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The effects of Covid-19 on young people's mental health and psychological well-being An updated literature review

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1. Introduction

Research examining the effects of the Covid-19 pandemic on the population from spring 2020 to spring 2022 shows a strong impact on the mental health and psychological well-being of young people in Europe. Although much research has been conducted, the immediate as well as the long-term psychosocial consequences of the pandemic remain without clear understanding (Baumann 2021). This report emphasises the significant mental health effects the pandemic has had on young people in Europe according to recent research, including meta-analyses and special issues of Covid-19 related journals. The rise in demand for mental health services among young people is another reason necessitating this report.

Aims of the report

Following the work of Mastrotheodoros (2021) published by the Partnership between the European Commission and the Council of Europe in the field of Youth, this report is an updated literature review of studies focusing on the effects of the Covid-19 pandemic on young people's mental health and psychological well-being in Europe. The report presents an overview of the most recent research on the impact of the Covid-19 pandemic on adolescents' and young people's mental health and psychological well-being, as well as an increase in seeking mental health services. The age group is restricted to ages from approximately 12 to 29 years, covering both adolescence and young adulthood. The report also provides some important distinctions regarding whether the studies are longitudinal or entail more than one wave of data collection. Additionally, two questions are investigated more specifically. First, what are the possible mediators, that is, concepts or variables that might be considered responsible for the effects of

the pandemic on mental health? In other words, why does the pandemic affect young people's mental health, and what are the mechanisms bringing about such effects? Second, what are the possible moderators, that is, concepts or variables that might indicate for whom the effects of the pandemic on mental health are more pronounced? Who is more vulnerable, or are there any characteristics that make some people more vulnerable compared to others? The final section of the report focuses on policy and practice. How has the youth sector responded to the current mental health crisis and what are some recommendations for policy to foster young people's mental health during and after the pandemic?

2. Young people's mental health during the pandemic

Even though the pandemic has been a stressful, novel situation for most people in the world, it has been especially distressing for young people. Compared to adults over 30 years of age, young adults up to 29 years old have been found to be more concerned about the effects the pandemic might have on their mental health and well-being (Ranta et al. 2020). Similarly, stress levels and anxiety have been significantly higher among young adults compared to older people (Czeisler et al. 2020). Most importantly, research has shown the effects of the pandemic on young people's mental health, implying that they might be a particularly vulnerable group.

2.1. Increases in mental health symptoms

Several empirical studies indicate that young people have experienced considerable mental health difficulties during the pandemic. Meta-analytic research screens thousands of published studies and then empirically synthesises the collective findings of several of them, allowing for more solid conclusions. Recent meta-analytic evidence screening more than 8 000 published

articles and synthesising the results of about 77 of them showed that, on average, at least one in four young people (25.2%) show clinically elevated symptoms of depression, and at least one in five (20.5%) show clinically elevated symptoms of anxiety (Racine et al. 2021; Santomauro et al. 2021). These figures imply that young people experience at least twice as many psychological difficulties compared to before the pandemic (pre-pandemic levels were 12.9% and 11.6%, for depression and anxiety, respectively). Importantly, these meta-analyses noted that younger people were more strongly affected by the pandemic than older people (Santomauro et al. 2021), and the effects on mental health increased over time, with higher impact on mental health as the pandemic continued (Racine et al. 2021). This result implies that there is a continuing effect of the pandemic on young people's mental health.

Longitudinal data in empirical research contribute to understanding whether the pandemic has affected young people's mental health. Such methodologies follow the same participants over time and can, therefore, track potential changes in mental health. Studies that started before the Covid-19 global outbreak and continued collecting data during the pandemic are particularly suited to offer insights into the degree that the pandemic impacts on young people's mental health. These studies can compare the mental health levels of the same participants during and before the pandemic.

Research using longitudinal methodology shows decreases in overall well-being and increases in mental health difficulties during the pandemic. For example, university students' social connections and social networks were negatively affected, assessed by social interaction and study collaboration (Elmer et al. 2020). Social isolation increased, and emotional support decreased, which was accompanied by increased symptoms of depression and anxiety. Several

other longitudinal studies show increased depressive symptoms, worsened mental health, increased loneliness, and increased domestic violence, for adolescents and young adults, from pre-pandemic times to during the pandemic (Alt et al. 2021; Hawes et al. 2021; Romm et al. 2021; Steinhoff et al. 2021; Thorisdottir et al. 2021). In addition, the pandemic has been associated with decreased school engagement and increased school burnout among young people (Salmela-Aro et al. 2021). University students have had to cope with online learning during the pandemic which contributed to increasing burnout rates and decreased school engagement throughout the pandemic (Salmela-Aro et al. 2022). Similarly, the study of Fialho and colleagues (2021) on university students in Germany investigated both pandemic related and study condition changes on young people's depressive symptoms. These perceived conditions measured by academic stress and academic satisfaction were found to be associated with mental health: better study conditions were associated with fewer depressive symptoms.

The duration of the pandemic is also an important factor to consider regarding changes in young people's mental health. Most published studies have used data from the first wave or first year of the pandemic. For example, an extensive review of Aknin and colleagues (2022) on data collected during the first year of the pandemic found that anxiety, depression and distress increased in the early stages of the pandemic especially among younger people. Some researchers have, however, critiqued those studies arguing that the first wave of the pandemic was a shock to most people resulting in an acute and temporary inflation in mental health problems that might later withdraw to pre-pandemic levels (Daly and Robinson 2022; Robinson et al. 2022). Thus, newer studies including data from more than the first wave are needed to better understand how young people's mental health might fluctuate along the waves of the

pandemic. The few studies employing such a method offer nuance to what we know about young people's mental health during the pandemic. Overall, the longer the pandemic duration and the ensuing restrictive measures, the worse the effect on mental health. For example, young people with clinically elevated psychological symptoms (anxiety, depression, stress) showed larger increases in symptoms during the second pandemic wave (January 2021) compared to the first (April 2020) (Bouter et al. 2022).

Subjective pandemic-related stress and worry may also exacerbate adjustment difficulties over time. For example, in a study of Dutch early adolescents, individuals who were more worried about the pandemic, being infected by the virus and being concerned about how the pandemic harms mental and physical health, experienced a stronger increase in internalising symptoms (Bernasco et al. 2021). Similarly, Wright and colleagues (2021) found that fear of the impact of the virus on health was associated with poorer adolescent mental health.

2.2. Improved mental health for some young people

Even though most studies document negative effects of the pandemic on young people's mental health, there are exceptions. For example, no pandemic-related changes in adolescent stress as well as a decrease in daily irritability were found in the study of Janssens and colleagues (2021). Improvements in mental health during the pandemic were also indicated by decreases in anxiety (Hollenstein et al. 2021) and internalising symptoms (Bernasco et al. 2021) during the pandemic, compared to the pre-pandemic time. In addition, in a clinical sample of psychologically troubled adolescents, internalising and externalising problems decreased during the first months of the pandemic compared to before the pandemic (Di Giunta et al. 2021). Similarly, in the study by Bouter and colleagues (2022) mentioned above, most adolescents

remained stable in their psychological symptoms throughout the pandemic. Furthermore, some adolescents in that same sample even showed improvements in their mental health symptoms during the first two pandemic waves. These positive changes during the pandemic might emerge because young people did not have to go to school and be forced to have social contacts, two important triggers of stress and irritability for youth (Di Giunta et al. 2021; Janssens et al. 2021). This way, youth with externalising behaviours, for example, had far fewer chances to behave in such a problematic way.

Such findings offer some nuance to understanding what the effect of the pandemic is on young people's mental health, and call for further studies to better understand how, for whom and under what conditions the effects of the pandemic are more troublesome.

3. Why the pandemic affects young people's mental health: looking for mediators

One step further in understanding the effects of the pandemic on young people's mental health is research that tries to uncover mechanisms whereby such effects are exerted. Several empirical studies have tried to understand the pathways by which the pandemic has affected young people's mental health. Some variables that have attracted empirical attention as candidates for explaining why the pandemic affects young people's mental health are loneliness, perceived stress and coping.

In their developmental transition to adulthood, adolescents and young adults strive for autonomy while also having a prominent need to belong, and therefore engage increasingly with peers outside the family system. Following the restrictions imposed as a response to the pandemic, young people, along with the general population, were confined to stay at home, and were therefore largely taken away from opportunities to spend time with friends and

peers, leading to increased loneliness (Janssens et al. 2021). Decreased social contacts have been found to be one major reason why the pandemic has affected young people's mental health (Sabato et al. 2021). The fewer (virtual) social connections young people had during the lockdown, the higher their sense of loneliness and the higher their mood problems, indicating that a lack of social connections is a significant factor mediating the effects of the pandemic (Sabato et al. 2021). Loneliness is related to social contacts, and it is another factor that explains the effects the pandemic might have on young people's mental health. The increase in depression among young people during the pandemic was explained largely by their increased loneliness (Alt et al. 2021).

Perceived stress and coping have also been found to be important factors in understanding the effects of the pandemic for young people. Individuals who experienced higher stress during the pandemic also experienced larger changes in their mental health (Achterberg et al. 2021). In addition, negative, maladaptive coping strategies, such as rumination and parental over-reactivity, were associated with higher perceived stress, further increasing the burden associated with the pandemic (Achterberg et al. 2021). That is, the higher the rumination (negative coping) and the parental over-reactivity, the higher the stress young people perceived during the pandemic, which in turn was the mechanism carrying the negative effects of the pandemic on young people's mental health (Achterberg et al. 2021). Finally, another factor that has been thought to mediate the effects of the pandemic is psychological flexibility. That is, the pandemic decreased young people's ability to adapt to the present situation, which is seen as a risk factor for changes in mental health (Browne et al. 2022).

These indicative studies imply that the loss of social contacts and the ensuing sense of

loneliness, as well as increased perceived stress, are core issues for young people during the pandemic. In contrast, however, social support, high-quality parent–youth relationships and discussions, positive coping skills, and physical activity have all shown promise as factors buffering the effects of the pandemic (Jones et al. 2021; Kiss et al. 2022). Therefore, these factors could potentially be targeted in attempts to protect young people’s mental health during crisis situations.

4. Who is more vulnerable: looking for moderators

A relevant next step in research is to understand individual differences in how mental health is affected by the pandemic. In other words, it is imperative to have a clearer picture about who is more vulnerable in order to adapt specific support measures for young people. Are there any personal or contextual characteristics that make some young people more vulnerable than others in the face of the pandemic? Several factors have been identified as increasing the risk for lower mental health during the pandemic: certain personality characteristics, cognitive and emotional vulnerabilities, lack of pre-existing coping strategies, younger age, female gender, socioeconomic adversity such as having low annual income, unhealthy behaviours such as smoking, and the presence of physical multimorbidity (Smith et al. 2020). For the most part, the main conclusion from several studies can be described as “the poor get poorer”: those young people who had more difficulties and vulnerabilities before the pandemic tend to be those with higher risk of suffering during the pandemic. For example, longitudinal studies following adolescents from before the pandemic and through the first lockdown showed that adolescents reporting higher levels of stress, negative-maladaptive coping strategies, and/or mental health symptoms before the pandemic were those who experienced higher and more enduring

difficulties during the pandemic (Bouter et al. 2022; Hafstad et al. 2020; van Loon et al. 2021).

Personality and other relatively stable psychological factors such as cognitive and emotional traits can also be factors indicating vulnerability. In one study, young people with an extravert personality were found to be more vulnerable to feeling depressed during the pandemic, compared to more introverted youth (Alt et al. 2021). Because extraverts are more inclined to interact socially and might enjoy interpersonal interactions more, they run a higher risk of being left with their needs unmet, during the confinement of the pandemic. Indeed, it was found that extraverted young people were more likely to experience higher loneliness during the pandemic, which was partly responsible for higher depressive symptoms (Alt et al. 2021). Furthermore, young people with pre-existing cognitive and emotional vulnerabilities, such as anxiety sensitivity, distress intolerance, and high urgency during adolescence were at higher risk (Cho et al. 2021), whereas those with higher positivity and future orientation were at lower risk for maladaptation during the pandemic (Skinner et al. 2022). Finally, another study focusing on inequalities found that sex (being female), minority sexual orientation, and pre-existing disabilities were associated with higher mental health burden. However, these group differences for the most part did not increase further during the pandemic (Liu et al. 2022).

Research evidence shows how pandemic-related changes in mental health may be different for boys and girls (Hollenstein et al. 2021). In the study of Wright and colleagues of British adolescents, fear of the virus, perceived stress and anxiety were significantly higher in female participants (Wright et al. 2021). Similarly, in the study of Thorisdottir and colleagues (2021), girls had a significantly higher increase in depressive symptoms and worsened mental well-being from before to during the period of Covid-19.

Aside from personal characteristics, interpersonal and contextual characteristics also define to some extent how strongly Covid-19 and the ensuing situation affect young people's mental health. For example, pre-pandemic support from friends was found to protect against internalising symptoms during the pandemic (Bernasco et al. 2021). Interestingly, this effect was not moderated by time spent with friends, which implies that pre-existing high-quality relationships might confer enduring protection beyond the tangible effects of interpersonal contact.

Several contextual characteristics also confer higher vulnerability for mental burden during the Covid-19 period. Job and income insecurity have been shown to be two of them; young people experiencing higher job and income insecurity were more prone to experience mental health difficulties during the pandemic (Roche et al. 2022). Therefore, risk factors such as (threat of) poverty and precarious employment caused by the pandemic need to be considered for preparedness for future crisis situations (Baumann 2021).

5. Policy and the youth sector: what can be done to foster young people's mental health during and after the pandemic?

In this final section of our report, we provide a brief insight into the policy and practical implications of how young people's mental health and development can be supported during the pandemic. Our perspective is based on a resilience framework, which is in accordance with positive psychology. We therefore aim to conclude this report with an orientation toward empowerment and supporting the strengths of young people during and after the pandemic and potentially also in other crisis situations.

5.1. Policy responses

A review made by the European Council shows that at the European and national levels, there is only limited evidence for using recovery funds for the impact of the pandemic on youth services. Survey data collected within the Knowledge HUB: Covid-19 Impact on the Youth Sector of the EU-Council of Europe Youth Partnership reveals inadequate preparedness by the state sector for the pandemic's impact on young people's mental health on national, regional and local levels (EU-Council of Europe Youth Partnership 2022; O'Donovan and Petkovic 2022). In response, public authorities at all levels should place urgent importance on fixing the deficits in youth services (Potočnik and Ivanian 2022). At the international level, the Covid-19 pandemic has placed mental health into a key priority area in the youth sector which is a significant change compared with the past. During the pandemic years from 2020 to 2022, the European Commission and European Union youth strategies have included mental health among the top three priority areas for policy. As a concrete step, the European Year of Youth (2022) currently includes the support of mental health as a key initiative.

The European Commission also underlines the importance of best practice learning across countries in the area of mental health in line with its Eu4Health Programme (European Health and Digital Executive Agency 2022). In practice, this has been implemented by the Joint Action on Implementation of Best Practices in the Area of Mental Health (JA ImpleMENTAL 2022) in contributing to the understanding of the effects of the pandemic on the mental health of vulnerable groups in particular, including young people. With this evidence, 11 participating countries aim to improve mental health services at a local level. Another example is the "EAAD Best-Improve Depression Care and Prevent Suicidal Behavior in Europe", with eight European

countries emphasising depression prevention (EAAD-Best 2022).

Since 2021, the European Commission has also put an emphasis on mental health and well-being with a related programme aimed at young people and families especially with parents or caregivers facing different problems or difficult situations. This programme supports children in their daily environment with a shared understanding between close ones to reduce anxiety, feelings of depression and emotional difficulties and increase social interaction. Having mental health on the agenda supports the European Year of Youth 2022 as the “year of hope” with positive future perceptions and youth empowerment.

5.2. Youth sector responses

Youth sector responses to the mental health crisis include, among others, provision of counselling services online by youth organisations, assistance by youth workers, peer support, and disseminating public health information and support to vulnerable groups. Youth workers, youth organisations and decision makers have had to re-evaluate their work and methods in how they reach out to the youth population in these changing societal circumstances, with limited in-person interaction, quick transition to digital services, and a lack of funding for youth services (Corbi and Rossino 2021). For example, in many European countries different initiatives were made by youth workers to reach out to the community during pandemic lockdowns (Boskovic and O’Donovan 2021). Digital youth work services and other innovative practices had to be developed. In Estonia, for example, youth workers organised webinars for youth to cope with pandemic fatigue, whereas in Malta, weekly social media coverage on youth work services was provided by the National Youth Agency.

Overall, innovative and interesting initiatives have been made across Europe in terms of service

provision. Another example is from Scotland, where the Young Scot association has launched a broad communication campaign on Covid-19 (Young Scot NEC 2022). This campaign included objective information and getting informed on all matters related to the virus in a youth-friendly and understandable language as well as dealing with issues related to mental health and well-being.

5.3. Recommendations for research, policy and practice

In closing this report, it is essential to make a clear statement about the importance of mental health difficulties among young people during the pandemic at an international level. Even if the negative changes in mental health might seem transient or limited, it is imperative to keep in mind that a small percentage of increase in mental health difficulties might accumulate and lead to a larger societal burden in the longer term. The mental health epidemic that some authors have warned about (Hisham et al. 2021) might not be apparent right away, but it could take time to unfold. Therefore, much research across disciplines and global boundaries are needed to reveal the mental health impact this complex and challenging period has placed on young people's life span development.

Pedagogical, psychological and also medical practitioners must comprehensively acknowledge the problems arising from the pandemic within a child-in-environment diagnosis (Baumann 2021). This comprehensive model aims to give a deeper understanding of the impact of the Covid-19 situation on young people and offers some hypotheses for intervention strategies including the importance of the socio-economic environment of the child and various key factors of the virus and the pandemic. As indicated by the empirical studies on moderating

characteristics above, not all young people are “on the same page” in the face of the pandemic. Overall, “the poor get poorer” also explains which young people are more prone to face psychological difficulties during the pandemic. This picture underscores the critical importance of supporting the mental health of young people. Empowering and restabilising young people in their emotional experience is of critical importance as the pandemic makes its change into a new phase and young people face other emerging and continuing crises and uncertainties. This includes, above all, strengthening skills and social needs and in practical terms, an emphasis on early detection of mental health difficulties, educational services, counselling, empowerment-oriented support and, if needed, psychotherapy and family therapy (Baumann 2021).

Most European countries have implemented several urgent measures, mainly in the fields of health care and education, to mitigate the mental health effects of the pandemic on young adults. Strengthening and supporting services and school interventions have been in focus as well as disseminating information on the mental health effects of the pandemic. In response, more interventions could be made in the fields of leisure activities such as sport as well as youth work which are often implemented by non-governmental or private sectors (O’Donovan and Petkovic 2022). Furthermore, long-term issues related to mental health require an integrated approach to mental health policy including a common understanding of mental health among different practitioners and professionals (OECD 2022).

Research on the pandemic highlights its mental health impact on young people with pre-existing mental health conditions. Other risk factors include substance use, and personal background factors such as low income, ethnic minority, gender, diverse minority and young caregivers. Therefore, national policy interventions should aim to support the well-being of at-

risk, disadvantaged populations with vulnerable circumstances and pre-pandemic problems (O'Donovan and Petkovic 2022; OECD 2022).

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