows the same methodology used in recent reviews that focus on the influence of the COVID-19 pandemic on mental health across different population strata published by our research team [42,43].

This study was conducted in accordance with the PRISMA guidelines for reporting systematic reviews and meta-analyses [44] (Supplementary Table S1).

2.1. Search Strategy

Following the standards set by The Methods Group of the Campbell Collaboration [45], two researchers (JS and BV) searched for all cross-sectional studies reporting the prevalence of post-traumatic stress disorder published from 1 December 2019 through to 31 December 2021, using MEDLINE via PubMed. The search proceeded as follows:

We searched for (covid[tiab] OR COVID-19[tiab] OR coronavirus[tiab] OR SARSCoV-2[tiab] OR "Coronavirus" [Mesh] OR "severe acute respiratory syndrome coronavirus 2" [Supplementary Concept] OR "COVID-19" [Supplementary Concept] OR "Coronavirus Infections/epidemiology" [Mesh] OR "Coronavirus Infections/prevention and control" [Mesh] OR "Coronavirus Infections/psychology" [Mesh]) AND ("Post-traumatic stress" [Mesh] OR "Posttraumatic stress" [Mesh] OR PTSD [Mesh]).

No language restriction was made. References from selected articles were inspected to detect additional potential studies. Any disagreement was resolved by consensus among the third and fourth researchers (NO-E and NI), according to [46].

2.1.1. Selection Criteria

Studies were included if they met the following criteria: (1) reported cross-sectional data on the prevalence of post-traumatic stress disorder, or information sufficient to compute this, during the COVID-19 outbreak; (2) focused on children and adolescents; (3) included a validated instrument to assess PTSD; (4) the full text was available.

We excluded studies focusing only on community-based samples of the general population or specific samples that were not children and adolescents (e.g., teachers, medical professionals, patients), as well as review articles.

2.1.2. Data Extraction

A pre-designed data extraction form was used to extract the following information: country, sample size, proportion of girls, average age, response rate and sampling methods, the instruments used to assess PTSD, and their prevalent rates. Two researchers (JS and BV) coded the studies independently and then reached consensus.

3. Methodological Quality Assessment

Two independent reviewers (IL and JS) assessed the articles selected for retrieval for methodological validity prior to inclusion using the standardized Joanna Briggs Institute (JBI) Critical Appraisal Checklist for prevalence studies [47]. The researchers evaluated their quality according to nine criteria, providing a total score between 0 and 9 (1 or 0 for each criterion). The questions were as follows: (1) Was the sample appropriate to address the target population? (2) Was study recruitment of participants appropriate? (3) Was the sample of adequate size? (4) Were the participants and setting adequately described? (5) Was the data analysis conducted sufficiently for the identified sample? (6) Was the condition identified by valid methods? (7) Was the condition reliably measured for all participants? (8) Was the statistical analysis appropriate? (9) Was the response rate adequate or was a low response rate appropriately managed? Disagreements that arose between the reviewers were resolved by further discussion with additional researchers (NO-E and NI).

Statistical Analysis

The researchers used a standard inverse variance method, employing a random effects model [48], including the double arcsine transformation of proportion. This method accounted for the variability in and heterogeneity of the prevalence rates in the studies that were included [49]. The researchers used Knapp–Hartung adjustments [50] to calculate the confidence intervals around the pooled prevalence. Research [51] has shown that this adjustment reduces false positives, especially with a small number of studies. The researchers presented the main outcomes in a proportion format with a 95% confidence interval (95% CI) and a 95% prediction interval (95% PrI), together with heterogeneity results. The researchers reported the Hedges Q statistic to assess heterogeneity across the studies, with significance set at $p < 0.10$. The researchers also used the I^2 statistic and 95% confidence interval to quantify heterogeneity [52]. With this, values between 25–50% are considered as low, figures between 50–75% are considered moderate, and figures of 75% or more are considered high [53]. The heterogeneity of effects between studies may occur when differences in results for the same exposure–disease association cannot be fully explained by the sampling variation. Sources of heterogeneity include differences in study design or demographic characteristics. The researchers performed meta-regression and subgroup analyses [54] to explore the sources of heterogeneity expected in the meta-analyses of observational studies [55]. We also conducted a sensitivity analysis to determine the influence of each individual study on the overall result by omitting studies one by one. The researchers used the visual inspection of a funnel plot and also Egger's test [56] ($p < 0.05$) to determine publication bias, as funnel plots were found to be inaccurate for assessing publication bias in meta-analyses of proportion studies [57].

In our meta-analysis of proportion studies, the DOI plot and the Luis Furuya-Kanamori (LFK) index represent better approaches for graphically representing publication bias. A symmetrical triangle implies the absence of publication bias. In contrast, an asymmetrical triangle indicates possible publication bias [58]. The DOI plot and LFK index have higher sensitivity and thus detect publication bias more accurately than the funnel plot [59]. Basically, the LFK index provides a quantitative measure to assess the degree of asymmetry; here, a score within 1 suggests 'no asymmetry', ±2 suggests 'minor asymmetry', and a score exceeding ±2 suggests 'major asymmetry'. Additionally, the fail-safe N value is an indicator of publication bias [60]. This statistic is recommended with <10 studies in the MA [53,61] and suggests the number of non-significant, unpublished, or missing studies that would need to be added in the MA to reduce the finding of non-significance. JS ran the statistical analyses with *R* statistical software [62].

4. Results

4.1. Search and Selection

Figure 1 shows the flowchart of the search strategy and study selection process. A total of 469 records were initially identified from Medline via PubMed, of which 450 records

were excluded after a first screening of the titles and abstracts. After reading the remaining 19 articles in full, we finally included 6 in our meta-analysis [63–68]. The reasons for the exclusion of articles are detailed in Figure 1.
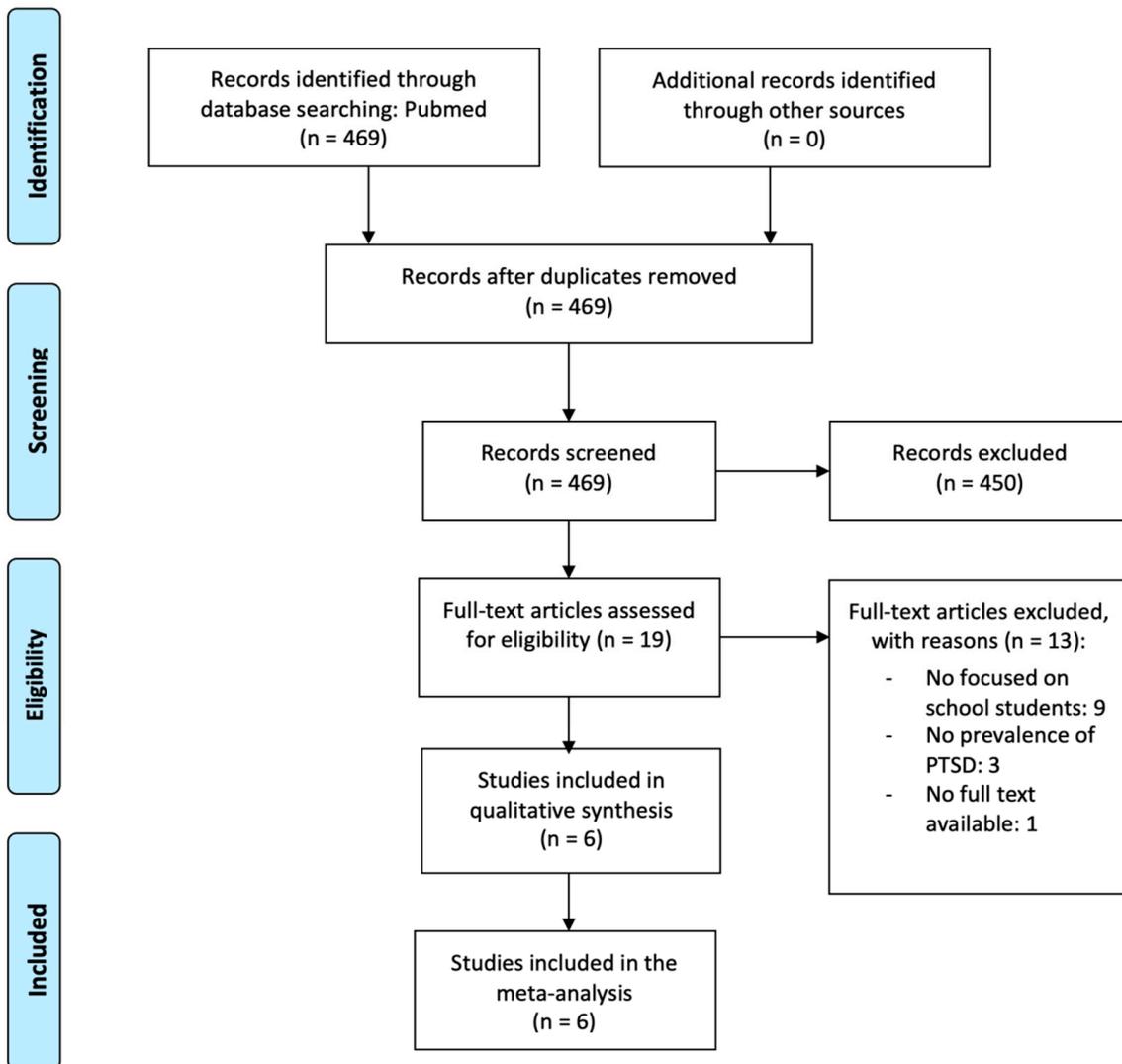
Figure 1. Flowchart of the Study Search and Selection Process.

4.2. Characteristics and Methodological Quality of the Included Studies

Tables 1 and 2 show the characteristics of the six studies included in the meta-analysis. Table 1 provides a description of the study characteristics. Four came from China, one came from Saudi Arabia, and one came from Japan. The sample sizes ranged from 537 [65] to 57,948 [63] participants, while the mean age ranged from 12.2 [65] to 16.7 years [67]. In one study [67], the participants were only girls, and in the other studies, on average, 51.3% of the participants were girls. The response rate was between 76.3% [67] and 98.23% [64]. All of the included studies used standardized and validated scales with online questionnaires. Of those studies reporting a sampling methodology, two used probabilistic methods [66,67], and the rest employed non-probabilistic methods [64,65,68].

Table 1. Characteristics of the Studies Included in the Meta-Analysis.

Study	Country	Sample Size	Age Mean (SD)	Proportion Females	Response Rate	Sampling Method (Sampling Technique Category)	JBI Critical Appraisal
Cao et al. (2021) [63]	China	57,948	14.8 (1.6)	51.6%	NR	NR	4
Ma et al. (2021) [64]	China	668	NR	49.7%	98.2%	Purposive (Non-probability sampling)	5
Sayed et al. (2021) [65]	Kingdom of Saudi Arabia	537	12.2 (3.7)	51.2%	NR	Convenience (Non-probability sampling)	4
Shek et al. (2021) [66]	China	4981	13.1 (1.3)	51.5%	NR	Cluster (Probability sampling)	5
Takeda et al. (2021) [67]	Japan	871	16.7 (0.9)	100%	76.3%	Stratified (Probability sampling)	6
Xu et al. (2021) [68]	China	7769	15 (NR)	52.5%	NR	Convenience (Non-probability sampling)	5

Abbreviations: SD, standard deviation; NR, not reported.

Table 2. PTSD Assessments in the Included Studies.

Study	PTSD Assessment		
	Scale	Criteria	No. Cases (Prevalence)
Cao et al. (2021) [63]	GPS-T	≥3	9810 (16.9%)
Ma et al. (2021) [64]	IES-R	>20	138 (20.7%)
Sayed et al. (2021) [65]	UCLA-BCSCA	≥21	70 (13%)
Shek et al. (2021) [66]	CRIES-13	>30	517 (10.4%)
Takeda et al. (2021) [67]	IES-R	≥24	49 (5.6%)
Xu et al. (2021) [68]	CRIES-13	>30	1639 (21.1%)

Abbreviations: GPS-T, Global Psychotrauma Screen for Teenagers; IES-R, Impact of Event Scale Revised; IES-6, The Impact of Event Scale-6; UCLA-BCSCA, Brief COVID-19 Screen for Child/Adolescent; CRIES-13, Children's Revised Impact of Event Scale.

Table 2 breaks down the methods of measurement, the cut-off PTSD scores and the reported number of cases and prevalence found in each study.

Regarding the quality of the studies, the scores ranged from 4 to 6 on the 9-point JBI Critical Appraisal scale. In all of the studies, the confidence intervals and described prevalence were provided, and the participants and settings were described. All studies were limited because they did not use unbiased reviewers to measure PTSD, due to using online surveys. Additionally, most studies did not have unbiased sampling methods or adequately high response rates. Table 3 presents the precise methodological attributes that were present and absent.

Table 3. Quality Assessment.

Study	1	2	3	4	5	6	7	8	Total
Cao et al. (2021) [63]	0	0	1	1	0	0	1	1	4
Ma et al. (2021) [64]	0	0	1	1	0	1	1	1	5
Sayed et al. (2021) [65]	1	0	1	1	0	0	1	1	5
Shek et al. (2021) [66]	0	0	1	1	0	0	1	1	4
Takeda et al. (2021) [67]	1	0	1	1	0	1	1	1	6
Xu et al. (2021) [68]	0	1	1	1	0	0	1	1	5

Abbreviations: (1) Random sample or entire population; (2) Unbiased sampling frame (census data); (3) Adequate sample size (>300 subjects); (4) Standard measures were used (5) Outcome measured by unbiased reviewers; (6) Adequate response rate (>70%) and description of losses; (7) Confidence intervals and subgroup analysis; and (8) Study subjects described.

4.3. PTSD Prevalence

Prevalence rates ranged from 6% [67] to 21% [64] (Table 1). We estimated the overall prevalence of PTSD to be 14% (95% CI: 11–18%), with significant heterogeneity in the

sample of studies (Q test: $p < 0.01$; $I^2 = 98.7\%$) (Figure 2). The prediction interval showed that the proportion of PTSD in future similar studies would range between 4% to 29% (Figure 2).
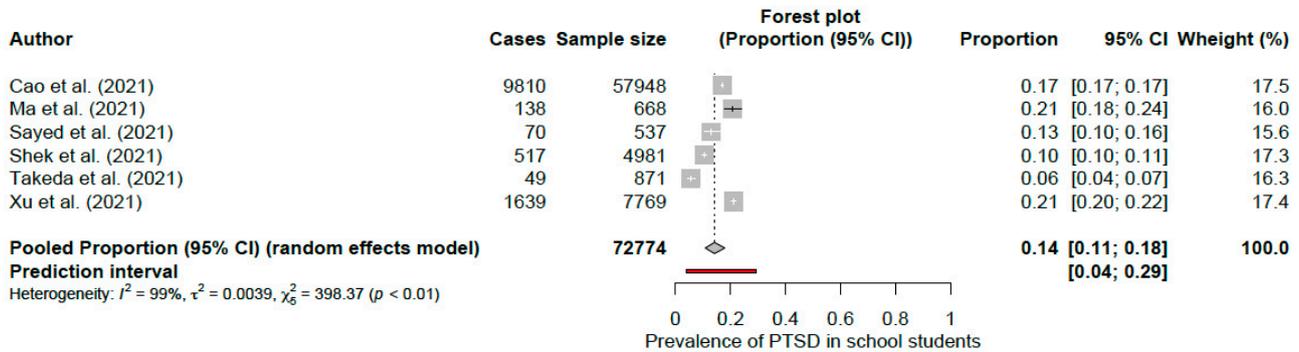

Figure 2. Forest Plot for the prevalence of PTSD among children and adolescents [63–68].

Our subgroup analyses, performed in order to identify sources of heterogeneity, found a significantly higher prevalence of PTSD in studies in China (17% [95% CI: 13–21%]) compared to those in Japan or the Kingdom of Saudi (9% [95% CI: 5–14%]). We also observed a higher prevalence of PTSD in the studies using convenience samples (17% [95% CI: 9–27%]) compared with other sampling methods (11% [95% CI: 6–18%]); nevertheless, this difference did not reach statistical significance. Similarly, no differences were observed depending on which PTSD scale was used ($p = 0.891$). Our meta-regression showed that the prevalence of PTSD was lower with a lower percentage of girls ($b = -0.36$, $p = 0.005$), and was independent of the mean age at baseline ($p = 0.514$) or methodological quality ($p = 0.284$). No meta-regression analysis according to the response rate was performed due to insufficient data available.

Excluding studies one by one from the analysis did not substantially change the pooled prevalence of PTSD, which varied between 13% (95% CI: 9–18%), with Xu et al. [68] excluded, and 15% (95% CI: 12–19%), with Shek et al. [66] excluded (Figure 3). This indicates that no single study had a disproportional impact on the overall PTSD prevalence.
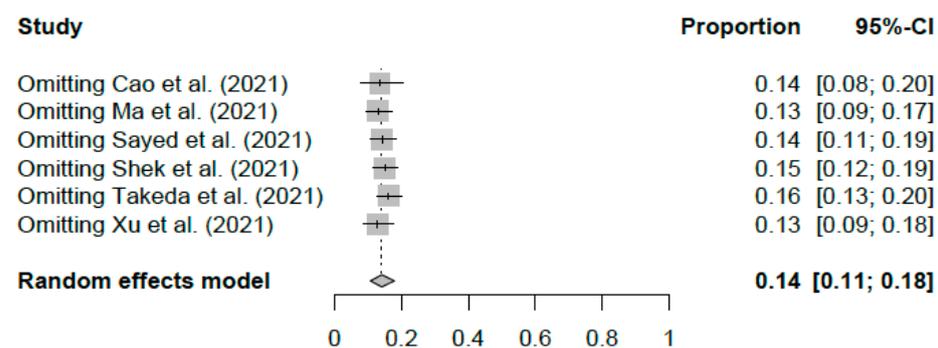

Figure 3. Sensitivity Forest Plot for the prevalence of PTSD among children and adolescents [63–68].

Figure 4 shows the DOI plot and an LFK index of −2.84, indicating 'major asymmetry' and a high likelihood of publication bias. In contrast, a fail-safe N of 3887 indicated an absence of publication bias, meaning that 3887 studies with null results would be needed to reduce the observed overall prevalence to non-significance.
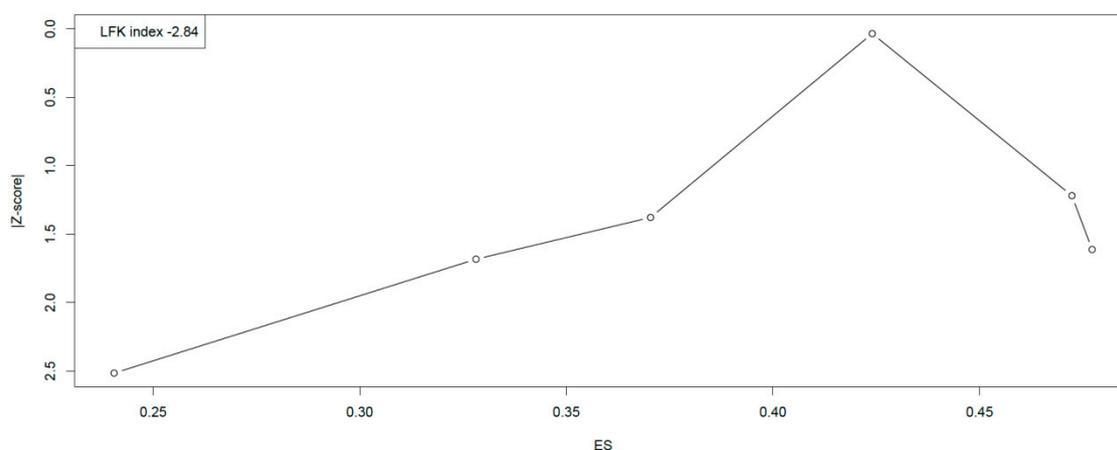
Figure 4. DOI Plot for the prevalence of PTSD among children and adolescents.

5. Recommendations for Intervention

Finally, a review was carried out to analyze which interventions to improve the mental health and well-being of children and adolescents were recommended by each article, and the results can be seen in the Table 4.

Table 4. General recommendations for intervention.

ID	Study	General Recommendations for Intervention
1	Cao et al., 2021 [63]	Improving the family context and increasing social support are strategies to improve long-term mental health in adolescence.
2	Ma et al., 2021 [64]	As the mental health of the population continues to be deteriorated by COVID-19, authorities must take action and implement online interventions to improve mental health.
3	Sayed et al., 2021 [65]	Parents and professionals should detect the following alarming symptoms in order to prevent PTSD: intrusion, avoidance, negative mood and arousal/reactivity. If parents and teachers are aware of the severity of the symptoms they can help children to cope with these situations.
4	Shek et al., 2021 [66]	Psycho-educational programmes, early intervention assessments by teachers and professionals and mental health training for teachers would be very useful to help children and adolescents.
5	Takeda et al., 2021 [67]	—
6	Xu et al., 2021 [68]	—

6. Discussion

This is the first study to conduct a meta-analysis of PTSD in adolescents and children during the COVID-19 pandemic. It is important to have carried out this meta-analysis as the WHO has made it its objective to take special care of the mental health of this group after the pandemic we have experienced [3]. This is why this meta-analysis of PTSD in children and adolescents during the pandemic has been conducted. After the analysis of the collected works, it was found that the estimated prevalence of post-traumatic stress in this population group is 14%, with it being predicted that a PTSD prevalence range between 4% to 29% in children and adolescents will be found in future similar studies.

This prevalence is clearly lower than that found by Ma et al. [64] in the first months of the pandemic in China. This was to be expected, as the confinement of those first months and the severity of the pandemic was extreme in China. However, other mental health markers analyzed in children during that time found a prevalence of 22.6% for

depression and a prevalence of 18.9% for anxiety in Hubei province itself, where the crisis originated [69]. Even Ma et al. (2021) found a prevalence of 29% and a prevalence of 26% for depression and anxiety, respectively, in the same review. Thus, one might suspect that the 48% incidence they found for PTSD could be challenged by further research. In fact, the prevalence of PTSD in China is significantly higher in our study. If we compare the 14% prevalence with that found in the adult population, it is observable that in the general population, the prevalence of PTSD during the COVID-19 pandemic ranged from 15% to 28.34% [68,70–73]. Variability is also found in specific populations, such as health care workers, with a prevalence of PTSD between 18% and 29.22% [72]. Finally, Qui et al. [73] also found a PTSD prevalence of 29.39% in the teachers/students cohort. However, in this analysis, there was only one group of students and teachers, and it did not take into account other variables such as age, grade, or sector of education. With greater precision, ref. [74] found a PTSD prevalence of 10% in teachers and one of 23% in university students. Therefore, looking at these average values, it seems that the prevalence of PTSD among children and adolescents may be somewhat lower than adults in general, or than older students such as university students. However, it is striking that it is higher than that found among teachers.

Several research studies have shown that girls may experience more PTSD because of their possible tendency to ruminate more [75]. Age range may also influence the development of PTSD [75] because they have less language skills, and they may have difficulty understanding what is happening during the pandemic [76]. However, the study by Ma et al., 2021, showed no significant age and gender results for PTSD during the COVID-19 pandemic among children and adolescents. In the present study, differences by gender were found, with a lower incidence among girls. Contrary to the adult population, there have also been previous studies in which the well-being of girls has been found to be higher than that of boys during the pandemic [4].

Age range may also influence the development of PTSD [75], as younger children have less knowledge and less language; this affects their understanding of the events and the number of events, and they are less able to regulate their emotions, which affects how they process the event [76]. However, the study by Ma et al., 2021 [64] showed that coping psychologically with the pandemic had been more difficult for adolescents than for younger children [64]. In the present study, in terms of age, the mean age range of the articles analyzed was between 12.2 and 16.7 years, i.e., there were no studies with young children, something that could generate variability.

6.1. The Importance of Intervening in Order to Respond to the Impact of the Pandemic on Children's Mental Health and Well-Being

In our review, the different authors of [66] made proposals to reduce the impact of the pandemic on the mental health and well-being of children and adolescents. The proposals included improving the family and rebuilding social support systems, to create [63], to improve online educational systems and to implement psychoeducational interventions and programs in it that are effective [64,66], to increase awareness among parents and teachers [65], to conduct assessments using rapid teacher assessment tools [66] and to provide training for frontline teachers and allied professionals.

However, these proposals do not propose a specific strategy to help children and adolescents. However, science has shown that emotional education can be key to helping these minors [77–80].

Specifically, emotional intelligence could improve PTSD and the impact of the pandemic on children's mental health. According to Goleman, the key elements related to emotional intelligence are emotional self-awareness, emotional self-control, self-motivation, empathy and interpersonal relationships [81]. Therefore, thanks to the skills acquired by emotional intelligence, we acquire a better knowledge of our own emotions. We learn to identify our emotions and control them in an adequate way, and develop the ability to regulate them. Emotional intelligence will not eliminate problematic situations from our

lives, but it does allow us to control them better and thus prevent reactions that could harm us in the long term.

Post-traumatic stress often goes hand in hand with anxiety and depression, and it is important to work on all the emotions that appear when starting to experiencing the symptomatology of PTSD in order to cope with it. If children and adolescents, thanks to their emotional skills, are able to name the intense emotions that they are feeling at that moment, they will be able to better manage that feeling. It has been demonstrated that the expression of emotions produces a change in the amygdala, which then induces calm and tranquility [82]. In addition, an emotionally intelligent person will be able to anticipate adversity and its impact, as well as anticipate the possible reaction of others to adversity. This will enable him/her to develop appropriate responses to adversity and to recover quickly.

Emotional intelligence helps individuals to deal with environmental stressors by understanding their own and others' emotions [83]. Therefore, educating children and adolescents in emotional intelligence can help them to cope with the traumatic situation they have experienced during the pandemic, and also to prevent possible future traumatic situations.

Thanks to emotional education, the child/adolescent will be able to adapt to the social world, not only in pre-school, but also from infancy to adulthood, providing them with emotional, communicative, motivational and problem-solving skills [84].

Likewise, an intervention based on emotional intelligence in educational environments should take into account that one should be educated to know, understand and adequately regulate one's own feelings and emotions, and those of others, in order to adapt to the environment more easily and efficiently [85]. To this end, a good emotional literacy program in educational environments should take into account the following points:

- Work on emotional self-knowledge. In this way, children would learn more about emotions and their causes.
- Learn the difference between action and emotion.
- Learn to manage the following emotions: frustration, anger management, stress management or feelings of inferiority.
- Work empathy: to learn how to understand others, their feelings and how to listen. In this way, they would be more able to understand and analyze others, help deal with conflicts, improve communication and create more cooperation.

Therefore, we support the idea that learning about emotional intelligence should become an explicit part of the curriculum.

6.2. Strengths and Limitations

A strength of the current study is that it is a Feasible, Interesting, Novel, Ethical, and Relevant piece of research that follows the FINER framework [86]. This meta-analysis gives us an update on a problem that could affect nearly 14% of children, and is something that should be considered if we want to raise mentally healthy children. As such, this study may provide a basis for further studies along this line of research.

However, some limitations should be considered when interpreting our results. First, it cannot be guaranteed that the results were measured by unbiased raters, as only online surveys were employed. In addition, most of the included studies had sampling shortcomings. Most did not have a random sample, an unbiased sampling frame, or adequate response rates (>70%). While they were not statistically significant, we found a lower prevalence of PTSD in studies only reporting convenience samples. In addition, the studies were generally of moderate-to-low methodological quality, as suggested by the JBI Critical Appraisal results. Moreover, there was little variety in the countries analyzed among the studies, so it is difficult to generalize these results to the world population. Finally, there were only a few studies included. However, it is clear that meta-analyses based on a few studies can be successful and provide substantially better estimates than isolated moderate

or low-quality studies, or narrative reviews [87]. However, this study is also a basis from which to push for further studies on the topic.

7. Conclusions

The results of the present study led us to conclude that it is important to attend to the mental health of children, and that the psychological suffering they have experienced during the pandemic may have long-term consequences given the emerging development of their identities and personalities. As the WHO [3] itself states, the well-being of children was in a vulnerable position during the pandemic, because they have less experience and fewer tools to cope with the events they experience. Therefore, it is important to care for children who may be suffering the most from the psycho-social-economic consequences of the pandemic, such as those experiencing post-traumatic stress. Moreover, it is also important to continue research on children's mental health in the face of and recovery from the pandemic.

Taking into account the recommendations we have extracted from the selected articles, and bearing in mind that we are bio-psycho-social humans [88], we will draw on Bronfenbrenner's theory [89] to give some recommendations for dealing with the post-traumatic stress that children may have suffered in the pandemic.

It is important that they have family support [90] in order to not suffer psychologically. That is why parents should be taught via an emotional education strategy [91] so that they can pass emotional intelligence on to their children in order to improve their micro-system. Moreover, since the ecosystem influences the emotional state of children as well, parents should have better working conditions so that they can take better care of their children and dedicate more time to them, thus also devoting more time to emotional care.

Taking into account Bronfenbrenner's mesosystem, parents should have a close relationship with their children's schools, so that there is good communication regarding emotional health education [92].

It is also obvious that an adequate macrosystem is necessary in order for children to have a good emotional education. For this, governments must give value to the health care of children and adolescents, and create policies to take into account their mental health [93].

Finally, we must take into account the chronosystem in which children all over the world are living. A pandemic and post-pandemic moment must not be left aside, and the mental health of children and adolescents must be taken into account. Therefore, this study has made us aware of the studies on post-traumatic stress in children and adolescents so far. It is also important to understand the policies and recommendations that should be applied to improve children's mental health. Finally, it is a basis for further research on children and adolescents' mental health.

References

1. Reuge, N.; Jenkins, R.; Brossard, M.; Soobrayan, B.; Mizunoya, S.; Ackers, J.; Jones, L.; Taulo, W.G. Education response to COVID 19 pandemic, a special issue proposed by UNICEF: Editorial review. *Int. J. Educ. Dev.* **2021**, *87*, 102485. [CrossRef] [PubMed]
2. Francis, N.N.; Pegg, S. Socially distanced school-based nutrition program under COVID-19 in the rural Niger Delta. *Extr. Ind. Soc.* **2020**, *7*, 576–579. [CrossRef] [PubMed]
3. COVID-19 and Children. 2022. Available online: https://www.euro.who.int/en/health-topics/Life-stages/child-and-adolescent-health/covid-19-and-children (accessed on 1 December 2022).
4. Berasategi Sancho, N.; Idoiaga Mondragon, N.; Dosil Santamaria, M.; Eiguren Munitis, A. The Well-being of children in lock-down: Physical, emotional, social and academic impact. *Child. Youth Serv. Rev.* **2021**, *127*, 106085. [CrossRef]
5. Grechyna, D. Health Threats Associated with Children Lockdown in Spain during COVID-19. 2020. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3567670 (accessed on 14 November 2021).
6. Luijten, M.A.J.; van Muilekom, M.M.; Teela, L.; Polderman, T.J.C.; Terwee, C.B.; Zijlmans, J.; Klaufus, L.; Popma, A.; Oostrom, K.J.; van Oers, H.A.; et al. The impact of lockdown during the COVID-19 pandemic on mental and social health of children and adolescents. *Qual. Life Res.* **2021**, *30*, 2795–2804. [CrossRef]
7. Panda, P.K.; Gupta, J.; Chowdhury, S.R.; Kumar, R.; Meena, A.K.; Madaan, P.; Sharawat, I.K.; Gulati, S. Psychological and Behavioral Impact of Lockdown and Quarantine Measures for COVID-19 Pandemic on Children, Adolescents and Caregivers: A Systematic Review and Meta-Analysis. *J. Trop Pediatr.* **2021**, *67*, fmaa122. [CrossRef]
8. Thakur, K.; Kumar, N.; Sharma, N. Effect of the Pandemic and Lockdown on Mental Health of Children. *Indian J. Pediatr.* **2020**, *87*, 552. [CrossRef]
9. Transforming Our World: The 2030 Agenda for Sustainable Development. 2015. Available online: https://sdgs.un.org/2030agenda (accessed on 27 April 2022).
10. ESCAP UN; World Health Organization. *SDG 3 Goodhealth and Well-Being: Ensure Healthy Lives and Promote Well-Being for All at All Ages*; ESCAP Publications: Bangkok, Thailand, 2021.
11. Khetrapal, S.; Bhatia, R. Impact of COVID-19 pandemic on health system & Sustainable Development Goal 3. *Indian J. Med. Res.* **2020**, *151*, 395–399.
12. Idoiaga, N.; Berasategi, N.; Eiguren, A.; Picaza, M. Exploring Children's Social and Emotional Representations of the COVID-19 Pandemic. *Front. Psychol.* **2020**, *11*, 1952. [CrossRef]
13. Jiao, W.Y.; Wang, L.N.; Liu, J.; Fang, S.F.; Jiao, F.Y.; Pettoello-Mantovani, M.; Somekh, E. Behavioral and emotional disorders in children during the COVID-19 epidemic. *J. Pediatr.* **2020**, *221*, 264–266.e1. [CrossRef] [PubMed]
14. Okruszek, L.; Aniszewska-Stańczuk, A.; Piejka, A.; Wiśniewska, M.; Żurek, K. Safe but lonely? Loneliness, mental health symptoms and COVID-19. *Front. Psychol.* **2020**, *11*, 579181. [CrossRef]
15. Singh, J.; Singh, J. COVID-19 and its impact on society. *Electron. Res. J. Soc. Sci. Humanit.* **2020**, *2*. Available online: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3567837 (accessed on 29 January 2023).
16. Lippi, G.; Henry, B.M.; Bovo, C.; Sanchis-Gomar, F. Health risks and potential remedies during prolonged lockdowns for coronavirus disease 2019 (COVID-19). *Diagnosis* **2020**, *7*, 85–90. [CrossRef]
17. Wang, G.; Zhang, Y.; Zhao, J.; Zhang, J.; Jiang, F. Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Lancet* **2020**, *395*, 945–947. [CrossRef] [PubMed]
18. Sharma, S.V.; Chuang, R.; Rushing, M.; Naylor, B.; Ranjit, N.; Pomeroy, M.; Markham, C. Peer reviewed: Social determinants of health–related needs during COVID-19 among low-income households with children. *Prev. Chronic Dis.* **2020**, *17*, E119. [CrossRef]
19. Ramkissoon, H. COVID-19 Place Confinement, Pro-Social, Pro-environmental Behaviors, and Residents' Wellbeing: A New Conceptual Framework. *Front. Psychol.* **2020**, *11*, 2248. [CrossRef]
20. Jiloha, R.C. COVID-19 and mental health. *Epidemiol. Int.* **2020**, *5*, 7–9. [CrossRef]
21. de Figueiredo, C.S.; Sandre, P.C.; Portugal, L.C.L.; Mázala-de-Oliveira, T.; da Silva Chagas, L.; Raony, Í.; Ferreira, E.S.; Giestal-de-Araujo, E.; dos Santos, A.A.; Bomfim, P.O.-S. COVID-19 pandemic impact on children and adolescents' mental health: Biological, environmental, and social factors. *Prog. Neuro-Psychopharmacol. Biol. Psychiatry* **2021**, *106*, 110171. [CrossRef]
22. Racine, N.; McArthur, B.A.; Cooke, J.E.; Eirich, R.; Zhu, J.; Madigan, S. Global Prevalence of Depressive and Anxiety Symptoms in Children and Adolescents During COVID-19: A Meta-analysis. *JAMA Pediatr.* **2021**, *175*, 1142–1150. [CrossRef]
23. Kleinberg, B.; van der Vegt, I.; Mozes, M. Measuring emotions in the COVID-19 real world worry dataset. *arXiv* **2020**, arXiv:2004.04225.
24. Malboeuf-Hurtubise, C.; Léger-Goodes, T.; Mageau, G.A.; Joussemet, M.; Herba, C.; Chadi, N.; Lefrançois, D.; Camden, C.; Bussières, È.-L.; Taylor, G.; et al. Philosophy for children and mindfulness during COVID-19: Results from a randomized cluster trial and impact on mental health in elementary school students. *Prog. Neuro-Psychopharmacol. Biol. Psychiatry* **2021**, *107*, 110260. [CrossRef]
25. Fegert, J.M.; Vitiello, B.; Plener, P.L.; Clemens, V. Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolesc. Psychiatry Ment. Health* **2020**, *14*, 20. [CrossRef] [PubMed]
26. Idoiaga Mondragon, N.; Orcasitas-Vicandi, M.; Roman Etxebarrieta, G. Impact of emergency eLearning in a multilingual context with a minority language: How has the absence of school affected the use of Basque, English, and Spanish in the Basque context? *Int. J. Biling. Educ. Biling.* **2022**, *25*, 3533–3550. [CrossRef]

27. UNESCO. *Survey on National Education Responses to COVID-19 School Closures, Round 2*; UNESCO: Paris, France, 2020.

28. Berasategi Sancho, N.; Idoiaga Mondragon, N.; Dosil Santamaria, M.; Picaza Gorrotxategi, M. The well-being of children with special needs during the COVID-19 lockdown: Academic, emotional, social and physical aspects. *Eur. J. Spec. Needs Educ.* **2021**, *37*, 776–789. [CrossRef]

29. Fomenko, L.; De Schrijver, L.; Vandeviver, C.; Keygnaert, I. Locked up at home: A cross-sectional study into the effects of COVID-19 lockdowns on domestic violence in households with children in Belgium. *BMC Public Health* **2022**, *22*, 1719. [CrossRef]

30. Griffith, A.K. Parental Burnout and Child Maltreatment During the COVID-19 Pandemic. *J. Fam. Violence* **2020**, *37*, 725–731. [CrossRef]

31. Pereda, N.; Díaz-Faes, D.A. Family violence against children in the wake of COVID-19 pandemic: A review of current perspectives and risk factors. *Child Adolesc. Psychiatry Ment. Health.* **2020**, *14*, 40. [CrossRef] [PubMed]

32. Education in Emergencies in EU-Funded Humanitarian Aid Operations DG ECHO Thematic Policy Document No 10. 2019. Available online: https://ec.europa.eu/echo/files/news/eie_in_humanitarian_assistance.pdf (accessed on 29 January 2023).

33. Idoiaga Mondragon, N.; Eiguren Munitis, A.; Berasategi Sancho, N.; Ozamiz Etxebarria, N. Drawing the COVID-19 pandemic: How do children incorporate the health crisis and its consequences into their everyday thinking? *Psychol. Health* **2022**, 1–20. [CrossRef]

34. Paterson, D.C.; Ramage, K.; Moore, S.A.; Riazi, N.; Tremblay, M.S.; Faulkner, G. Exploring the impact of COVID-19 on the movement behaviors of children and youth: A scoping review of evidence after the first year. *J. Sport Health Sci.* **2021**, *10*, 675–689. [CrossRef]

35. Rozhnova, G.; van Dorp, C.H.; Bruijning-Verhagen, P.; Bootsma, M.C.J.; van de Wijgert, J.H.H.M.; Bonten, M.J.M.; Kretzschmar, M.E. Model-based evaluation of school- and non-school-related measures to control the COVID-19 pandemic. *Nat. Commun.* **2021**, *12*, 1614–1616. [CrossRef] [PubMed]

36. Willem, L.; Abrams, S.; Libin, P.J.K.; Coletti, P.; Kuylen, E.; Petrof, O.; Møgelmose, S.; Wambua, J.; Herzog, S.A.; Faes, C.; et al. The impact of contact tracing and household bubbles on deconfinement strategies for COVID-19. *Nat. Commun.* **2021**, *12*, 1524–1527. [CrossRef]

37. Samji, H.; Wu, J.; Ladak, A.; Vossen, C.; Stewart, E.; Dove, N.; Long, D.; Snell, G. Review: Mental health impacts of the COVID-19 pandemic on children and youth—A systematic review. *Child Adolesc. Ment. Health.* **2022**, *27*, 173–189. [CrossRef]

38. Bhushan, B.; Basu, S.; Ganai, U.J. Post-traumatic Stress and Growth Among the Children and Adolescents in the Aftermath of COVID-19. *Front. Psychol.* **2021**, *12*, 791263. [CrossRef] [PubMed]

39. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*; American Psychiatric Association: Washington, DC, USA, 2013.

40. Powell, T.; Wegmann, K.M.; Backode, E. Coping and Post-Traumatic Stress in Children and Adolescents after an Acute Onset Disaster: A Systematic Review. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4865. [CrossRef]

41. Ma, L.; Mazidi, M.; Li, K.; Li, Y.; Chen, S.; Kirwan, R.; Zhou, H.; Yan, N.; Rahman, A.; Wang, W.; et al. Prevalence of mental health problems among children and adolescents during the COVID-19 pandemic: A systematic review and meta-analysis. *J. Affect. Disord.* **2021**, *293*, 78–89. [CrossRef]

42. Idoiaga Mondragon, N.; Fernandez, I.L.; Ozamiz-Etxebarria, N.; Villagrasa, B.; Santabarbara, J. PTSD (Posttraumatic Stress Disorder) in Teachers: A Mini Meta-Analysis during COVID-19. *Int. J. Environ. Res. Public Health* **2023**, *20*, 1802. [CrossRef] [PubMed]

43. Lasheras, I.; Gracia-García, P.; Lipnicki, D.M.; Bueno-Notivol, J.; López-Antón, R.; De La Cámara, C.; Lobo, A.; Santabárbara, J. Prevalence of anxiety in medical students during the COVID-19 pandemic: A rapid systematic review with meta-analysis. *Int. J. Environ. Res. Public Health* **2020**, *17*, 6603. [CrossRef]

44. Moher, D.; Liberati, A.; Tetzlaff, J.; Altman, D.G.; Prisma Group. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med.* **2009**, *6*, e1000097. [CrossRef] [PubMed]

45. Methods Group of the Campbell Collaboration. *Methodological Expectations of Campbell Collaboration Intervention Reviews: Conduct Standards*; Campbell Policies and Guidelines Series; Campbell Collaboration: Oslo, Norway, 2016; Volume 3.

46. Harrer, M.; Cuijpers, P.; Furukawa, T.A.; Ebert, D.D. *Doing Meta-Analysis with R: A Hands-on Guide*; Chapman and Hall/CRC: Boca Raton, FL, USA, 2021.

47. Moola, S.; Munn, Z.; Tufanaru, C.; Aromataris, E.; Sears, K.; Sfetc, R.; Currie, M.; Lisy, K.; Qureshi, R.; Mattis, P.; et al. Systematic reviews of etiology and risk. In *Joanna Briggs Institute Reviewer's Manual*, 5th ed.; The Joanna Briggs Institute: Adelaide, Australia, 2017.

48. DerSimonian, R.; Laird, N. Meta-analysis in clinical trials. *Control. Clin. Trials* **1986**, *7*, 177–188. [CrossRef]

49. Lin, L.; Xu, C. Arcsine-based transformations for meta-analysis of proportions: Pros, cons, and alternatives. *Health Sci. Rep.* **2020**, *3*, e178. [CrossRef] [PubMed]

50. Knapp, G.; Hartung, J. Improved tests for a random effects meta-regression with a single covariate. *Stat. Med.* **2003**, *22*, 2693–2710. [CrossRef]

51. Langan, D.; Higgins, J.P.; Jackson, D.; Bowden, J.; Veroniki, A.A.; Kontopantelis, E.; Viechtbauer, W.; Simmonds, M. A comparison of heterogeneity variance estimators in simulated random-effects meta-analyses. *Res. Synth. Methods* **2019**, *10*, 83–98. [CrossRef]

52. von Hippel, P.T. The heterogeneity statistic I 2 can be biased in small meta-analyses. *BMC Med. Res. Methodol.* **2015**, *15*, 35. [CrossRef]

53. Higgins, J.P.; Thompson, S.G.; Deeks, J.J.; Altman, D.G. Measuring inconsistency in meta-analyses. *BMJ* **2003**, *327*, 557–560. [CrossRef]

54. Thompson, S.G.; Higgins, J.P. How should meta-regression analyses be undertaken and interpreted? *Stat. Med.* **2002**, *21*, 1559–1573. [CrossRef]

55. Egger, M.; Schneider, M.; Davey Smith, G. Spurious precision? Meta-analysis of observational studies. *BMJ* **1998**, *316*, 140–144. [CrossRef]

56. Egger, M.; Davey Smith, G.; Schneider, M.; Minder, C. Bias in meta-analysis detected by a simple, graphical test. *BMJ* **1997**, *315*, 629–634. [CrossRef]

57. Hunter, J.P.; Saratzis, A.; Sutton, A.J.; Boucher, R.H.; Sayers, R.D.; Bown, M.J. In meta-analyses of proportion studies, funnel plots were found to be an inaccurate method of assessing publication bias. *J. Clin. Epidemiol.* **2014**, *67*, 897–903. [CrossRef]

58. Furuya-Kanamori, L.; Xu, C.; Lin, L.; Doan, T.; Chu, H.; Thalib, L.; Doi, S.A.R. P value-driven methods were underpowered to detect publication bias: Analysis of Cochrane review meta-analyses. *J. Clin. Epidemiol.* **2020**, *118*, 86–92. [CrossRef]

59. Furuya-Kanamori, L.; Barendregt, J.J.; Doi, S.A.R. A new improved graphical and quantitative method for detecting bias in meta-analysis. *Int. J. Evid. Based Healthc.* **2018**, *16*, 195–203. [CrossRef]

60. Rosenberg, M.S. The file-drawer problem revisited: A general weighted method for calculating fail-safe numbers in meta-analysis. *Evolution* **2005**, *59*, 464–468.

61. Sterne, J.A.; Sutton, A.J.; Ioannidis, J.P.; Terrin, N.; Jones, D.R.; Lau, J.; Carpenter, J.; Rücker, G.; Harbord, R.M.; Schmid, C.H.; et al. Recommendations for examining and interpreting funnel plot asymmetry in meta-analyses of randomised controlled trials. *BMJ* **2011**, *343*, d4002. [CrossRef]

62. R Core Team; R Development Core Team. *R: A Language and Environment for Statistical Computing*; R Foundation for Statistical Computing: Vienna, Austria, 2019.

63. Cao, C.; Wang, L.; Fang, R.; Liu, P.; Bi, Y.; Luo, S.; Grace, E.; Olff, M. Anxiety, depression, and PTSD symptoms among high school students in china in response to the COVID-19 pandemic and lockdown. *J. Affect. Disord.* **2022**, *296*, 126–129. [CrossRef]

64. Ma, Z.; Idris, S.; Zhang, Y.; Zewen, L.; Wali, A.; Ji, Y.; Pan, Q.; Baloch, Z. The impact of COVID-19 pandemic outbreak on education and mental health of Chinese children aged 7–15 years: An online survey. *BMC Pediatr.* **2021**, *21*, 95. [CrossRef]

65. Sayed, M.H.; Hegazi, M.A.; El-Baz, M.S.; Alahmadi, T.S.; Zubairi, N.A.; Altuwiriqi, M.A.; Saeedi, F.A.; Atwah, A.F.; Abdulhaq, N.M.; Almurashi, S.H. COVID-19 related posttraumatic stress disorder in children and adolescents in Saudi Arabia. *PLoS ONE* **2021**, *16*, e0255440. [CrossRef]

66. Shek, D.T.L.; Zhao, L.; Dou, D.; Zhu, X.; Xiao, C. The Impact of Positive Youth Development Attributes on Posttraumatic Stress Disorder Symptoms Among Chinese Adolescents Under COVID-19. *J. Adolesc. Health* **2021**, *68*, 676–682. [CrossRef]

67. Takeda, T.; Kai, S.; Yoshimi, K. Association between Premenstrual Symptoms and Posttraumatic Stress Symptoms by COVID-19: A Cross-Sectional Study with Japanese High School Students. *Tohoku J. Exp. Med.* **2021**, *255*, 71–77. [CrossRef]

68. Xu, H.; Zhang, H.; Huang, L.; Wang, X.; Tang, X.; Wang, Y.; Xiao, Q.; Xiong, P.; Jiang, R.; Zhan, J.; et al. Increased symptoms of post-traumatic stress in school students soon after the start of the COVID-19 outbreak in China. *BMC Psychiatry* **2021**, *21*, 330–333. [CrossRef]

69. Xie, X.; Xue, Q.; Zhou, Y.; Zhu, K.; Liu, Q.; Zhang, J.; Song, R. Mental Health Status Among Children in Home Confinement During the Coronavirus Disease 2019 Outbreak in Hubei Province, China. *JAMA Pediatr.* **2020**, *174*, 898–900. [CrossRef]

70. Cénat, J.M.; Blais-Rochette, C.; Kokou-Kpolou, C.K.; Noorishad, P.; Mukunzi, J.N.; McIntee, S.; Dalexis, R.D.; Goulet, M.-A.; Labelle, P.R. Prevalence of symptoms of depression, anxiety, insomnia, posttraumatic stress disorder, and psychological distress among populations affected by the COVID-19 pandemic: A systematic review and meta-analysis. *Psychiatry Res.* **2021**, *295*, 113599. [CrossRef]

71. Zhang, L.; Pan, R.; Cai, Y.; Pan, J. The prevalence of post-traumatic stress disorder in the general population during the COVID-19 pandemic: A systematic review and single-arm meta-analysis. *Psychiatry Investig.* **2021**, *18*, 426–433. [CrossRef]

72. Salehi, M.; Amanat, M.; Mohammadi, M.; Salmanian, M.; Rezaei, N.; Saghazadeh, A.; Garakani, A. The prevalence of post-traumatic stress disorder related symptoms in Coronavirus outbreaks: A systematic-review and meta-analysis. *J. Affect. Disord.* **2021**, *282*, 527–538. [CrossRef]

73. Qiu, D.; Li, Y.; Li, L.; He, J.; Ouyang, F.; Xiao, S. Prevalence of post-traumatic stress symptoms among people influenced by coronavirus disease 2019 outbreak: A meta-analysis. *Eur. Psychiatry* **2021**, *64*, e30. [CrossRef] [PubMed]

74. Idoiaga, N.; Ozamiz-Etxebarria, N.; Villagrasa, B.; Santabárbara, J. Meta-analysis of the prevalence of PTSD (post-traumatic stress disorders) in teachers during COVID-19. *Arch. Psychiatr. Nurs.* **2022**, *in press*.

75. Trickey, D.; Siddaway, A.P.; Meiser-Stedman, R.; Serpell, L.; Field, A.P. A meta-analysis of risk factors for post-traumatic stress disorder in children and adolescents. *Clin. Psychol. Rev.* **2012**, *32*, 122–138. [CrossRef] [PubMed]

76. Salmon, K.; Bryant, R.A. Posttraumatic stress disorder in children. The influence of developmental factors. *Clin. Psychol. Rev.* **2002**, *22*, 163–188. [CrossRef] [PubMed]

77. Abdel-Fattah, H. Emotional intelligence and emotional stability in crises. *J. Psychiatry Psychiatr. Disord.* **2020**, *4*, 56–62.

78. Chandra, Y. Online education during COVID-19: Perception of academic stress and emotional intelligence coping strategies among college students. *Asian Educ. Dev. Stud.* **2020**, *10*, 229–238. [CrossRef]

79. Drigas, A.; Papoutsi, C. The Need for Emotional Intelligence Training Education in Critical and Stressful Situations: The Case of COVID-19. *Int. J. Recent Contrib. Eng. Sci. IT* **2020**, *8*, 20–36. [CrossRef]

80. Martín-Requejo, K.; Santiago-Ramajo, S. Reduced Emotional Intelligence in Children Aged 9–10 caused by the COVID-19 Pandemic Lockdown. *Mind Brain Educ.* **2021**, *15*, 269–272. [CrossRef]
81. Goleman, D. *Emotional Intelligence*; Bantam Books: New York, NY, USA, 1995.
82. Fessell, D.; Cherniss, C. Coronavirus disease 2019 (COVID-19) and beyond: Micropractices for burnout prevention and emotional wellness. *J. Am. Coll. Radiol.* **2020**, *17*, 746–748. [CrossRef]
83. Reivich, K.; Shatte, A. *The Resilience Factor: 7 Essential Skills for Overcoming Life's Inevitable Obstacles*; Broadway Books: New York, NY, USA, 2002.
84. Boix, C. Educar para ser feliz. In *Una Propuesta de Educación Emocional*; CEPE: Madrid, Spain, 2007.
85. Salovey, P.; Mayer, J.D. Emotional intelligence. *Imagin. Cogn. Personal.* **1990**, *9*, 185–211. [CrossRef]
86. Cummings, S.R.; Browner, W.S.; Hulley, S.B. Conceiving the research question and developing the study plan. *Des. Clin. Res.* **2013**, *4*, 14–22.
87. Goh, J.X.; Hall, J.A.; Rosenthal, R. Mini meta-analysis of your own studies: Some arguments on why and a primer on how. *Soc. Personal. Psychol. Compass* **2016**, *10*, 535–549. [CrossRef]
88. Valls-Llobet, C. La salud bio-psico-social re-generada. *Quad. Psicol.* **2010**, *12*, 175–181. [CrossRef]
89. Rosa, E.M.; Tudge, J. Urie Bronfenbrenner's theory of human development: Its evolution from ecology to bioecology. *J. Fam. Theory Rev.* **2013**, *5*, 243–258. [CrossRef]
90. Cavaleri, M.A.; Olin, S.S.; Kim, A.; Hoagwood, K.E.; Burns, B.J. Family support in prevention programs for children at risk for emotional/behavioral problems. *Clin. Child Fam. Psychol. Rev.* **2011**, *14*, 399–412. [CrossRef]
91. Roa García, A. La educación emocional, el autoconcepto, la autoestima y su importancia en la infancia. *Edetania* **2013**, *44*, 241–257.
92. Romagnoli, C.; Gallargo, G. *Alianza Efectiva Familia Escuela: Para Promover el Desarrollo Intelectual, Emocional, Social y Ético de los Estudiantes*; Valoras UC: Santiago de Chile, Chile, 2018.
93. Ramírez, F.B.; Misol, R.C.; Alonso, M.d.C.F.; Tizón, J.L. Pandemia de la COVID-19 y salud mental: Reflexiones iniciales desde la atención primaria de salud española. *Atención Primaria* **2021**, *53*, 89–101. [CrossRef]