

Review

Well-Being during the Pandemic—Insights from a Rapid Review on the Mental Health of Disadvantaged Youth and Young Adults

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Abstract: The spread of the COVID-19 pandemic had a wide range of impacts on living conditions, opportunities and mental health. As discussed by society and supported by some studies, young people were particularly affected. The aim of this review was to provide an overview of research that explicitly addressed the mental health outcomes of adolescents' and young adults' transition. A systematic literature search in PubMed, PsycInfo, PSYINDEX, Embase and LIVIVO was conducted in February 2022. 42 of 2562 screened publications from industrialized/high-income countries were included and analyzed. All included publications show that the mental health of young people worsened during the pandemic. Several studies suggest(ed) that youths with less education and low socioeconomic status were affected most. Regarding different stages of adolescence, study results are heterogeneous. Evidence indicates that schools as institutions are important settings for everyday lives, personal development and education of young people. The review shows that there is a need for research and scientifically validated recommendations for practice. Further consideration should focus on the implementation of sustainable structures on the local level to strengthen resilience, minimize risk factors for young people's mental health and create opportunities for valuable transitions.

Keywords: psychosocial impact; mental health; adolescents; pandemic; disadvantaged youth; transition



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1. Introduction

The COVID-19 pandemic has an impact on various dimensions of life, e.g., limiting social contact, leading to a lack of exercise, an increased media consumption and influencing mental health. Initial studies show that adolescents and young people, in particular, are a vulnerable group [1]. Because of measures taken by the government, including social distancing and school closures, young people have fewer social contacts and are hindered in their access to support services. In addition, home schooling, financial insecurity and social distancing are major challenges that are associated with stress and strain.

Regarding disadvantaged youths, COVID-19 reinforced already existing marginalization in the transition from school to work. Welfare systems have drawn attention to health inequalities, but little attention has been paid to the way in which health is a factor mediating inequalities of opportunities in education, employment and patterns of leaving home [2]. On the flipside, practices of labor market integration and their way of limiting young people's well-being seem to be rather neglected, leading to a seemingly predestined reproduction of health inequalities rather than their reduction. There is less focus on resources of young people themselves and resources provided in their environment to live a life youth have reason to value [3,4], and in this way to realize subjective valuable

transition processes, such as labor market integration. This analytical focus refers to realization opportunities, and how young people's wellbeing is shaped by the social context in which youths' transitions occur in their living environment and how social practices impact their health [5] as a yardstick for inequalities in transition processes during pandemics. Here, socialization theory offers an interdisciplinary approach that considers biological, psychological and social processes and thus enhances the empirical focus [6] on young people's realization opportunities related to the circumstances in life.

Mental health in times of a pandemic plays an important role in analyzing young people's options to fulfil an individually valued life with the focus on transition. The chance of achieving health during times of crisis was spread increasingly unequally regarding youths' possibilities to realize transition processes. Well-being within a neo-liberal policy agenda places greater responsibility upon individuals for their own physical [5] and mental health. Thereby, well-being becomes a factor functioning like a tool of social integration within the consequences of health pressure, rather than a catalyst for transition processes. "For what is largely ignored in the theoretical framework of egalitarian liberalism is the question of the extent to which the options opened up in principle by the provision of resources or basic goods can in fact be made use of by concrete people in their concrete life circumstances" [3] (p. 210).

While the importance of supporting self-management in relation to youths' health has long been recognized, and health promotion approaches have been deemed important, there is a specific need to understand health in youths' living environments during pandemics to address and support the availability of personal resources to foster health in a way that extends beyond self-management and highlights the importance of an environmental health promotion approach [7]. To achieve this in practice, health-related agency must be fostered through developmentally tailored approaches to health promotion that take a holistic lifeworld approach [8].

In many studies, however, adolescents and young adults in transition to labor market integration are not considered as a separate group with special needs. This holds true especially among marginalized and socially excluded youths. The youths' well-being is often either grouped together with that of children (e.g., [9]) or the group of young adults is defined with a wide age range from 18 to 29 or 34 years (e.g., [10]). The specific challenges of transition to adulthood in general and well-being in the context of occupational transition are not specifically considered. As adolescents are confronted with different challenges, fears and desires depending on their age and stage in life, they should accordingly be considered in smaller age range categories [11] so that the overcoming of typical challenges of youths can be considered as an influencing factor for the possibilities of social integration.

The German feasibility study *co*gesund* focuses in particular on (educationally) disadvantaged young people during COVID-19 in the transition between school and work. This rapid review aims to give an overview on the existing evidence regarding the impact of the COVID-19 pandemic on mental health and well-being of adolescents and young adults (in countries comparable to Germany). According to the research interest stated above, the focus of the analysis was set on (a) the specific circumstances of disadvantaged youth during the pandemic, (b) differences between age groups and (c) findings regarding associations with the school context and transition.

2. Materials and Methods

This rapid review was conducted following the items of the PRISMA protocol [12]. In order to develop an adequate search strategy, initial search terms were defined by means of categorization, derived from the research focus. These were tested and honed in an initial unsystematic search. A number of operators for the final database search were defined through this process. Depending on the options in the databases, the search was limited to the years 2020 to 2022 and to publications in German or English. The combinations were used differently depending on the database in order to achieve as many suitable hits as possible. All of them can be found in Appendix A Table A1.

Five databases were selected for the research process, covering health science, social science and psychosocial research spectrums. In addition to the German-language database LIVIVO, the international databases Pubmed, PSYINDEX, Embase and PsycInfo were used. The research took place from 1–8 February 2022.

2.1. Eligibility Criteria

The references have been reviewed for suitability and inclusion and exclusion criteria were defined beforehand. Criteria include the publication period, language, manuscript type, country, study population and outcome.

References were included if they were published after/since February 2020. The studies had to be conducted in industrialized/high-income countries or the results had to refer to countries comparable to Germany. In addition, a group of young people or adolescents who have an overlap with the target group between 12 and 21 years should be explicitly considered in the publication. Focus was on marginalized young people which here describes people affected by educational disadvantage and low socioeconomic status. Studies that addressed mental health as an outcome were included. These incorporate depressive and anxiety symptoms, substance use, COVID-19-related worries, well-being and life satisfaction as well as coping strategies, loneliness and suicidal ideation.

Studies were excluded if they only focused on physical outcomes like decrease in physical activity or obesity without mention of consequences for mental health or reference to COVID-19-related measures and their consequences for adolescents. Specifications were made regarding the manuscript types such as primary or secondary data analysis and reviews. Comments, letters to the editor or pre-publications were excluded. Further a full-text had to be available online.

2.2. Selection Process

For administration, the web-based software CADIMA was used. After the import of the records, the software removed duplicates, searched and uploaded PDFs automatically. Both were supplemented by manual verification.

After deletion of duplicates, a criteria list was set and checked jointly at the beginning of the title and abstract scan and a second time before the full-text scan. The title and abstract scan was performed by three reviewers on the remaining articles ($n = 2462$). 66% had to be rated parallel by two team members. This identified 213 full texts as relevant to the rapid review. For further delimitation, the inclusion criteria were sharpened, especially with regard to the age range. Four reviewers performed the full-text scan, two team members rated 50% of the records parallel. The most common exclusion criteria for the full-text search were considered to be age, type of publication (e.g., conference paper or commentary) and outcome (not specifically related to adolescent mental health).

Four reviewers conducted the selection process independently. Inconsistencies were checked throughout the process. Figure 1 shows the number of included and excluded articles at each step of the process.

2.3. Data Collection and Analysis

Data extraction was performed with systematic preparation along the outcome categories in CADIMA. Categories for analysis were chosen with regard to general information on the publications as well as the aim of this review: mental health in relation to health inequalities, differences between age groups, and specific mentions of schools regarding their function as well as the transition from school to work during adolescence. The extracted information was then analyzed comparatively along these focal points (see Tables 1–4). With regard to health inequalities, various data were compiled. For this article, the analysis focused on educational and socioeconomic disadvantage.

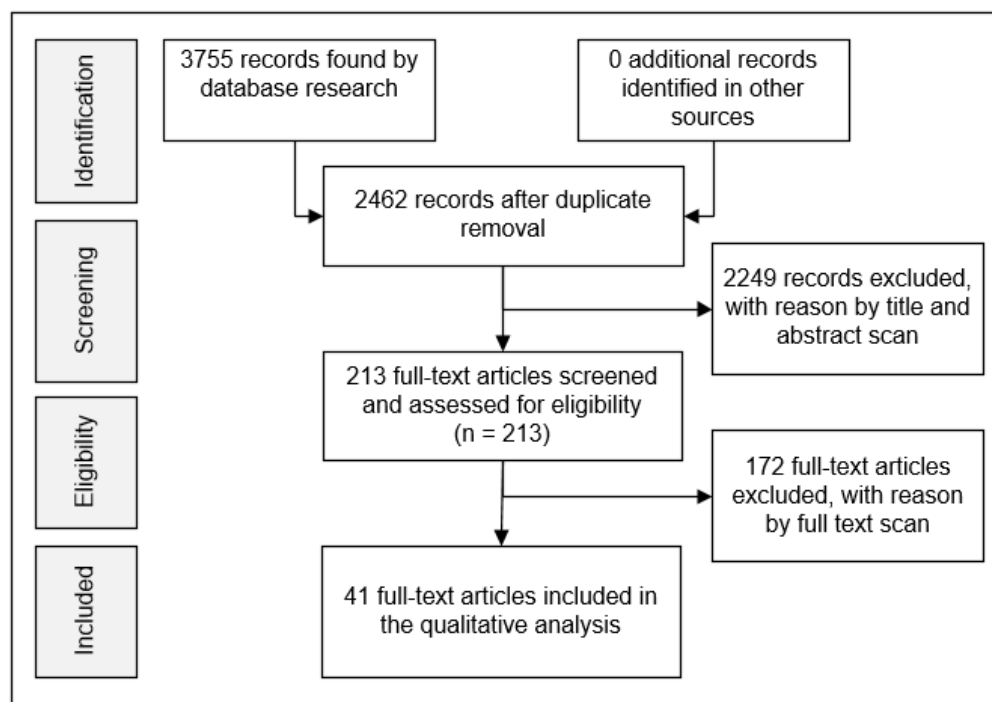


Figure 1. A PRISMA flow diagram of included full-text articles.

Table 1. An overview of the included full-text articles’ main characteristics in alphabetical order.

Authors (Year) [Reference]	Study Type	Country (ISO-CODE)	Research Focus (Considered Group) - All Related to the COVID-19 Pandemic -
Andrés et al. (2022) [13]	CS	ARG	Changes in symptomatology & positive emotions (C&A)
Bailin et al. (2021) [14]	CaS	USA	Social inequities (C&A)
Bélangier et al. (2021) [15]	LS	CAN	Effect on mental health (A)
Collier Villaume et al. (2021) [16]	LS	USA	Measure changes in perceived stress & mood (A)
Ellis et al. (2020) [17]	CS	CAN	Stress (daily behaviors) (A)
Engel de Abreu et al. (2021) [18]	CS	LUX, DEU, BRA	Well-being in different cultural contexts (C&A)
Ertanir et al. (2021) [19]	LS	CHE	Changes in mental health outcomes (C&A)
Gagné et al. (2021) [20]	LS	GBR	Psychological distress: long-term trends and changes in 2020 (A&YA)
Gazmararian et al. (2021) [21]	CS	GEO	Mental health impact on high school students
Hafstad et al. (2021) [22]	LS	NOR	Short-term psychological impact (A)
Hu & Qian (2021) [23]	LS	GBR	Mental health impact (A)
Jester & Kang (2021) [24]	LS	GBR	Perception of physical and mental health (A)
Juvonen et al. (2022) [25]	LS	USA	Role of friendships in alleviating social-emotional problems (YA)
Kaman et al. (2021) * [26]	CS	DEU	Mental health and quality of life (C&A)
Koenig et al. (2021) [27]	CS	DEU	Impact on mental health (A)
Landmann Szwarcwald et al. (2021) [28]	CS	BRA	Factors affecting the emotional well-being during the period of school closures (A)
Magklara et al. (2020) [29]	CS	GRC	Impact on mental health (C&A)

Table 1. Cont.

Authors (Year) [Reference]	Study Type	Country (ISO-CODE)	Research Focus (Considered Group) - All Related to the COVID-19 Pandemic -
McGuine et al. (2021) [30]	CS	USA	Health of athletes (A)
Myhr et al. (2021) [31]	CS	NOR	Changes in self-reported mental well-being (A)
Nagata et al. (2022) [32]	LS	USA	Evaluation of physical activity (A)
Naumann et al. (2021) [33]	LS	DEU	Mental health changes (A)
Parker et al. (2021) [34]	PS	USA	Black adolescents' experiences (i.a. challenges)
Pinchoff et al. (2020) [35]	CS	IND	Gender-specific differences knowledge, behavior and health effects (YA)
Prignitz et al. (2021) [36]	LS	DEU	Neg. thoughts (alcohol use & mindfulness) (A)
Ravens-Sieberer et al. (2021) * [37]	LS	DEU	Mental health & quality of life (C&A)
Ravens-Sieberer et al. (2021) * [38]	LS	DEU	Changes in health-related quality of life and mental health (risk and resources) (C&A)
Ravens-Sieberer et al. (2021) * [39]	CS	DEU	Health-related quality of life & mental health (C&A)
Rosenthal et al. (2021) [40]	CS	USA	Disparities in the mental health burden (YA)
Sarkadi et al. (2021) [41]	CS	SWE	Expressed worries (C&A)
Scott et al. (2020) [42]	QS	USA	Challenges during school closures & social-distancing policies (A)
Shah et al. (2020) [43]	R	**	Risk factors to mental health & solutions (C&A)
Swords et al. (2021) [44]	LS	USA	Changes in rumination during the initial transition to distance learning (A)
Tetreault et al. (2021) [45]	LS	USA	Factors associated with perceived changes in mood and anxiety (A, male)
Ulset et al. (2021) [46]	CS	NOR	Experiences, sociodemographic factors & infection rates (A)
Viola & Nunes (2021) [47]	R	**	Emotional, psychological and sleep quality consequences (C&A&P)
Vogel et al. (2021) [48]	LS	DEU	Well-being, media use & emotions (C&A)
Von Soest et al. (2020) [49]	LS	NOR	Life satisfaction and subjective well-being (A)
Wang et al. (2021) [50]	LS	USA	Parental employment status as influence factor for adolescents' daily affect (A)
Watkins-Martin et al. (2021) [51]	LS	CAN	Changes in depressive & anxiety symptoms (YA)
Wright & Wachs (2021) [52]	LS	USA	Perceived teacher support, self-isolation & negative health outcomes (A)
Zhu et al. (2021) [53]	CS	HKG	Associations between loneliness and gaming addiction behaviors (C&A)

Legend: CS = Cross-sectional Survey, CaS = Case Study, LS = Longitudinal Survey, R = Review, QS = Qualitative Survey, * = Publications refer to the same survey, data are analyzed with different focus, ** = Reviews have included studies from different countries; C = Child; A = Adolescents; YA = Young Adults.

Table 2. Outcomes of the included publications about the mental health effects on groups along the social gradient.

Negative Effect on	Disadvantage Through				Higher SES	No Difference
	SES	Parental Education (PE)	Living Conditions (LC)	Parental Employment		
Mood, emotional health	+ [23,25,28,38]	+ [16,26,39]	+ [26,38]	-	-	SES: [13,21]
Anxiety	x [22,40]	-	+ [19,51] x [30]	-	+ [45]	SES: [51] PE: [19]
Depression	+ [40] x [22,31]	-	+ [19,51] x [30]	+ [35]	-	SES: [33,51] PE: [19,33]
Loneliness	x [31]	-	-	-	-	-
Suicidal ideation	+ [40]	-	-	-	-	-
Stress	o [31] > [27]	+ [16]	+ [20]	-	-	-
Worries	+ [21] (+) [48]	-	-	-	-	LC: [41]
Psychosomatic complaints	-	-	-	-	-	PE: [26]
Negative consequences	+ [46]	-	-	-	-	-
Quality of life	+ [37]	+ [26]	+ [26,37] x [30]	-	-	-
Life satisfaction	= [49]	-	-	-	+ [49]	-
Subjective wellbeing	(x) [48]	-	+ [18]	-	-	-
Healthy behavior	+ [28]	-	-	-	-	-
Physical activity	+ [32]	-	x [30]	-	-	-
Leisure activities	-	-	-	-	+ [46]	-
Gaming addiction behavior	+ [53]	-	-	-	-	-
Family conflicts	-	-	-	+ [29,50]	-	-
Peer interaction problems	-	+ [26]	+ [26]	-	+ [23]	-

Legend: + Effect on item; x inequality like before the pandemic; = no change during the pandemic for this group, but constant (high) level; > decrease of inequality; (+) Effect not statistically significant.

Table 3. Outcomes of included studies along the different age groups in adolescence.

Outcome	Young Adolescence (Mean Age 12–13 Years)		Middle Adolescence (Mean Age 14–16 Years)		Older Adolescence (Mean Age 17–18 Years)		Young Adults (Mean Age 19–22 Years)	
	Negative Trend	Positive Trend	Negative Trend	Positive Trend	Negative Trend	Positive Trend	Negative Trend	Positive Trend
Mental health in general	-	[28]	[15,26]	-	[24,46]	[37]	[51]	-
Anxiety	[13]	[30]	[21,22,26]	-	[20,30]	-	[25,45,51]	[51]
Depression	[13]	-	[21,22,31,47]	[30]	[30,33]	-	[25,35,40,51]	-

Table 3. Cont.

Outcome	Young Adolescence (Mean Age 12–13 Years)		Middle Adolescence (Mean Age 14–16 Years)		Older Adolescence (Mean Age 17–18 Years)		Young Adults (Mean Age 19–22 Years)	
	Negative Trend	Positive Trend	Negative Trend	Positive Trend	Negative Trend	Positive Trend	Negative Trend	Positive Trend
Worries	-	[44]	[21]	-	-	[41,48]	-	-
Quality of life	-	[30]	[31,37]	-	[30]	-	[45]	-
Behavioral disorders	[13]	-	[23]	[23,37]	-	-	-	-
Social problems	[48]	-	[42]	[23,37]	[24]	-	[25,45]	[25,51]
Support	-	-	-	-	[48]	-	-	-
Loneliness	-	-	[17,21]	-	-	-	-	[25]
Suicidality	[52]	-	[17]	-	-	-	-	-
Substance use	-	-	[36]	-	-	-	-	-

Table 4. The school-related themes.

	Theme Description	Related Themes
School functions	<i>Social</i> : School as space for social encounter and joint activities [25,30,37,46]	Loneliness and Isolation [17,22,24,28,29,39,47,53] Connection with peers and friends [21,23,29,31,38,45] Socio-emotional and behavioral support [23,34,37]
	<i>Development</i> : School as a contributor toward the development of language, motor and social skills [47]	
	<i>Support</i> : School and professionals as support system and access point to basic services [31,39,47,52]	
		<i>Routine</i> : Changes in/loss of routine [28,31,47]
Future	<i>Short-term</i> : Worries/fears/concerns about the immediate future [17,34,42]	
	<i>Long-term</i> : Worries/fears/concerns about farther future [41,43]	
	<i>Other</i> : Greater hopelessness and worry about the future, especially in males [31]	General worries about future [39]
Virtual lessons	<i>Lesson design</i> : Virtual lessons and schoolwork (depending on volume and type) buffer family conflict and are related to lower depression scores [17,18,24]	Increased media usage [28]
	<i>Stress/burden</i> : More pressure and higher difficulty [39,42,48] vs. no changes in stress [19] vs. less rumination and reduced daily stressors [44]	
	<i>Participation</i> : Attendance and access to virtual lessons [14,37,48]	
Other	<i>Employment</i> : Precarious and no work related to increased distress [20]	
	<i>Transition</i> : Worse mental health during the COVID-19 pandemic compared to the transition out of high school [25]	

3. Results

A total of 41 full-text articles with different focuses on the topic of mental health of adolescents and young adults during the COVID-19 pandemic were included in the

analysis. After a short overview of the included publications, the results are presented along the focal points of analysis outlined in Section 2.3. Table 1 gives an overview of the included publications' main characteristics. A tabular overview of the overall results is provided in the Appendix A Table A2.

In total, two reviews and 39 surveys were included (16 cross-sectional, 20 longitudinal, four other). The included surveys collected data in 14 countries. The most frequently represented countries were the United States (12) and Germany (9). It should be noted that four of the nine included articles from Germany refer to the same survey (COPSY study). Other countries with more than one included full-text article were Norway (4), Great Britain (3), Canada (3) and Brazil (2).

The main research focus of the included studies were changes in mental health in general or in individual symptoms during the pandemic. Depending on the survey method, the sample sizes of the studies varied from three (case vignettes [14]) to 13,000 data sets (online survey [30]). Overall, most of the included full texts referred to data collected in 2020. Only two research groups collected data (exclusively) in spring 2021 [25,46] and one study collected data for the second time in winter 2020/2021 [37].

3.1. Health Inequalities

With a number of 32 studies, a large proportion of the included publications provided evidence on the extent to which the impact on mental health of adolescents and young adults varied along a social gradient. Table 2 provides an overview of the results on this sub-question/topic.

The researchers in the included studies collected various sociodemographic data, which they used to compare social and health inequalities. The comparative parameter SES was the most frequent, although this was collected in different ways (e.g., via 'eligibility for free and reduced-price lunch' [21] or via a combination of instruments like the Laucht-Index and the Family Affluence Scale (FAS) [27]). Often, comparisons were also made selectively by parental education or by living conditions. The latter has been summarized for conciseness and includes both limited space (like no access to a private room) and the environment (living in a deprived area or the county with the highest poverty level). Others collected parents' work status or whether they were able to work at home during the pandemic. Outcome parameters on adolescent mental health impacts varied widely, as seen by the diversity of research focus of the included publications in Table 1.

Twelve publications described that adolescents/young adults who had lower SES or were disadvantaged by other aspects experienced a greater effect on mental health issues. Of these, six described increased mental health problems, worse mood or emotional health status [16,23,25,26,28,38] and six others described more symptoms of depression among the disadvantaged youths [19,22,31,35,40,51]. Other outcomes for which disparity among adolescent health during the COVID-19 pandemic was found according to the socioeconomic gradient were stress [16,20,31], anxiety [19,22,40,51], worries [21,48] and suicidal ideation [40]. Some researchers with longitudinal studies describe that, according to their data, the inequality in anxiety, depression or loneliness is comparable to that existing before the pandemic [22,31,40].

In addition to burdens on mental health, some groups of researchers also examined the effect on well-being. Different disadvantages had a negative effect on youths' quality of life during the COVID-19 pandemic. Kaman et al. [26] noted this with regard to living conditions and parental education and Ravens-Sieberer et al. with regard to lower SES [38]. Similarly, effects on well-being [18] and generally negative consequences [46] due to disadvantage were found. Others see the disparity as well, but say it is comparable to pre-COVID-19 times in terms of quality of life [30], life satisfaction [49] and well-being [48].

In addition, two groups of researchers also related aspects of behavior to mental health. According to them, adolescents with lower SES had poorer health behaviors [28], significantly less physical activity [32] and exhibited more gaming addiction behaviors [53], which again affected their well-being and mental health. McGuine et al. [30] further

describe less physical activity in youths with deprived living conditions but conclude that this difference is comparable to pre-pandemic times. A few studies also point to increased interaction problems with peers [26] and family conflicts [29,50] for these young people.

In contrast, some researcher groups observed that adolescents with high SES were particularly affected by COVID-19. Tetreault et al. [45] describe increased anxiety and Von Soest et al. [49] that there were fewer adolescents in this group with high life satisfaction than before the pandemic. Comparatively, the scores of the more disadvantaged youths have remained the same and inequality has decreased. In addition, adolescents of middle or high socioeconomic status were most negatively affected in terms of participation in leisure activities compared to before the pandemic [46] and the research group of Hu and Qian [23] found that young people with high SES had more problems in peer interaction.

In some publications, researchers conclude, based on the available data, that there was no evidence or statistically significant differences due to disadvantage through lower parental education [19,26,33] or lower SES [13,33,51] in total or for individual items [21]. Sarkadi et al. [41] conclude that there was no evidence that living conditions (housing type or geographic location) influenced the incident of worries.

3.2. Mental Health in the Different Age Groups of Youth

To look more specifically at the age groups, the results of the studies were divided into four categories: (1) young adolescence (average age of 12–13 years), (2) middle adolescence (average age of 14–16 years), older adolescence (average age of 17–18 years) and young adults (average age of 19–22 years). In addition, studies were included that did not refer to a specific youth age, but had a broader age range, while still focusing on adolescents. Table 3 shows which studies researched something about the respective age group.

As a first finding from the included studies, it can be pointed out that none of the age groups considered proved to be particularly at risk (compared to other young people). Depending on which outcomes in relation to mental health were taken into account in the respective study, the authors arrive at different (sometimes contradictory) results. Central findings on the individual age groups are subsequently presented.

One of the studies [28] found that the prevalence of various mental health outcomes is generally lower among *younger adolescents*. However, there are contradictions in the specific outcomes: while one of the studies [13] found higher levels of depression and anxiety, other studies [30] found the opposite in their investigations (with regard to anxiety). Increased levels of depressive symptoms have also been found, particularly in relation to self-isolation [52]. Other negative effects in younger adolescents were observed mainly in relation to conduct disorders (impulsivity-inattention and aggression-irritability) [13] and changes on the peers/social support scale [48]. Also, a relationship between self-isolation and nonsuicidal self-harm, subjective health complaints was highlighted [52]. In contrast, one study reported rather positively on the perceived relief from stress among adolescents in this youngest age group [44]. In addition, this group had the highest health-related quality of life score [30].

The findings on the group of *middle adolescents* were largely more consistent and showed a significantly more negative picture of mental health. Two studies [15,26] report generally poor mental health in this age group. Several studies [21,22,26] have found that anxiety symptoms are high in this age group. Other outcomes such as worry [21], quality of life [31,37], loneliness [17,21], suicidality [17] and drug use [36] also showed deterioration.

However, there are also outcomes in this age group with contradictions within the individual studies: For example, a majority of studies conclude that respondents in middle adolescence tend to have more depressive symptoms [21,22,31,47], whereas McGuine et al. [30] observed the opposite. Further, while one study was able to highlight major challenges with regard to friendship [42], other studies observed fewer peer problems [37] and a stronger increase in prosocial tendencies [23]. It has also been found that behavioral problems among adolescents within this age group generally show a decline, but a greater increase in hyperactivity among these respondents was observed during the

pandemic [23]. In contrast, there is no outcome that consistently shows a positive trend without contradiction from several studies.

While *older adolescents* show a negative effect in the general trend of their mental health, there are contradictory results on specific outcomes. Two studies found a negative impact of the pandemic although the second points out that there were also positive effects (such as improved sleep quality) [25,46]. One of the studies observed the general mental health as positive and with fewer problems [37]. Two studies reported a higher prevalence of anxiety disorders [20,30], while another two studies found an increased prevalence of depressive symptoms [30] or an increase in these [33].

McGuine et al. [30] point to a lower quality of life in respondents of this age group compared to younger adolescents. In addition, this group is more burdened with family conflicts and a deterioration of their mental health due to the lack of social interactions [24]. Vogel et al. [48] also found a decline in perceived social support. The only positive outcome was the outcome “worries”, as adolescents in this age group were less worried about themselves, their friends and family [48] or about the pandemic itself [41] compared to younger youths.

The findings on the *young adults* group are not always consistent and show some contradictions. In the case of general health, one study highlighted a negative influence due to social isolation [51]. Within the individual, concrete outcomes, the included studies partly came to different results. Two of the studies found a decrease in anxiety symptoms [25,45]. However, the study by Watkins-Martin et al. [51] found that those respondents with the lowest pre-pandemic anxiety symptoms experienced an increase, while those with the highest pre-pandemic anxiety symptoms experienced a decrease. The study came to the same conclusion in relation to depressive symptoms, with living alone being found to be the most important negative influencing factor [51]. Findings on social problems are ambiguous in the oldest age group: on the one hand, a study found that respondents reported reduced closeness to family (especially respondents with perceived worsened mood or perceived anxiety) [45] and that most young adults reported being in contact with fewer friends, but on the other hand, this contact had a higher quality [22].

One study included found that age (within youths) was not significantly related to the likelihood of worrying thoughts, and all age groups considered expressed concern about their future [41]. In relation to gambling addiction, Zhu et al. [53] found that the relationship between loneliness and gambling addiction was similar across genders and age groups.

3.3. Impact on School, Future and Work of Young People

As schooling was strongly affected by restrictions during the pandemic, an unsurprisingly high number (32/41) of studies looked at the effects of these changed circumstances on youths' mental health. Table 4 shows a summary of themes brought up in the reviewed studies. The listed related themes were not directly connected to either mental health outcomes or school closure.

Many of the included studies directly and indirectly highlighted the importance of other functions of school that could not be fulfilled during the pandemic as well as the effects digital lessons had on students. Most prevalent were reports of increased mental health issues associated with experiencing loneliness or isolation [17,22,24,28,29,39,47,53], reduced social closeness and connection to peers and friends [21,23,29,31,38,45] as well as the absence of socio-emotional and behavioral support [34]. Cancellation of school activities [30], a decrease in contact with classmates [46] and an increase in peer problems [37] were prevalent during the pandemic. Zhu et al. [53] further connect loneliness to an increase in gaming addiction and highlight the importance of activities beside online gaming. Hu and Qian [23] report on a connection between pre-pandemic mental health and the need for good peer relationships during the pandemic. Adolescents with a worse mental health score before the pandemic reported higher prosocial tendencies and fewer peer problems, while a better mental health status pre-pandemic was associated with the opposite.

Ravens–Sieberer et al. [37], Hafstad et al. [22] and Juvonen et al. [25] all highlighted the importance of friendship and peer relationships as social support for the mental health of students. Better mental health scores during the pandemic, as reported by Bélanger et al. [15], were discussed as being a result of negative in-person school experiences. While Viola and Nunes [47] report on potential delays in language, motor and social skill development due to school closure, Juvonen et al. [25] conclude in their discussion that youths seem to be more adaptive to the circumstances during the COVID-19 pandemic.

Wright and Wachs [52] report that support by teachers can act as a buffer against suicidality. Moreover, Viola and Nunes [47] describe school and teachers to be an important part of students' support systems, especially with regard to a rising number in cases of domestic violence. Parents also reported a wish for more professional support [39]. This coincides with recommendations by a number of studies regarding access to counseling and mental health support in the education sector [19] through providing teachers and related professionals with the necessary skills to administer psychological first aid [21,34,37,41,43,52] and detect psychological and family issues early on [27,35]. On a more practical level, school was shown to be related to daily structure and routine, which affects sleep quality and mental health as well as access to basic services [28,31,47]. Ravens–Sieberer et al. [39] stress the necessity of a daily structure and Magklara et al. [29] discuss the changes in behavior and life due to school closure as an explanation for bad mental health outcomes.

In general, youths reported more worries about their future [39] as well as higher hopelessness [31] with a stronger effect for males. Students showed concern about their short-term future like the school year and their current peer relationships [17,42], as well as about their eventual return to school [34]. On a more long-term scale, worries regarded both academic future and employment chances as well as personal relationships, a fear of missing out on youth experiences and inactivity [41,43].

Studies showed different effects of the online schooling period on mental health. The research group of Ravens–Sieberer et al. [38,39] reported higher pressure and a perceived increase in the difficulty of digital classes compared to regular lessons. Challenges in academics and work habits were described by Scott et al. [42]. Ertanir et al. [19], on the other hand, reported no significant changes in school-related stress, while Swords [44] describes reduced daily stressors during the lockdown and less rumination. Even though it led to an increase in media usage [28], the attendance of digital lessons was shown to relate to a lower prevalence of depression symptoms, as well as to act as buffers for family conflict [17,24]. Low attendance and a difficult access to online classes were related to worse mental health outcomes [37], treatments and youths' and families' well-being [14]. One study showed females to have missed more of the online classes [48]. Further, volume and type of schoolwork were reported to have an effect on the subjective well-being of students [18]. Ertanir et al. [19] stress the importance of private spaces for academic merit and mental health.

Due to the focus of this study, only one included study reported on the relationship between youth employment, the COVID-19 pandemic and mental health. Gagné et al. [20] reported a connection between precarious or no work with increased distress. In Juvonen et al.'s comparison between mental health outcome of young adults during the transition out of high school and the pandemic, the latter was associated with worse mental health [25].

4. Discussion

4.1. Discussion of the Method

Overall, it should be noted that the studies of the included publications are very heterogeneous in various respects. They vary widely in both the form of study design and sample size, although data was collected through online survey in most (30/41) cases. Comparison of the results is also limited by the diversity of countries and their heterogeneity, both in the development of the pandemic (incidences and mortalities) and the political response to it.

As is evident in the presentation of results, although the objectives of the studies are somewhat similar, the operationalization of constructs varied. For example, anxiety was surveyed with individual questions/newly constructed items (e.g., [24]) or with comprehensive (and validated) survey tools (e.g., [13]). Some indicators of disadvantage (due to the vulnerability of the group under consideration) simply covered the poverty level of an entire neighborhood, whereas others collected comprehensive data on individual family resources. With regard to outcomes (e.g., mental health, well-being) as well as comparative parameters (e.g., SES, living conditions, age groups), a standardization was chosen in order to be able to compare and (in case of different outcomes) to enrich the results. This reduction has made it possible to obtain an overview of different aspects, identifying both confirming results as well as controversies.

Although one aim of this review was to collect results on the mental health and well-being of disadvantaged adolescents, the heterogeneity of the sample is not present in all included studies. There are study samples with particularly high parental education [27,29] and those that included particularly few adolescents from families with low SES (at [48]). Considering online surveys were the most common approach, a collection bias especially with severely disadvantaged groups needs to be considered.

The high number of hits during the preliminary search as well as the aim for comparability made the described selection of considered countries necessary. The results thus offer indications for countries with high incomes and illustrate that the mental health of young people and health inequalities are highly relevant, despite protective measures (e.g., for students).

Due to the nature of a rapid review, it was decided not to conduct a thorough critical appraisal. The quality criteria of the included publications were not controlled, but attention was paid to the presentation of a scientific methodological approach in the selection of the full texts. It should be noted that a vast number of included publications used established/validated measurement instruments.

The rapid review offers a chance to bring together different findings on the mental health of adolescents and young adults in the context of the relevant role of school. Due to the focus, the article highlights relevant aspects. With regard to inequalities, further issues such as gender, migration background or belonging to an ethnic minority should also be considered. In particular, in view of the existing findings on their influence on (mental) health during the COVID-19 pandemic (e.g., [26,32,35]). In terms of methodology, mainly quantitative data were found. It is not yet possible to answer how health develops and is maintained in the environment of young people during pandemics and to what extent this correlates with their range of options in labor market-oriented integration.

Furthermore, as Viola and Nunes [47] indicate in their discussion, the impact on the mental health of young people will only become apparent in the long term. Although this review compiled publications two years after the start of the pandemic, it should only be understood as a status report. Surprisingly, even now, many included publications collected data only on the first wave or, at most, on the first six months after the outbreak of the pandemic.

4.2. Discussion of the Results

The large number of records found during the search illustrates that many researchers have focused on the pandemic's impact on mental health over the past two years. Overall, the well-being of the population has deteriorated during this global crisis. For children and adolescents, in particular, the impact on mental health was great. We will subsequently discuss the various conspicuities along the socioeconomic disadvantage of adolescents, burdens for the different age stages in adolescence and the function of school for young people.

4.2.1. Health Disparities for Educationally and Socioeconomically Disadvantaged Youths

The different results of the included full texts illustrate the many levels on which burdens are higher for disadvantaged young people. It can be seen that disadvantage

during the COVID-19 pandemic has an especially negative impact on young people's mental health, well-being and health behaviors. Although some authors have been unable to demonstrate a difference, this is a cause for concern in light of the large number of other findings.

According to the results, both the socioeconomic status of the parental home and the living conditions are relevant influencing factors for the mental health of young people. The parents' educational level, on the other hand, was only surveyed and considered separately by four groups of authors [16,19,26,33], and only two found a negative influence of the lower parental educational level [16,26]. Likewise, the parents' employment status was rarely considered separately, but was found to have a negative influence (e.g., if the parents lost their jobs during the COVID-19 pandemic) [29,35,50]. Insecurity about the job situation was a particular issue during the pandemic. These findings are indications that both parental educational and employment status are important indicators that are often closely related to SES and living conditions.

Living conditions such as limited space or no private room for adolescents have a negative impact on mental health and well-being in an ongoing extreme situation, which is the lockdown in the pandemic. It is important to ensure that young people find places of retreat in their vulnerable phase of life. Here, the municipalities in their relevant networking role at the local level should find solutions in cooperation with different settings (such as youth organizations or sport clubs). The sector of social work is a relevant support structure in this context but also the accessibility and resources of low-threshold structures for young people to get help with mental health problems have become increasingly important.

The fact that the influence of the SES increased during the COVID-19 pandemic can probably also be explained by the fact that the burdens on the already disadvantaged families were increased (e.g., through the loss of a job). In addition, many compensatory measures on the part of the state were unavailable. For example, free or reduced-price meals in school cafeterias were suspended, and worries about food became a more real concern and burden for the families. In line with the Sustainable Development Goals of the World Health Organization [54], this inequality must be counteracted and interventions and structures should be developed that strengthen (health) equity also in times of crisis.

Even though these aspects were not compared in this review, inequalities caused by other factors, such as gender, ethnic or racial minority and migration background, should be considered and taken into account in the design of measures to alleviate inequalities.

Overall, four publications provide concrete evidence that comparatively greater burdens also occurred on the part of adolescents with high SES. It is important to emphasize at this point that the mental health of all adolescents and young adults surveyed in these studies deteriorated during the pandemic. Tetreault et al. [45] justify their findings by suggesting that adolescents from better backgrounds experienced more disruptions during the COVID-19 pandemic, including their leisure activities being eliminated, which fits with Ulset et al.'s results [46] and the significantly lower life satisfaction found by Von Soest et al. [49]. Nevertheless, they conclude that the score for the disadvantaged were unchanged in this respect, but still worse.

Finally, many authors conclude that disadvantage exists, according to some results it has increased, in some it has remained the same, in a few it has decreased somewhat. The studies highlight a problem that existed before and that will continue to exist after the COVID-19 pandemic, in some cases even more so. Despite all the existing efforts, measures are needed to strengthen the well-being of young people from disadvantaged backgrounds.

4.2.2. Mental Health Is Affected from Young Adolescence throughout Young Adulthood

The comparison of the different age groups illustrates that the COVID-19 pandemic has different effects on young people and that specific attention should be paid to the developmental tasks of the different age groups and their needs.

The results for younger adolescents tend to be clearer than those for older adolescents. This is probably related to their increasing independence. While younger people are still

more closely tied to the family and the school system, the circumstances of older adolescents and young adults are already more diverse. Both the housing situation (living alone or in shared housing or with a family) and the employment status increasingly vary. In this older adolescence, in the transition to adult life, supportive offers and structures that reach youths in different ways are needed. In the younger age group, on the other hand, most adolescents can still be reached through the classic settings.

In addition, critical self-perception increases with age, which could explain the increased prevalence of /increase in depressive symptoms [30,33] and their lower quality of life. Further, it can be assumed that older adolescents and young adults are under greater pressure with regard to their future prospects in terms of work. However, no concerns were raised among these young people in the included publications.

Another aspect to keep in mind when looking at the results of different age groups is how different young people of different ages view the concept of (mental) health and (mental) illness.

The different outcomes among researched youth can be explained by the subjective value of well-being and health. Health is considered in the context of living circumstances and moreover influenced by societal norms. Due to the pandemic's restrictions, coping strategies for developmental tasks like education, transition and labor market integration as well as well-being in the everyday life were hardly acquired. Most of the studies were conducted in 2020, within the first few months of the pandemic outbreak. Impacts can be seen in the studies, but it also seems understandable that the young people themselves were not able to present them in full during the first year of the pandemic.

Although the effects of health behavior are often not apparent and of interest until later in life [55], it is nevertheless important to start promoting health in adolescence.

4.2.3. School Has Many Important Functions for Young People

The results of the included studies highlight the importance to address mental health of youths. Different functions of school have been shown to relate closely to the mental health of young people with and without disadvantages. The positive impact of access and attendance of virtual classes indicate the importance of education in young people's lives.

School, however, just like youths, should not be reduced to education and academic merit or achievement. It serves many more functions in the life of youths that are directly or indirectly related to mental health and well-being. While the presented functions in these cases were related to school closures, this carries possible implications into other areas of youths' life (i.e., home, sports). Still, recommendations by authors clearly show the focus on school as an access point for mental health aid through the described social, routine and support functions. School closures have in many cases eliminated peers as the main social supporters for young people in everyday life, which has led to an increase of loneliness and worries—just as they eliminated the extra sets of eyes able to monitor youths' development and well-being as well as intervene if necessary.

Higher levels of worries about the future can reasonably be read as a challenge for the future transition into the workplace. As only Juvonen et al. [25] specifically addressed the transition out of school and into the workplace, no clear picture can be drawn from the results though. This gap rather indicates the necessity to address this time of transition in youths' lives in further research, as is intended by the *co*gesund* project.

4.2.4. Implications of the Results and Further Need for Research

While this paper provides an overview of the impact of the early phases of the COVID-19 pandemic on the mental health of disadvantaged youths, several gaps in research can be identified. Only few results address school- and work-related worries and mental health outcomes in relation to the transition to the workplace and young people's thoughts about the future. Furthermore, research is needed to answer how health develops and is maintained in the environment of young people during pandemics and to what extent this correlates with their range of options in labor market-oriented integration. Coping strategies and sup-

portive/protective factors should also be examined in order to develop recommendations on how these young people can be supported individually and structurally.

Considering the presented results, social contacts and networks like schools, social youth work and leisure time activities become a major aspect to support the mental health, personal development, education and transition especially for disadvantaged youths. This should be kept in mind by decision-makers and practitioners to serve as a starting point for real lifeworld-oriented approaches in health promotion among this target group. It highlights the need to further youth-oriented health promotion in school, labor market integration and social work settings. This holds true not only for future restrictions due to COVID-19, but also for the aim to alleviate health inequity as well.

5. Conclusions

In summary, the following aspects can be noted with regard to the research focus: The mental health of young people, especially disadvantaged ones, has deteriorated during the pandemic. In view of the heterogeneous research procedures, further efforts should be dedicated to developing international standards to ensure comparability (e.g., the Wellbeing Index in Canada) [56]. More in-depth research is needed to examine how the environmental circumstances and mental health status affect the developmental processes and opportunities of youths. A particular focus should be placed on coping strategies and structural development to empower youths. Based on this, measures should be developed that reach and strengthen young people in their living environments. In addition to the municipality, schools and other settings play a central role here.

The results underline the relevance of the next steps in the research project *co*gesund*, which focuses on future challenges for disadvantaged young people and the transition from school to work, where young people themselves as well as stakeholders of relevant structures contribute to the process.

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Appendix A

Table A1. Overview of the complete search strings by databases with indication of the number of records found.

Database (Date)	Complete Search Strings	Results after Duplicate Removal (Origin Results)
PubMed (1 February 2022)	((“young *” [Title/Abstract] OR “youth *” [Title/Abstract] OR “teen *” [Title/Abstract] OR “adolescent *” [Title/Abstract]) AND (“hasabstract” [All Fields] AND “loattrfull text” [Filter]) AND (“corona *” [Title/Abstract] OR “Covid *” [Title/Abstract]) AND (“hasabstract” [All Fields] AND “loattrfull text” [Filter])) AND (“health *” [Title/Abstract] OR “mental health” [Title/Abstract] OR “wellbeing” [Title/Abstract] OR “well-being” [Title/Abstract] OR “well-being” [Title/Abstract]) AND (“hasabstract” [All Fields] AND “loattrfull text” [Filter])) AND (“equity *” [Title/Abstract] OR “disadvant *” [Title/Abstract] OR “SES” [Title/Abstract] OR “socioeconomic *” [Title/Abstract] OR “inequality *” [Title/Abstract] OR “inequit *” [Title/Abstract] OR “marginaliz *” [Title/Abstract] OR “marginalis *” [Title/Abstract] OR “transition” [Title/Abstract]) AND (“hasabstract” [All Fields] AND “loattrfull text” [Filter])) AND ((fha [Filter]) AND (fft [Filter]) AND (English [Filter] OR german [Filter]))	Results: 324 (origin:828)
PSYINDEX (8 February 2022)	(Young * OR Youth * OR Teen * OR Adolescent *) AND (Corona * OR Covid *) AND (health * OR mental health OR wellbeing OR well being OR well-being) AND (Equity * OR disadvantage * OR SES OR Socioeconomic * OR inequality * OR inequit * OR marginaliz * OR marginalis * OR transition)	Results: 10 (origin: 12)
Embase (8 February 2022)	((Young * or Youth * or Teen * or Adolescent *) and (Corona * or Covid *) and (health * or mental health or wellbeing or well being or well-being)).mp. and (Equity * or disadvant * or SES or Socioeconomic * or inequality * or inequit * or marginaliz * or marginalis * or transition).ab,ot,ti. [mp = title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword heading word, floating subheading word, candidate term word]	Results: 655 (origin 1070)
PsycInfo (8 February 2022)	(Young * OR Youth * OR Teen * OR Adolescent *) AND (Corona * OR Covid *) AND (health * OR mental health OR wellbeing OR well being OR well-being) AND (Equity * OR disadvantage * OR SES OR Socioeconomic * OR inequality * OR inequit * OR marginaliz * OR marginalis * OR transition) [Title] OR (Young * OR Youth * OR Teen * OR Adolescent *) AND (Corona * OR Covid *) AND (health * OR mental health OR wellbeing OR well being OR well-being) AND (Equity * OR disadvantage * OR SES OR Socioeconomic * OR inequality * OR inequit * OR marginaliz * OR marginalis * OR transition) [Abstract]	Results: 125 (origin: 207)
LIVIVO (8 February 2022)	(Young * OR Youth * OR Teen * OR Adolescent *) AND (Corona * OR Covid *) AND (health * OR mental health OR wellbeing OR well being OR well-being) AND (Equity * OR disadvantage * OR SES OR Socioeconomic * OR inequality * OR inequit * OR marginaliz * OR marginalis * OR transition) [2020–2022; Language: English]	Results: 1348 (origin 1638)

Table A2. Overview of the main characteristics of the included full text articles.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Andrés et al. [13]	2022	CS	ARG	Web-based/online	Parents	1205	CBCL (Psychopathological Symptoms in Child/Adol.; Items of the Argentinian Version); PANAS (Positive affect scale (Children/Adol.), Affectivity of Parents); STAI (State-Trait Anxiety Inventory, Spanish adaptation); BDI-II (Depression Symptoms in Parents, Spanish Adaption); Five ad-hoc items (Concerns of Parents/about the Situation); Sociodemographic variables (Gender, Age, SES of the Family)	3–18 (12–14; 15–18)	/	2020.06	2020,06	2020,06
Bailin et al. [14]	2021	CaS	USA	Case vignettes	/	3	Patient records	10–15	13	/	“first three months of pandemic”	
Bélangier et al. [15]	2021	LS	CAN	Web-based/online	Youth	2099	10-item Center for Epidemiologic Studies Depression Scale Revised; 7-item Generalized Anxiety Disorder scale; Diener’s 8-item Flourishing Scale; (relationships, life purpose,...)	12–16	14.1 (2018)	2018.3; 2019.3	2020,05	2020,06
Collier Villaume et al. [16]	2021	LS	USA	Diaries	Youth	128	Questions to perceived stress; items adapted from the Positive and Negative Affect, Schedule (Daily mood); Question to parent education; Pandemic timing (creation of a variable to reflect pandemic timing)	13–17	15.2	2017.12–2020.3	2020,03	2020,07
Ellis et al. [17]	2020	CS	CAN	Web-based/online	Youth	1054	COVID-19 stress (8 items), Social media use (time), Time in daily activities (own scale), Depression (BSI), Loneliness (revised UCLA Loneliness Scale), Physical activity (Godin Leisure-Time Exercise Questionnaire); Sociodemographic variables (Age, Gender, Grade, Ethnicity, Living-Situation)	14–18	16.68	/	2020,04	2020,04
Engel de Abreu et al. [18]	2021	CS	LUX, DEU, BRA	Web-based/online	Youth	1515	Self-developed multi-language Questionnaire based on validated surveys on children’s SWB and the Organization for Economic Co-operation and Development Program for International Student Assessment SWB indicators: general life satisfaction, Satisfaction with school life during pandemic Situation with health and safety, neg. affects dur. pand., Worries 20 UV: activities, relationships, resources, policies, context	10–16	12.8	/	2020,05	2020,07

Table A2. Cont.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Ertanir et al. [19]	2021	LS	CHE	Web-based/online	Youth	319	HSCL-25 (Hopkins Symptoms Checklist) (Depression and Anxiety); ASQ-S (Adolescent Stress Questionnaire) (shortened; Home and School Stress); (COVID-19) Burden, Sociodemographic variables (Gender, immigrant status, SES)	/	12.67	2019 (9-10)	2020,08	2020,09
Gagné et al. [20]	2021	LS	GBR	Web-based/online	Youth	263	GHQ (General Health Questionnaire); economic activity & cohabitation with parents as transition variables; Sociodemographic variables (parental education, area deprivation, ethnic group, age, sex)	16–24	/	2009–2010; 2018; 2019	2020,05	2020,11
Gazmararian et al. [21]	2021	CS	GEO	Web-based/online	Youth	761	high school student COVID-19 survey (established survey instruments were used or adapted i.a. GAD-7, PHQ-2, UCLA loneliness scale) and school district demographic data (sex, race, ethnicity, free or reduced lunch eligibility, grade level)	(9th–12th grade) ~15–18	/	/	“shortly after closure of public schools”	
Hafstad et al. [22]	2021	LS	NOR	Web-based/online	Youth	3572	HSCL-10 (Hopkins Symptom Checklist) (Anxiety and Depression); Adoption of Pandemic Anxiety Scale (Pandemic-related worries); UCLA loneliness scale; Sociodemographic variables (age, gender, economic means of family, parents workforce status)	12–16	14.7	2019.2	2020,06	2020,06
Hu & Qian [23]	2021	LS	GBR	postal paper questionnaire	Youth	886	SDQ (Strengths and Difficulties Questionnaire)	10–16	14.26	prepandemic (not specified)	2020,07	2020,07
Jester & Kang [24]	2021	LS	GBR	Web-based/online	Youth	55	13 questions: 6 × mental health (sleep, exercise, appetite, caffeine, alcohol, productivity, headaches, indigestion and migraines); 7 × physical health (screentime, social media, creativity, socializing, conflict and harmony (living together peacefully rather than arguing))	15–18	17	/	2020,04	2020,06

Table A2. Cont.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Juvonen et al. [25]	2022	LS	USA	Web-based/online	Youth	1557	Friendship variables; Change in number of friends and in friendship quality, Reported change in contact with friends, Frequency and satisfaction of electronic communication, Social-emotional wellbeing, social anxiety (Items from the Social Anxiety Scale for Adolescents), depressive symptoms (items (CES-D)); Generalized anxiety (GAD-7); Loneliness; Other predictors (race/ethnicity, gender, sexual identity); currently in school or working; financial stress; living arrangements	20–24	22.5	2017–2019	2021,03	2021,05
Kaman et al. * [26]	2021	CS	DEU	Web-based/online	Child/Youth + Parents	1037	Cantril Ladder (Life satisfaction), KIDSCREEN-10 (Quality of life), SDQ (Strengths and Difficulties Questionnaire; mental abnormalities), PHQ-2 (depressive symptoms), Subscale des SCARED (generalized anxiety), HBSC Symptom Checklist (General. Health condition and psychosomatic complaints), PHQ-8 (Depression-parents), Family climate scale from Schneewind (Family cohesion); Sociodemographic variables (age, gender, migration, maternal education, marital status, housing situation)	11–17	13.77	/	2020,06	2020,07
Koenig et al. [27]	2021	CS	DEU	Web-based/online	Youth	324	SDQ (Strengths and Difficulties Questionnaire; emotional and behavioral problems); PHQ-A (depressive symptoms); Weight Concerns Scale (WCS) + Eating Disorder Examination-Questionnaire (EDE-Q) (Eating disorder symptoms); German version of the KIDSCREEN (KS-10) (Health-related quality of life); Paykel Suicide Scale (PSS) (suicidal thoughts and behavior); Laucht-Index + Family Affluence Scale (FAS) (sociodemographic confounds of sex and age, psychosocial risk factors, socioeconomic status)	12–20	14.93	2018.11-	2020,03	2020,08
Landmann Szwarcwald et al. [28]	2021	CS	BRA	Web-based/online	Youth	9470	Questionnaire with 54 multiple choice items	12–17		/	2020,06	2020,09

Table A2. Cont.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Magklara et al. [29]	2020	CS	GRC	Web-based/online	Parents	1232	Conditions of everyday life (conflicts within the family, the level of contact with friends and relatives and self-perceived psychological health of parents); psychological impact on children; <i>Sociodemographic variables</i> (parental sex, age, nationality, geographical area of current address, type of residential area, highest educational level attained and employment status; child's sex and age, family annual income, number of bedrooms, number of household members, parental tele-working and employment as a healthcare worker during the lockdown)	0–18 (13–18)	/	/	2020,03	2020,05
McGuine et al. [30]	2021	CS	USA	Web-based/online	Youth	13,002	<i>General Anxiety Disorder 7-item</i> (Anxiety), <i>Patient Health Questionnaire 9 items</i> (Depression), <i>Pediatric Functional Activity Brief Scale</i> (Physical Activity), <i>Pediatric Quality of Life Inventory 4.0</i> (Health-Related QoL)	13–19	16.3	/	2020,05	2020,05
Myhr et al. [31]	2021	CS	NOR	Web-based/online	Youth	2011	<i>Hopkins Symptom Checklist</i> (Depressive symptoms; constituting the “Depressive Mood Inventory”); individual questions (loneliness); <i>Cantril's ladder</i> (Life satisfaction); (43), individual questions (subjective quality of life)	13–16	/	2014 (spring)	2020,05	2020,05
Nagata et al. [32]	2022	LS	USA	Questionnaire, type unclear	Youth + Parents	5153	<i>COVID RRR Survey items</i> (adolescent-reported mental health, COVID-19-related worry, perceived stress, social support, coping behaviors); <i>Youth Risk Behavior Survey</i> and <i>International Physical Activity Questionnaire Short Form</i> (Physical Activity; adapted questionnaire); <i>Sociodemographic variables</i> (household income, parent education, age, gender, race/ethnicity)	10–14	12.5	2016–2018	2020,05	2020,05
Naumann et al. [33]	2021	LS	DEU	Web-based/online	Youth	854	<i>STDS</i> (State-Trait Depression Scale; German adaption; depression), <i>Sociodemographic variables</i> (employment situation, mother's education, financial situation, type of housing, place of residence)	16–19	/	2018.11–2019.07	2020,05	2020,07

Table A2. Cont.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Parker et al. [34]	2021	PS	USA	interview (video conference or telephone)	Youth	12	Interview: "students were asked to describe: (a) the challenges they experienced as a result of COVID-19, (b) how religious/spiritual practices helped them cope with COVID-related challenges, (c) additional coping strategies they used to manage their response to COVID-19, (d) how their school supported them in the early stages of COVID-19 (from March to June 2020 when school was still in session), and (e) their perceptions of the school and religious/spiritual-based support they received"	12–18	15.17	/	2020,06	2020,07
Pinchoff et al. [35]	2020	CS	IND	mobile-phone-based	Youth	1666	Questions to basic demographics, awareness of COVID-19 or coronavirus, knowledge of symptoms, risk groups and transmission, perceived risk, COVID-19 prevention behaviors, fears or concerns regarding the outbreak; household and individual needs under the government lockdown; measure of mental health was very simple and self-reported	18–24	/	/	2020,04	2020,04
Prignitz et al. [36]	2021	LS	DEU	Web-based/online	Youth	21	Coronavirus Health impact survey (CRISIS V0.1 + AUDIT (Alcohol Use Disorder Identification Test); MAAS-A (Mindful Attention Awareness Scale-Adolescents); Own added questions about negative thoughts and alcohol consumption	14–16	15.11	/	2020,04	2020,11
Ravens-Sieberer et al. * [37]	2021	LS	DEU	Web-based/online	Youth	1040	KIDSCREEN-10 (Health-related quality of life); SDQ with the subscales emotional problems, conduct problems, hyperactivity, and peer problems (mental health problems); SCARED (anxiety); CES-DC, PHQ-2 (depressive symptoms); HBSC-SCL (psychosomatic complaints)	7–17	12.67	2020.12–2021.1	2020,05	2020,06
Ravens-Sieberer et al. * [38]	2021	LS	DEU	Web-based/online	Youth	1586	KIDSCREEN-10 (Health-related quality of life); SDQ (mental health problems); SCARED (anxiety); CESDC (depression); Sociodemographic variables (age, gender, marital status, occupational status, parental education, migration background)	7–17	12.25	BELLA-Data	2020,05	2021,01
Ravens-Sieberer et al. * [39]	2021	CS	DEU	Web-based/online	Child/Youth + Parents	1040	KIDSCREEN-10 (Health-related quality of life); SDQ (mental health problems); SCARED (anxiety); CESDC (depression)	7–17 (11–17)	12.25	BELLA-Data	2020,05	2020,06

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Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Rosenthal et al. [40]	2021	CS	USA	Web-based/online	Youth	528	CES-D-10 (depression); GAD-7 (anxiety); MacArthur SSS (SES)	18–25	20.5	/	2020,05	2020,1
Sarkadi et al. [41]	2021	CS	SWE	Web-based/online	Youth + Parents with Children	1047	16 questions (for 13–18 year olds) in four different languages (Swedish, Arabic, English, and Somali); <i>Sociodemographic variables</i> (age, county, rural or urban living, housing type (rental flat, owned flat, or house)), acquaintance of someone with COVID-19; open-ended question (which is part of this paper): Is there anything that you are worried about when it comes to “Corona”?	4–18 (13–18)	15.12 (A)	/	not specified	
Scott et al. [42]	2020	QS	USA	Web-based/online	Youth	719	Survey consisted of validated or adapted instruments (not named) (sleep, changes in diet, demographic information, broad changes to mental health); Focus on the open-question “What are your three biggest challenges right now?”	14–19	16.28	/	2020,05	2020,05
Shah et al. [43]	2020	R	International **	div.	/	not specified	/	children, adolescents, young adults		/	/	/
Swords et al. [44]	2021	LS	USA	App-based	Youth	22	<i>Children’s depression inventory</i> (depressive symptoms) Two questions assessing state rumination	12–15	13.58	/	2020,01	2020,04
Tetreault et al. [45]	2021	LS	USA	Web-based/online	Youth	571	Questions: changes in mood, changes in anxiety, closeness to friends and family; Open-ended-question: major impact of the pandemic; <i>Independent variables</i> : Age, region of residence at baseline, race/ethnicity, household SES parent education (highest in the household, modeled as a college degree or higher vs. less); household income (modeled as \$50,000 or higher vs. less); baseline reporting about of feelings of depression or anxiety	(2015: 11–16) 16–21	18.5	2015–2016	2020,06	2020,06
Ulset et al. [46]	2021	CS	NOR	Web-based, whilst physically present at school	Youth	106,448	“devised questions specifically for this study about the adolescents’ own overall impressions of the pandemic”	(grade 8–13) ~13–19	/	/	2021,01	2021,05

Table A2. Cont.

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											Start	End
Viola & Nunes [47]	2021	R	International**	div.	/	96–91,000	/	0–17	/	/	2020	2021
Vogel et al. [48]	2021	LS	DEU	Web-based/online	Parents and Youth	257	KIDSCREEN-27 (scales on physical well-being, psychological well-being, peer and social support); self-developed questions regarding Corona and media consumption; parents: job situation during Corona + SES (combination of education + professional qualification of the parents + equalized disposable household income)	9–18	12.4/13.4	“study visit before the pandemic” (mean mid of 2019)	2020,03	2020,05
Von Soest et al. [49]	2020	LS	NOR	Web-based/online	Youth	8116	Cantril’s ladder (instrument for life satisfaction) + Questions to measure subjective well-being (based on a report from the Norwegian Directorate of Health) + Sociodemographic variables (Higher Education of the parents; number of books at home; Family Affluence Scale II (cars, computer, and holidays, own bedroom) + Concerns and changes to everyday life (...))	(Lower secondary school)	/	2018.04; 2020.02–03	2020,04	2020,05
Wang et al. [50]	2021	LS	USA	Personal	Parent-Youth dyads	447	Daily-Diary’s child affect: Positive and Negative Affect Scale for children; family relationship: Network of Relationship Inventory (conflict and parental warmth)	12–18	15	/	2020,05	2020,06
Watkins-Martin et al. [51]	2021	LS	CAN	Web-based/online	Youth	1039	Centre for Epidemiological Studies Depression Scale, short form (depression); GAD-7 (Generalized Anxiety Disorder 7-item scale, anxiety); own questionnaire assessing their worries about the pandemic	(2018:20) 22	22	2018 (spring)	2020,07	2020,08
Wright & Wachs [52]	2021	LS	USA	Web-based/online	Youth	467	Self-Isolation During the Beginning of the COVID-19 Pandemic (3 Items); Child and Adolescent Social Support Scale (Perceived Teacher Support); Suicidal Ideation (2 Items); Self Harm-Inventory (for the examination of Nonsuicidal Self-Harm); global psychosomatic symptom checklist of the Health and Behavior in School-Aged Children Symptom Checklist (Subj. Health Complaints); Center for Epidemiological Studies Depression Scale for Children	12–15	13.47	/	2020,04	2020,05

Table A2. Cont.

Author	Year of Publication	Study Type	Country (ISO-Code)	Survey Form	Respondent Group	Sample Size	Survey Tool(s)	Age (Years)	Mean Age (Years)	Period of Previous Surveys/Comparison Data	Period of Survey during COVID-19	
											Start	End
Zhu et al. [53]	2021	CS	HKG	questionnaires in class (in the presence of the research assistant)	Youth	2863	Chinese children's version of the 7-item Game Addiction Scale (GAS) (based on DSM-5); Gaming Time and Mode; Loneliness (single question); 4-item family subscale of the Multidimensional Scale of Perceived Social Support (MSPSS) (Parental support); Three items adapted from the Parental Monitoring Scale; Patient Health Questionnaire-9 (Depression); GAD-7 (Generalized Anxiety Disorder-7 scale); Sociodemographic variables (parental education, parents have a job or not, the number of household appliances, the number of e-learning devices, home internet accessibility, and the family having a car or not)	8–17	12.6	/	2020,06	2020,06

Legend: CS = Cross-sectional Survey, CaS = Case Study, LS = Longitudinal Survey, R = Review, QS = Qualitative Survey, * = Publications refer to the same survey, data are analyzed with different focus, ** = Reviews have included studies from different countries.

References

1. Edwards, J. *Protect a Generation: The Impact of COVID-19 on Children's Lives*; Save the Children International: London, UK, 2020.
2. Coles, B. *Joined-Up Youth Research, Policy and Practice: A New Agenda for Change?* Youth Work Press in partnership with Barnardo's: Leicester, UK, 2000; ISBN 0-86155-244-X.
3. Otto, H.-U.; Ziegler, H. *Enhancing Capabilities: The Role of Social Institutions, 1st ed*; Verlag Barbara Budrich: Leverkusen, Germany, 2013.
4. Ziegler, H. *Subjective Well-Being and Capabilities: Views on the Well-Being of Young Persons. Children and the Good Life*; Springer: Berlin/Heidelberg, Germany, 2011; pp. 91–101.
5. MacDonald, R.; Shildrick, T. Youth and Wellbeing: Experiencing Bereavement and Ill Health in Marginalised Young People's Transitions. *Sociol. Health Illn.* **2013**, *35*, 147–161. [[CrossRef](#)] [[PubMed](#)]
6. Richter, M.; Hurrelmann, K. Life Course Influences on Health and Health Inequalities: A Socialisation Perspective. *Z. Für Soziologie Der Erzieh. Und Sozial.* **2016**, *3*, 264–280.
7. Rademaker, A.L.; Holland, L.R. Subjective Experience of Health, Personal Health Resources and Beliefs: Supporting a Lifeworld Approach to Social Work in Youth Health. *Eur. J. Soc. Work* **2021**, *24*, 344–357. [[CrossRef](#)]
8. Rademaker, A.L.; Liel, K. New Paradigms in German Health Promotion—(New) Challenges for Social Work. *J. Czech. Slovak Soc. Work—ERIS J.* **2018**, *18*, 45–61.
9. Rajmil, L.; Hjern, A.; Boran, P.; Gunnlaugsson, G.; Kraus de Camargo, O.; Raman, S. Impact of Lockdown and School Closure on Children's Health and Well-Being During the First Wave of COVID-19: A Narrative Review. *BMJ Paediatr. Open* **2021**, *5*, e001043. [[CrossRef](#)] [[PubMed](#)]
10. Lucchini, M.; Gerosa, T.; Pancheva, M.; Pisati, M.; Respi, C.; Riva, E. Differential Effects of COVID-19 and Containment Measures on Mental Health: Evidence from ITA.LI-Italian Lives, the Italian Household Panel. *PLoS ONE* **2021**, *16*, e0259989. [[CrossRef](#)] [[PubMed](#)]
11. Cizek, B.; Kapella, O.; Steck, M. *Entwicklungstheorie II: Adoleszenz*; Working Paper/Österreichisches Institut für Familienforschung, 49; Social Science Open Access Repository: Wien, Austria, 2005; Available online: <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-57916-0> (accessed on 8 January 2022).
12. Page, M.J.; McKenzie, J.E.; Bossuyt, P.M.; Boutron, I.; Hoffmann, T.C.; Mulrow, C.D.; Shamseer, L.; Tetzlaff, J.M.; Akl, E.A.; Brennan, S.E.; et al. The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews. *BMJ* **2021**, *372*, n71. [[CrossRef](#)]
13. Andrés, M.L.; Galli, J.I.; Del Valle, M.; Vernucci, S.; López-Morales, H.; Gelpi-Trudo, R.; Canet-Juric, L. Parental Perceptions of Child and Adolescent Mental Health During the COVID-19 Pandemic in Argentina. *Child Youth Care Forum* **2022**, 1–31. [[CrossRef](#)]
14. Bailin, A.; Burton, S.; Rego, S.; Alpert, J.; Pimentel, S. Integrating Advocacy for Marginalized Children and Families Into Evidence-Based Care During COVID-19: Clinical Vignettes. *Cogn. Behav. Pr.* **2021**, *28*, 701–715. [[CrossRef](#)]
15. Bélanger, R.E.; Patte, K.A.; Leatherdale, S.T.; Gansaonré, R.J.; Haddad, S. An Impact Analysis of the Early Months of the COVID-19 Pandemic on Mental Health in a Prospective Cohort of Canadian Adolescents. *J. Adolesc. Health* **2021**, *69*, 917–924. [[CrossRef](#)]
16. Collier Villaume, S.; Stephens, J.E.; Nwafor, E.E.; Umaña-Taylor, A.J.; Adam, E.K. High Parental Education Protects Against Changes in Adolescent Stress and Mood Early in the COVID-19 Pandemic. *J. Adolesc. Health* **2021**, *69*, 549–556. [[CrossRef](#)] [[PubMed](#)]
17. Ellis, W.E.; Dumas, T.M.; Forbes, L.M. Physically Isolated but Socially Connected: Psychological Adjustment and Stress Among Adolescents During the Initial COVID-19 Crisis. *Can. J. Behav. Sci./Rev. Can. Des. Sci. Du Comport.* **2020**, *52*, 177–187. [[CrossRef](#)]
18. Engel de Abreu, P.M.J.; Neumann, S.; Wealer, C.; Abreu, N.; Coutinho Macedo, E.; Kirsch, C. Subjective Well-Being of Adolescents in Luxembourg, Germany, and Brazil During the COVID-19 Pandemic. *J. Adolesc. Health* **2021**, *69*, 211–218. [[CrossRef](#)]
19. Ertanir, B.; Kassis, W.; Garrote, A. Longitudinal Changes in Swiss Adolescent's Mental Health Outcomes from Before and During the COVID-19 Pandemic. *Int J. Env. Res. Public Health* **2021**, *18*, 12734. [[CrossRef](#)]
20. Gagné, T.; Nandi, A.; Schoon, I. Time Trend Analysis of Social Inequalities in Psychological Distress Among Young Adults Before and During the Pandemic: Evidence from the UK Household Longitudinal Study COVID-19 Waves. *J. Epidemiol. Community Health* **2021**, *76*, 421–427. [[CrossRef](#)] [[PubMed](#)]
21. Gazmararian, J.; Weingart, R.; Campbell, K.; Cronin, T.; Ashta, J. Impact of COVID-19 Pandemic on the Mental Health of Students From 2 Semi-Rural High Schools in Georgia. *J. Sch. Health* **2021**, *91*, 356–369. [[CrossRef](#)] [[PubMed](#)]
22. Hafstad, G.S.; Sætren, S.S.; Wentzel-Larsen, T.; Augusti, E.-M. Adolescents' Symptoms of Anxiety and Depression Before and During the COVID-19 Outbreak: A Prospective Population-based Study of Teenagers in Norway. *Lancet Reg. Health Eur.* **2021**, *5*, 100093. [[CrossRef](#)] [[PubMed](#)]
23. Hu, Y.; Qian, Y. COVID-19 and Adolescent Mental Health in the United Kingdom. *J. Adolesc. Health* **2021**, *69*, 26–32. [[CrossRef](#)]
24. Jester, N.; Kang, P. COVID-19 Pandemic: Is Teenagers' Health in Crisis?: An Investigation into the Effects of COVID-19 on Self-reported Mental and Physical Health of Teenagers in Secondary Education. *Public Health Pr.* **2021**, *2*, 100099. [[CrossRef](#)]
25. Juvonen, J.; Lessard, L.M.; Kline, N.G.; Graham, S. Young Adult Adaptability to the Social Challenges of the COVID-19 Pandemic: The Protective Role of Friendships. *J. Youth Adolesc.* **2022**, *51*, 585–597. [[CrossRef](#)]
26. Kaman, A.; Otto, C.; Adedeji, A.; Devine, J.; Erhart, M.; Napp, A.-K.; Becker, M.; Blanck-Stellmacher, U.; Fertmann, R.; Saier, U.; et al. Belastungserleben und psychische Auffälligkeiten von Kindern und Jugendlichen in Hamburg während der COVID-19-Pandemie: Ergebnisse der COPSY-Studie-Hamburg. *Nervenheilkunde* **2021**, *40*, 319–326. [[CrossRef](#)]

27. Koenig, J.; Kohls, E.; Moessner, M.; Lustig, S.; Bauer, S.; Becker, K.; Thomasius, R.; Eschenbeck, H.; Diestelkamp, S.; Gille, V.; et al. The Impact of COVID-19 Related Lockdown Measures on Self-Reported Psychopathology and Health-Related Quality of Life in German Adolescents. *Eur. Child. Adolesc. Psychiatry* **2021**, 1–10. [[CrossRef](#)] [[PubMed](#)]
28. Szwarcwald, C.L.; Malta, D.C.; Barros, M.B.d.A.; de Souza Júnior, P.R.B.; Romero, D.; de Almeida, W.d.S.; Damacena, G.N.; Werneck, A.O.; da Silva, D.R.P.; Lima, M.G.; et al. Associations of Sociodemographic Factors and Health Behaviors with the Emotional Well-Being of Adolescents during the COVID-19 Pandemic in Brazil. *Int. J. Env. Res. Public Health* **2021**, *18*, 6160. [[CrossRef](#)]
29. Magklara, K.; Lazaratou, H.; Barbouni, A.; Poulas, K.; Farsalinos, K.; Coronavirus Greece Research Group. Impact of COVID-19 Pandemic and Lockdown Measures on Mental Health of Children and Adolescents in Greece. *medRxiv* **2020**. [[CrossRef](#)]
30. McGuine, T.A.; Biese, K.M.; Petrovska, L.; Hetzel, S.J.; Reardon, C.; Kliethermes, S.; Bell, D.R.; Brooks, A.; Watson, A.M. Mental Health, Physical Activity, and Quality of Life of US Adolescent Athletes During COVID-19-Related School Closure and Sport Cancellations: A Study of 13000 Athletes. *J. Athl Train.* **2021**, *56*, 11–19. [[CrossRef](#)]
31. Myhr, A.; Naper, L.R.; Samarawickrema, I.; Vesterbekkmo, R.K. Impact of COVID-19 Pandemic Lockdown on Mental Well-Being of Norwegian Adolescents During the First Wave—Socioeconomic Position and Gender Differences. *Front. Public Health* **2021**, *9*, 717747. [[CrossRef](#)]
32. Nagata, J.M.; Cortez, C.A.; Dooley, E.E.; Iyer, P.; Ganson, K.T.; Pettee Gabriel, K. Moderate-to-Vigorous Intensity Physical Activity Among Adolescents in the USA During the COVID-19 Pandemic. *Prev. Med. Rep.* **2022**, *25*, 101685. [[CrossRef](#)]
33. Naumann, E.; von den Driesch, E.; Schumann, A.; Thönnissen, C. [Increase of Depressive Symptoms Among Adolescents During the First COVID-19 Lockdown in Germany: Results from the German Family Panel Pairfam]. *Bundesgesundheitsblatt Gesundh. Gesundh.* **2021**, *64*, 1533–1540. [[CrossRef](#)]
34. Parker, J.S.; Haskins, N.; Lee, A.; Hailemeskel, R.; Adepoju, O.A. Black Adolescents' Perceptions of COVID-19: Challenges, Coping, and Connection to Family, Religious, and School Support. *Sch. Psychol.* **2021**, *36*, 303–312. [[CrossRef](#)]
35. Pinchoff, J.; Santhya, K.G.; White, C.; Rampal, S.; Acharya, R.; Ngo, T.D. Gender Specific Differences in COVID-19 Knowledge, Behavior and Health Effects Among Adolescents and Young Adults in Uttar Pradesh and Bihar, India. *PLoS ONE* **2020**, *15*, e0244053. [[CrossRef](#)]
36. Prignitz, M.; Guldner, S.; Nees, F. Adolescence Alcohol Use Behaviours During the COVID-19 Pandemic and the Role of Mindfulness. *Sucht* **2021**, *67*, 287–297. [[CrossRef](#)]
37. Ravens-Sieberer, U.; Kaman, A.; Erhart, M.; Otto, C.; Devine, J.; Löffler, C.; Hurrelmann, K.; Bullinger, M.; Barkmann, C.; Siegel, N.A.; 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. *Eur. Child Adolesc. Psychiatry* **2021**, 1–14. [[CrossRef](#)] [[PubMed](#)]
38. Ravens-Sieberer, U.; Kaman, A.; Erhart, M.; Devine, J.; Schlack, R.; Otto, C. Impact of the COVID-19 Pandemic on Quality of Life and Mental Health in Children and Adolescents in Germany. *Eur. Child Adolesc. Psychiatry* **2022**, *31*, 879–889. [[CrossRef](#)] [[PubMed](#)]
39. Ravens-Sieberer, U.; Kaman, A.; Otto, C.; Adedeji, A.; Napp, A.K.; Becker, M.; Blanck-Stellmacher, U.; Löffler, C.; Schlack, R.; Hölling, H.; et al. [Mental Health and Psychological Burden of Children and Adolescents During the First Wave of the COVID-19 Pandemic-Results of the COPSY Study]. *Bundesgesundheitsblatt Gesundh. Gesundh.* **2021**, *64*, 1512–1521. [[CrossRef](#)]
40. Rosenthal, S.R.; Pearlman, D.N.; Field, M.A.; Sammartino, C.J.; Noel, J.K. Inequities Laid Bare: The Mental Health of Young Adults in Rhode Island During the COVID-19 Pandemic. *Rhode Isl. Med. J.* **2021**, *104*, 36–41.
41. Sarkadi, A.; Sahlin Torp, L.; Pérez-Aronsson, A.; Warner, G. Children's Expressions of Worry During the COVID-19 Pandemic in Sweden. *J. Pediatr. Psychol.* **2021**, *46*, 939–949. [[CrossRef](#)]
42. Scott, S.R.; Rivera, K.M.; Rushing, E.; Manczak, E.M.; Rozek, C.S.; Doom, J.R. "I Hate This": A Qualitative Analysis of Adolescents' Self-Reported Challenges During the COVID-19 Pandemic. *J. Adolesc. Health* **2020**, *68*, 262–269. [[CrossRef](#)]
43. Shah, K.; Mann, S.; Singh, R.; Bangar, R.; Kulkarni, R. Impact of COVID-19 on the Mental Health of Children and Adolescents. *Cureus* **2020**, *12*, e10051. [[CrossRef](#)]
44. Swords, C.M.; Lecarie, E.K.; Doane, L.D.; Hilt, L.M. Psychological Well-Being of Ruminative Adolescents During the Transition to COVID-19 School Closures: An EMA Study. *J. Adolesc.* **2021**, *92*, 189–193. [[CrossRef](#)]
45. Tetreault, E.; Teferra, A.A.; Keller-Hamilton, B.; Shaw, S.; Kahassai, S.; Curran, H.; Paskett, E.D.; Ferketich, A.K. Perceived Changes in Mood and Anxiety Among Male Youth During the COVID-19 Pandemic: Findings from a Mixed-Methods Study. *J. Adolesc. Health* **2021**, *69*, 227–233. [[CrossRef](#)]
46. Ulset, V.S.; Bakken, A.; von Soest, T. Adolescents' Assessments of Consequences of the Pandemic After one Year of COVID-19 Restrictions. *Tidsskr. Nor. Laegeforen.* **2021**, 141. [[CrossRef](#)]
47. Viola, T.W.; Nunes, M.L. Social and Environmental Effects of the COVID-19 Pandemic on Children. *J. Pediatr. (Rio J.)* **2022**, *98* (Suppl. 1), 4–12. [[CrossRef](#)] [[PubMed](#)]
48. Vogel, M.; Meigen, C.; Sobek, C.; Ober, P.; Igel, U.; Körner, A.; Kiess, W.; Poulain, T. Well-Being and COVID-19-Related Worries of German Children and Adolescents: A Longitudinal Study from Pre-COVID to the End of Lockdown in Spring 2020. *JCPP Adv.* **2021**, *1*, e12004. [[CrossRef](#)] [[PubMed](#)]
49. Soest, T.V.; Bakken, A.; Pedersen, W.; Sletten, M.A. Life Satisfaction Among Adolescents Before and During the COVID-19 Pandemic. *Tidsskr. Nor. Laegeforen.* **2020**, 140. [[CrossRef](#)]

50. Wang, M.-T.; Henry, D.A.; Del Toro, J.; Scanlon, C.L.; Schall, J.D. COVID-19 Employment Status, Dyadic Family Relationships, and Child Psychological Well-Being. *J. Adolesc. Health* **2021**, *69*, 705–712. [[CrossRef](#)]
51. Watkins-Martin, K.; Orri, M.; Pennestri, M.H.; Castellanos-Ryan, N.; Larose, S.; Gouin, J.P.; Ouellet-Morin, I.; Chadi, N.; Philippe, F.; Boivin, M.; et al. Depression and Anxiety Symptoms in Young Adults Before and During the COVID-19 Pandemic: Evidence from a Canadian Population-Based Cohort. *Ann. Gen. Psychiatry* **2021**, *20*, 42. [[CrossRef](#)]
52. Wright, M.F.; Wachs, S. Self-Isolation During the Beginning of the COVID-19 Pandemic and Adolescents' Health Outcomes: The Moderating Effect of Perceived Teacher Support. *Sch. Psychol.* **2022**, *37*, 47–53. [[CrossRef](#)]
53. Zhu, S.; Zhuang, Y.; Lee, P.; Li, J.C.-M.; Wong, P.W.C. Leisure and Problem Gaming Behaviors Among Children and Adolescents During School Closures Caused by COVID-19 in Hong Kong: Quantitative Cross-Sectional Survey Study. *JMIR Serious Games* **2021**, *9*, e26808. [[CrossRef](#)]
54. World Health Organization. *Regional Office for Europe. Concept Note. Assessment Tool for Governance for Health and Well-Being*; WHO: Geneva, Switzerland, 2019.
55. Homfeldt, H.G. Gesundheit. In *Handbuch Qualitative Methoden in der Sozialen Arbeit*; Bock, K., Miethe, K., Eds.; Verlag Barbara Budrich: Opladen & Farmington Hills, MI, USA, 2010; pp. 124–131.
56. Muhajarine, N.; Labonte, R.; Winqvist, B.D. The Canadian Index of Wellbeing: Key Findings From the Healthy Populations Domain. *Can. J. Public Health* **2012**, *103*, e342–e347. [[CrossRef](#)]