



Big Picture Mental Health of Generation Z in The World

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Abstract

Mental health problems, especially in Generation Z, are currently an important issue to be addressed. This condition is caused by mental health being able to influence various aspects of life. This research method uses a Systematic Literature Review approach with the Prisma protocol, which focuses on five continents. The research results explained that there was an increase in cases of depression, anxiety, stress, and sleep disorders in Generation Z. This was influenced by several factors, such as excessive exposure to information on social media, fatigue from using social media, as well as academic stressors and social problems faced. Handling mental health problems can be done by providing mental health education, psychotherapy, social support, and managing the use of social media and gadgets.

Keywords: Generation Z, Mental Health, Systematic Literature Review

I. BACKGROUND

According to both the World Health Organization (WHO) in 2011 and recent reports from the Institute for Health Metrics and Evaluation (IMHE) in 2019 and WHO in 2021, mental health disorders are a significant global disease burden. According to both the World Health Organization (WHO) in 2011 and recent reports from the Institute for Health Metrics and Evaluation (IMHE) in 2019 and WHO in 2021, mental health disorders

are a significant global disease burden. However, there is a growing recognition that these problems are not adequately addressed and that more resources are needed to alleviate them. Mental health problems are a multifaceted concern that can profoundly impact various aspects of life (Moitra, 2023). According to global health data, mental health problems affect 970 million people worldwide, which accounts for 12.2% of the total world population (refer to Table 1).

Table 1. Global Prevalence of Mental Health Problems in The World (WHO, 2022)

Type	Number (Million People)	Percentage (%)
Anxiety disorders	300,7	31
Depressive disorders	280,3	28,9
Developmental disorder (idiopathic)	107,6	11,1
Attention-Deficit / Hyperactivity disorder	85,3	8,8
Bipolar disorder	39,7	4,1
Conduct disorders	39,7	4,1
Autism spectrum disorders	28,1	2,9
Schizophrenia	24,25	2,5
Eating disorders	13,5	1,4

Several countries have acknowledged the growing incidence of mental health cases, especially in light of the COVID-19 pandemic (Saqib et al., 2023). According to Jenkins (2005), several countries, including Iran, Zanzibar, Georgia, and Macedonia, have implemented government-supported mental health policies. The objective of these policies is to decrease the incidence and prevalence of mental disorders, promote mental health, reduce the severity, and decrease mortality related to mental illness, with a particular focus on suicide. Since the 18th century, the British and United States governments have recognized the importance of managing mental health problems. This is evidenced by the Mental Health Bill Act of 2022 (Moncrieff, 2003) in the UK and the

shift from local communities to state governments to ensure more adequate and well-controlled services in the US (Nash & Arhyle, 2004). This is evidenced by the Mental Health Bill Act of 2022 (Moncrieff, 2003) in the UK and the shift from local communities to state governments to ensure more adequate and well-controlled services in the US (Nash & Arhyle, 2004). According to Herman (2012), several countries, such as the UK, USA, Ireland, Australia, New Zealand, and Thailand, have adopted a comprehensive approach to promoting, preventing, and treating mental disorders. This approach considers the needs of individuals, families, and communities. Gratzner and Goldbloom (2017) explained the high prevalence of mental health problems in Canada.

Consequently, the government has increased access to mental health services and funding and has developed telehealth and information centers.

Currently, mental health concerns among Generation Z are a significant issue due to the high risk of experiencing health problems. According to data from Unicef (2021), mental health problems affect one in seven adolescents, and unfortunately, 46,000 adolescents commit suicide every year. According to a survey conducted by the McKinsey Health Institute in 2022, it was found that Generation Z experiences more health problems than the Millennial generation, particularly in regards to mental health. It is essential to provide special attention to this generation in order to reduce the number of mental health disorders and promote a healthier future generation.

Currently, Generation Z faces various challenges that can cause mental health problems. Pradidi et al. (2021) explain that academic problems contribute to stressors that can affect mental health. The problem of time or time is something that needs to be considered; this is taking lessons during a pandemic where cases of mental health problems increase. Trikusuma and Hendriani (2021) explain that the COVID-19 pandemic has impacted

the psychological distress of many people at every level because these conditions increase uncertainty.

To overcome Generation Z's mental health problems, we need to map the factors that affect mental health. Andrias and Satori (2016) and Azizah and Hartono (2018) explain that factor mapping is essential to discover the problems occurring in the study object. This is done to get data on things that need to be managed. In this way, mapping becomes an essential foundation in dealing with mental health problems more systematically and efficiently.

2. METHODS

The study utilized the Systematic Literature Review (SLR) research method, which was selected for its capacity to identify, interpret, analyze, and evaluate pertinent information. Additionally, the study adhered to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) protocol to address research problems. The PRISMA protocol is based on a series of recommended stages, including defining eligibility criteria, determining information sources, selecting data, collecting data, and retrieving data (Asar et al., 2016).

Data was collected using several applications, namely publish or perish, consensus, and several supporting articles from Google Scholar. The keywords used for this article are 1) "mental health," "generation Z," "America," 2) "mental health," "generation Z," "Europe," 3) "mental health," "generation Z," "Asia," 4) "mental health," "Generation Z," "Africa," 5) "mental health,"

"generation Z," "Australia." The articles obtained were then screened for duplication. The next activity was eliminating titles and abstracts that did not meet expectations or research themes. Ultimately, an overall review of the documents obtained was carried out. The data selection process is presented in Figure 1.

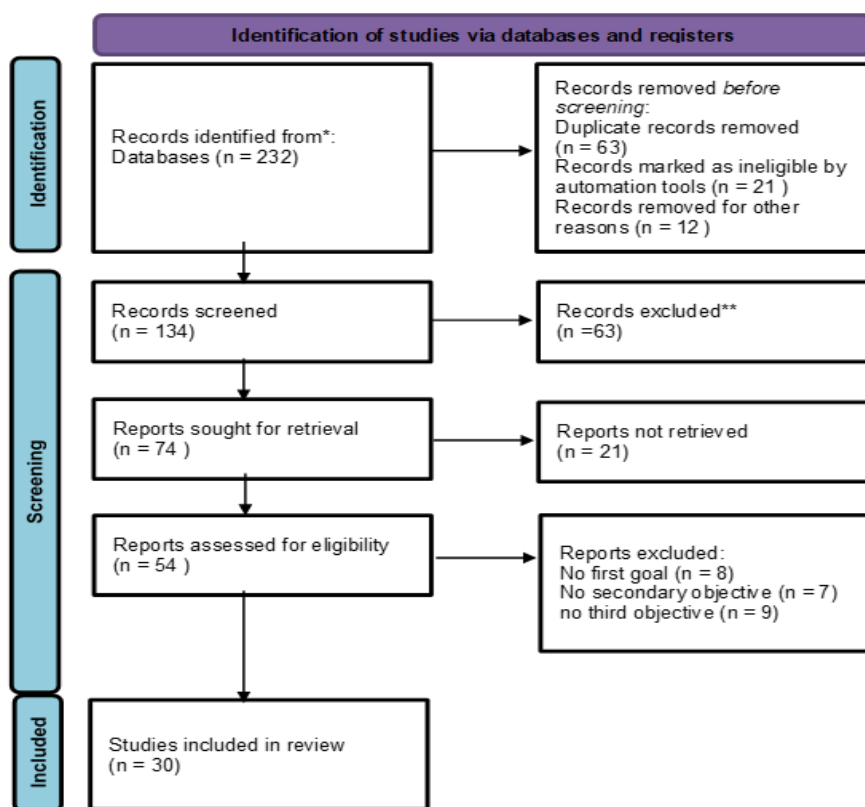


Figure 1. Framework PRISMA Systematic Literature Review

3. RESULTS

The factor mapping in this study involved various journals published in various countries focusing on Generation Z. The aim was to obtain a specific picture

of mental health conditions, influencing factors, and treatments. This aims to obtain a specific picture of mental health conditions, influencing factors, and how they are handled. Furthermore, the

information collected was categorized to obtain recommendations that can be used as a basis for managing mental health problems. In this context, triangulation is carried out to obtain an accurate research result; Chen (2020) explains that the triangulation approach is an important part that can strengthen the results of the analysis produced, while Maxwell (2022) explains that triangulation is an integral part of obtaining valuable and conceptualized information. The results of applying Systematic Literature Review to several journals obtained detailed information as follows:

The State of Mental Health in the World for Generation Z

According to reports, most Generation Z has expressed concern regarding the COVID-19 pandemic. Additionally, a considerable number of individuals within this generation have reported experiencing anxiety and depression, particularly during the strict lockdown period. It has been suggested that the excessive use of social media may have contributed to feelings of mental fatigue and fear.

Generation Z's anxiety about COVID-19 is triggered by the amount of information circulating on social media.

This has led to increased stress due to excessive information about COVID-19. The emergence of symptoms of fatigue and fear is also triggered by exposure to excessive information about COVID-19 circulating on social media. In addition, the long-term impact of exposure to excessive information can lead to symptoms of peritraumatic dissociation.

The study found that respondents experienced varying levels of depression, anxiety, stress, and sleep disturbance. However, most were still within the normal range, except for anxiety symptoms, which exceeded the abnormal threshold. Respondents' overall climate change anxiety levels and mental health indices were moderate. Linear regression analysis showed that the level of climate change anxiety had a significant impact on the decline in mental health. A study found that millennials and post-millennials experience moderate to very severe levels of depression, anxiety, stress, and sleep disturbances due to gadget dependency. Additionally, several studies have revealed a high prevalence of mental illness, including general mental disorders and suicidal ideation, among university students. Access to therapy for mental disorders in university students is relatively low.

The survey results indicate that a majority of respondents reported knowing individuals with mental health issues. Additionally, approximately 12% of respondents reported experiencing or currently experiencing mental health problems themselves. Another study highlighted the mental health stigma faced

by bilingual students and its detrimental effect on their academic performance. Several further studies found an increase in symptoms of depression, anxiety, stress, and other mental health disorders in college students during the pandemic, especially in millennials and Gen Z.

Table 2. Condition Mental Health of Generation Z

Continent	Description	Expert
America	Previous research has found an increase in symptoms of depression, anxiety, stress, feelings of loneliness, and other mental health disorders among Generation Z in the Americas, particularly among those aged 18-29 years.	Liu, Cindy H <i>et al</i> (2020); Rao, Maya <i>et al</i> (2021); Piotr, Dlugosz <i>et al</i> (2021); McPherson, Pamela <i>et al</i> (2022); Grelle, Kaitlin (2023)
Europe	Several previous studies have found that approximately 60% of Generation Z in Continental Europe experienced anxiety as a result of the Russia-Ukraine War in 2022 (RUW-22), with about half of this group experiencing both anxiety and depression. Additionally, fatigue is associated with the use of social media.	Ranieri, <i>et al</i> (2021); Liu, <i>et al</i> (2021); Vacchiano, M. (2022); Riad, A., <i>et al</i> (2022); Runcan, <i>et al</i> (2023)
Asia	Previous research suggests that Generation Z is susceptible to various mental health issues, including depression, anxiety, eating disorders, self-harm, stress, loneliness, multiple perfectionism, and sleep disorders.	Lestar, R. dan Astuti, B. (2021); Haddad, Jessica <i>et al</i> (2021); Surat, Shahlan <i>et al</i> (2021); Marc Eric S. Reyes <i>et al</i> (2021); Rudianto, Zalfa Nuraeni (2022); Claretta, Dyva <i>et al</i> (2022); Dodok, Yohanis <i>et al</i> (2022); Rizvi <i>et al</i> (2022); Pei, Lihua <i>et al</i> (2022); Yuniarta, D. V., <i>et al</i> , (2023); Beyari, Hasan <i>et al</i> (2023); Fahreza, M.D.A., <i>et al</i> (2024)
Africa	Previous research indicates that mental health conditions are on the rise in Africa, particularly among the younger generation, who experience high levels of anxiety and depression.	Hassen, H.M., <i>et al</i> (2021); Bantjes, Jason <i>et al</i> (2023); Ndubiwa, T. N (2023)
Australia	Previous research indicates an increase in mental health disorders among Australian children and adolescents. These disorders include fear, overwhelm, hopelessness, anger, depression, sleep disorders, behavioral changes, and risk of suicidal thoughts.	Godden, N.J., <i>et al</i> (2021) ;Li, S.H., <i>et al</i> (2022)

Important Factors Affecting Mental Health

Factors associated with mental health conditions include excessive exposure to COVID-19 information on social media, fatigue from overuse of social media, fear of COVID-19, fear of missing out, and dependence on technology. Overloading on social media can trigger mental burden, fear, anxiety, and psychological disorders.

Personality traits, such as conscientiousness and openness, can mediate and moderate the relationship between anxiety and mental health. The study found a positive association between anxiety related to climate change and social isolation and a decline in mental health. Additionally, demographic, socioeconomic, environmental, and age factors were found to be influential. Students face a variety of stressors, including academic, social, and financial pressures. Additionally, technology-rich environments and social media can contribute to these stressors. The Covid-19 pandemic has also had a

significant impact, with social distancing and online learning exacerbating these challenges. Limited access to mental health services further compounds the issue.

Various factors contribute to the conditions of adolescents, including the stigma of mental illness, academic pressure, social isolation during the pandemic, low emotional competence, and excessive use of social media. Additionally, family communication patterns, the quality of family time, parental health literacy, and academic demands can also have an impact. On the other hand, psychological resilience and high family social support are protective factors that can improve young people's social, economic, and cultural resources. Research indicates that excessive use of social media, race, online education, exercise, and age are contributing factors to mental health decline. The summary of the various factors that influence the mental health conditions of individuals and groups based on the results of related studies in Table 1. Indicators of emotional levels in elderly respondents (f=108).

Table 3. Factors Affecting Mental Health of Generation Z (Continue to page 9)

Continent	Description	Expert
America	<p>Factors affecting mental health conditions in the Americas are as follows:</p> <ul style="list-style-type: none"> • Excessive use of social media. • Social and economic factors, including finance, religion, and economic stability. • Personality characteristics as mediators between anxiety and mental state. • Age and generational factors, with millennials and Gen Z experiencing worse symptoms than older generations. • Gender, women tend to be at risk of poor mental state compared to men. • Child disharmony with parents 	<p>Liu, Cindy H <i>et al</i> (2020); Rao, Maya <i>et al</i> (2021); Karin L. Becker (2021); Piotr, Dlugosz <i>et al</i> (2021); McPherson, Pamella <i>et al</i> (2022); Grelle, Kaitlin (2023).</p>
Europe	<p>The most influential factors on mental health in Continental Europe are as follows</p> <ul style="list-style-type: none"> • Excessive fear about news circulating on social media. • Fear of Missing Out (FOMO). • Gender. • Frequency of following the news. • Excessive use of social media. • Limited social interaction. • Uncertainty of career opportunities. • Adapt to new habits and technologies. 	<p>Ranieri, <i>et al</i> (2021); Liu, <i>et al</i> (2021); Vacchiano, M. (2022); Riad, A., <i>et al</i> (2022); Runcan., <i>et al</i> (2023)</p>
Asia	<p>Factors affecting mental health on the Asian continent are as follows:</p> <ul style="list-style-type: none"> • Climate change anxiety • Conscientiousness • Openness • Social isolation • Gadget addiction • Sleep quality disorders • Loneliness • Technophobia and nomophobia • Demographic, socio-economic and environmental • Age and development • Academic and financial stressors • Constraints on availability, accessibility, and affordability of mental health services • Mental health stigma • High competition • Family communication patterns • Quality family time • Social media usage • Exercise time • Exposure to information overload • Long working hours • Lifestyle • Level of knowledge and culture 	<p>Lestar, R. dan Astuti, B. (2021) ; Haddad, Jessica <i>et al</i> (2021) ; Surat, Shahlan <i>et al</i> (2021) ; Marc Eric S. Reyes <i>et al</i> (2021) ; Rudianto, Zalfa Nuraeni (2022) ; Claretta, Dyva <i>et al</i> (2022) ; Dodok, Yohanis <i>et al</i> (2022) ; Rizvi <i>et al</i> (2022) ; Pei, Lihua <i>et al</i> (2022) ; Yuniarta, D. V., <i>et al</i>, (2023) ; Beyari, Hasan <i>et al</i> (2023) ; Fahreza, M.D.A., <i>et al</i> (2024)</p>

Continent	Description	Expert
Africa	Factors that influence mental health conditions in the Americas are as follows: <ul style="list-style-type: none"> • Gender Based Violence. • Gender inequality. • Child marriage and initiation school practices. • Toxic culture. • Socio Demographics such as ethnicity, culture, parental education level and school level. • Socio-economic status 	Hassen, H.M., <i>et al</i> (2021); Bantjes, Jason <i>et al</i> (2023); Ndubiwa, T. N (2023)
Australia	Factors that influence the state of mental health on the Australian continent are as follows: <ul style="list-style-type: none"> • Loneliness. • Changes in behavior patterns. • Sleep disturbance. • Overuse of technology. • Climate change. • Sociodemographic factors such as ethnicity and culture. 	Godden, N.J., <i>et al</i> (2021) ;Li, S.H., <i>et al</i> (2022)

On the other hand, information can be obtained to map current mental health problems. According to WHO (2022), several levels can influence mental health, including the individual level (genetics, social skills, physical health, and daily activities), the family and community level (perinatal nutrition, parenting, networking, and access to space), and the country level (economy, infrastructure, access to services, environment, justice, income, and gender issues).

How To Handle Mental Health

Various approaches can be used to address mental health issues, including self-monitoring, regulating social media use, and participating in mental health education programs with related

organizations. It is necessary to implement interventions that focus on reducing anxiety and psychological disorders caused by the pandemic, such as digital-based online programs or counseling.

Psychotherapies such as Cognitive Behavioral Therapy (CBT) and social support can be applied to address mental health concerns. Additionally, awareness-raising efforts related to climate change and mitigation measures are recommended. It is also essential to raise awareness of the potential dangers of gadget dependence and monitor their use in a structured manner. Involving health and education institutions in professional counseling service programs, group psychotherapy, student welfare support policies, and mental health education

campaigns can be practical collaborative efforts. Additionally, cultural and transcultural wisdom approaches are recommended when conducting surveys and research. Engaging in regular exercise, getting adequate rest, establishing social interactions, and practicing relaxation and emotion regulation skills are also recommended. Consulting professionals such as psychologists and psychiatric

doctors is highly recommended if symptoms do not improve. A multidisciplinary approach can improve mental health conditions. Evidence-based mental health approaches, such as short, solution-focused counseling, have been shown to reduce anxiety effectively. Cross-sectoral cooperation is necessary to build an integrated and sustainable treatment system that supports community welfare.

Table 4. Intervention for Problem Mental Health of Generation Z (*Continue to page 11*)

Continent	Description	Expert
America	<p>The way mental health disorders are treated in the Americas are as follows:</p> <ul style="list-style-type: none"> • Consultation with mental health specialists, either through professional counseling and individual or group psychotherapy. • Implement an anti-bullying policy. • Provide mindfulness and optimism support to improve emotion regulation. • Increase access to mental health resources for Gen Z. • Create exercise moves, interactive games, and provide breaks. • Recommends careful use of social media features to avoid triggering mental disorders. • Improve interpersonal skills and emotion regulation. 	Liu, Cindy H <i>et al</i> (2020); Rao, Maya <i>et al</i> (2021); Karin L. Becker (2021); Piotr, Dlugosz <i>et al</i> (2021); McPherson, Pamela <i>et al</i> (2022); Grelle, Kaitlin (2023).
Europe	<p>The way mental health disorders are treated in Europe is as follows:</p> <ul style="list-style-type: none"> • Self-monitoring or self-care • Filtration of social media usage • Developing psychological support • Engage with social media 	Ranieri, <i>et al</i> (2021); Liu, <i>et al</i> (2021); Vacchiano, M. (2022); Riad, A., <i>et al</i> (2022); Runcan, <i>et al</i> (2023)
Asia	<p>How mental health disorders are treated on the Asian continent as follows:</p> <ul style="list-style-type: none"> • Social support • Completion activity • Increase faith • Raising awareness on gadget dependency, climate change, and mitigation measures • Controlling gadget use • Time management • Provide and deliver counseling • Create specialized training to manage emotions 	Lestar, R. dan Astuti, B. (2021); Haddad, Jessica <i>et al</i> (2021); Surat, Shahlan <i>et al</i> (2021); Marc Eric S. Reyes <i>et al</i> (2021); Rudianto, Zalfa Nuraeni (2022); Claretta, Dyva <i>et al</i> (2022); Dodok, Yohanis <i>et al</i> (2022); Rizvi <i>et al</i> (2022); Pei, Lihua <i>et al</i> (2022); Yuniarta, D. V., <i>et al</i> , (2023); Beyari, Hasan <i>et al</i> (2023); Fahreza, M.D.A., <i>et al</i> (2024).

Continent	Description	Expert
	<ul style="list-style-type: none"> • Increase social engagement • Learn relaxation techniques • Set realistic targets and expectations • Practice a balanced lifestyle with regular exercise, healthy eating, and adequate rest. • Be careful and discerning in the use of social media • Improve emotion regulation strategies such as mindfulness, optimism, and cognitive reappraisal. • Engage in relaxation and self-care activities. • Improving health literacy • Approaching with Solution Focused Brief Therapy (SFBT) 	
Africa	<p>How mental health disorders are treated on the African continent are as follows:</p> <ul style="list-style-type: none"> • Conduct mental health education campaigns. • Provide easily accessible counseling and psychological support services. • Implementing mental health literacy. • Facilitate access to therapy for mental disorders by involving health workers. • Promote the elimination of practices harmful to mental health. • Improving socio-economic status 	Hassen, H.M., <i>et al</i> (2021); Bantjes, Jason <i>et al</i> (2023); Ndubiwa, T. N (2023)
Australia	<p>The ways mental health disorders are treated in Australia are as follows:</p> <ul style="list-style-type: none"> • Psychosocial support such as counseling, emotional support, and health resource services that are easily accessible to Gen Z. • Improve mental health literacy through various media. • Develop a mental disorder prevention model that is easily accessible online. • Provide counseling, emotional support, and communication approaches. • Implement culture-based interventions according to community conditions. • Improve stress management and emotion regulation skills. 	Godden, N.J., <i>et al</i> (2021) ;Li, S.H., <i>et al</i> (2022)

4. DISCUSSION

A systematic literature review was conducted to map the conditions that may affect the mental health of Generation Z. The research aims to obtain a specific picture of mental health conditions, causative factors, and ways of handling

mental health problems in Generation Z worldwide. The information obtained will be further processed to produce recommendations that can be used to manage mental health problems in Generation Z. The research results are analyzed using a triangulation approach to

increase accuracy and strengthen the substance. Triangulation is crucial because it allows for comparing various data sources, strengthening the analysis. The literature review yielded essential findings. The mental health of Generation Z in various parts of the world tends to deteriorate due to factors such as the COVID-19 pandemic, war, social isolation, and excessive use of social media. Additionally, personal characteristics, age, gender, and environment can also affect mental health. Third, to address mental health disorders, it is recommended to consult with specialists, undergo psychotherapy, engage in mindfulness practices, participate in social activities, and regulate social media use. These recommendations are not just theoretical but practical steps that can be taken to improve mental health. The literature review results support these approaches:

1. America

Generation Z's mental health is deteriorating due to the pandemic, social isolation, and overuse of social media. Contributing factors include personal characteristics, socioeconomics, age, and gender. Treatment includes consulting specialists, psychotherapy, improving access to resources, and regulating social media use.

2. Europe

About 60% of Generation Z experienced anxiety due to the Ukraine-Russia war, and half experienced depression. The causes are fear of the news, FOMO, excessive social media use, and limited social interaction. Responses include self-monitoring, social media filtering, and psychological support.

3. Asia

Generation Z is prone to various mental disorders due to climate, social isolation, gadget dependency, and environmental factors. Treatments include social support, problem-solving activities, faith-building, and awareness of the dangers of gadget dependency.

4. Africa

Young people's mental health is deteriorating with high rates of depression and anxiety, influenced by gender, culture, and socioeconomic status.

5. Australia

Children and adolescents are experiencing an increase in mental disorders due to loneliness, behavioral changes, sleep disturbances, and overuse of technology.

5. WEAKNESSES

The literature review in this study examines numerous research involving

mental health of Generation Z in several continents. However, some limitations are still encountered. Heterogeneous methods, strategies, populations, and outcomes make it difficult to compare research results in each study. Although we conducted a systematic review, there may be some studies related to mental health of Generation Z that remained unidentified and excluded because they underreporting of mental health problems. Furthermore, presenting results in narrative form has limitations compared to meta-analysis because we do not have access to primary data.

6. CONCLUSION

The mental health condition of the younger generation, especially generation Z, tends to experience an increase in disorders such as depression, anxiety, stress, sleep disorders and suicidal thoughts both before and during the Covid-19 pandemic. This is a concern that must be managed in order to overcome bigger things. Mapping has been done based on factors that influence the increase in mental health disorders, including overexposure to information on social media where generation Z uses social media and gadgets is proven to be excessive, academic stressors and social relationships faced, as well as the direct

impact of the pandemic on learning and teaching activities.

Recommended treatments for mental health problems include psychotherapy, social support, mental health interventions at the campus and community level, management of social media and gadget use, and raising awareness of the dangers of mental health problems and how to deal with them. Finally, collaboration between various parties is needed to develop a more comprehensive mental health promotion program to prevent and treat the adverse effects of mental health problems in the younger generation.

AUTHOR CONTRIBUTIONS

Substantial contributions to conceptualization, data curation, analysis: Bintang Mukhammad Burhanudin Akbar, Dini Rahma Dwi Prawesti, and Wikan Swadesi Arum Perbani. Writing - review & editing: Bintang Mukhammad Burhanudin Akbar, Dini Rahma Dwi Prawesti, and Wikan Swadesi Arum Perbani. Manuscript revisions: Dini Rahma Dwi Prawesti.

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CONFLICT OF INTEREST

The authors declare no conflict of interest for this publication.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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