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CLIMATE CHANGE AND MENTAL HEALTH (A GLOBAL ANALYSIS)

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ABSTRACT: *Climate change and its corresponding consequences have been recognized as one of the dominating issues of global concern. Many governments of various nations are currently making efforts to mitigate the undesirable consequences of climate change. The essay is focused on carrying out an analysis of the effect of climate change on mental health in the United Kingdom. The paper presented a methodological framework for the diverse and multiple channels by which climate change impacts on a person's mental health. In connection with this, this methodological analysis led to the conceptualization of the variables that link or mediate the effect of climate change on human mental health and corresponding well-being. There was an exploration of evidence-based analysis of climate change modifies the variables that impact mental health; this will take care of the expression of the diverse pathways of effect. The essay recognizes that despite the mental health dangers and risks associated with climate change, adopting a strategic climate action can also be a window of opportunity to harness its impact and engage in proactive and preventable measures.*

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INTRODUCTION

Climate change and its corresponding consequences has been recognized as one of the dominating issues of global concern. Many governments of various nations are currently making efforts to mitigate the undesirable consequences of climate change. World Bank (2018) posits that climate change can be viewed as a major variation in typical weather patterns, such as becoming more humid, warm, or drier over a number of decades. One cannot however deny that such cascading and unforeseen variation in typical weather patterns has corresponding health implications. The global impact of climate change on health outcomes has been widely documented in literature. For example, Prabhakaran (2021) claims that climate change is now acknowledged as the most serious public health concern of the twenty-first century, with the potential to reverse decades of progress. In a similar assertion, World Health Organization WHO (2020) stated that climate change affects the health and well-being of people in a number of ways. It endangers the key components of human health, such as healthy air and water, a nourishing food supply, and reliable shelter, and has the potential to completely undo decades of gains in world health. These and other related inputs on the relationship between climate change and public health have been documented in literature.

However, one of the public health areas that has been of significant concern to the world at large is mental health. The mental well-being of individuals to a large extent determines their level of productivity, coordination, societal standard compliance and social relations. It is however believed that one of the effects of climate change is that it disrupts the mental health and well-being of not just the residents and citizens of the United Kingdom but the average world at large. The primary essence of this report is to analyze and synthesize the effect of climate change on mental health in the UK. The relationship between climate change and mental health has also received the attention of public health researchers, experts and authorities. For example, Lawrance et al. (2022) submit that climate change and mental health are two of the most pressing issues that are currently confronting nations around the world. Given this, one cannot deny the public health implications of having these two variables (climate change and disrupted mental health) in coexistence. According to the World Health Organization (2019), climate change causes both severe mental health concerns such as anxiousness and post-traumatic stress disorder, as well as a long-term disorder such as displacement and broken social cohesiveness. The Intergovernmental Panel on Climate Change (IPCC) in 2022 reported that climate change affects the mental well-being of people through an intensified global heating which directly or indirectly exerts catastrophic impact on human health.

The essence of this report/assessment is therefore to evaluate the effect of climate change on mental health within the context of the United Kingdom. The negative impact of climate change on mental health is public health given that its existence threatens the economic, social, and cultural existence of humanity at large. In the last couple of years, there have been documentations, policy briefings and relevant reviews on the negative effects of climate change on mental health (Liu, Potter & Zahner, 2020). The prevalence of mental health challenges caused by climate change remains a public health issue that calls for critical analysis and urgent policy interventions. In the last few years, there has emerged a growing recognition of the critical role mental health plays in reaching the world's development objectives, as evidenced by the strategic inclusion of mental health in the SDGs. Depression is among the primary causes of disability. Homicide is the fourth highest cause of mortality among those aged 15 to

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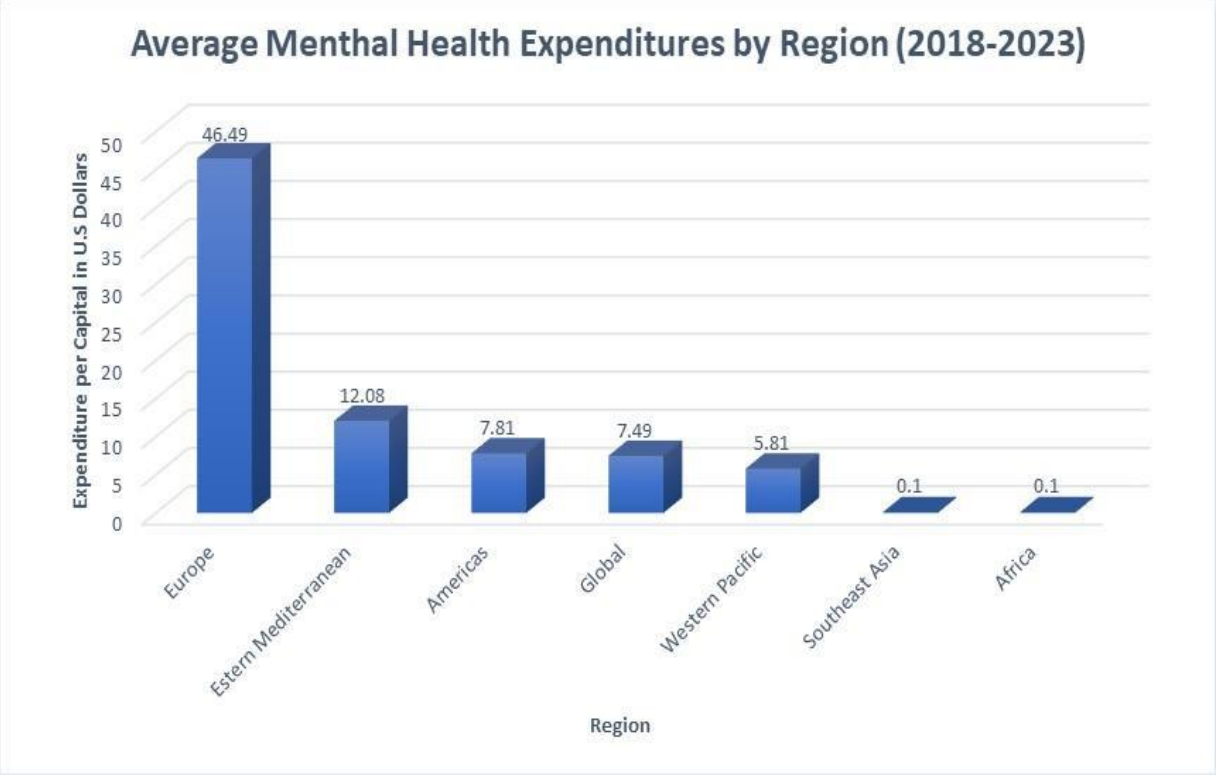
29. Individuals with serious mental illnesses die preterm, often up to two decades earlier, as a result of preventable physical diseases (WHO, 2019).

The interconnectivity between mental health and climate change is demonstrated through multiple pathways. Ignoring such an ugly trend will impose serious further health issues and has corresponding and multiplier implications on global economy and stability. In addition to the analyses identified above, climate change can cause job losses, forced relocation, and disruption to social cohesiveness and resources in the community, all resulting in mental health repercussions. Furthermore, fear of climate change and its implications for national security and human well-being can be extremely distressing.

In addition, another call for concern on the subject matter is that even without the negative effects of the climate disaster, the growing unmet mental health needs faced by individuals around the world pose a significant global health threat. The world's total economic cost of mental health conditions (including direct healthcare expenditures and indirect costs from lost output) has been put at $2.5 trillion USD in 2010 (Trautmann, Rehm & Wittchen, 2016) and is projected to increase to $16 trillion by 2030 (Patel et al., 2018). This is a disturbing scenario that a call for urgent policy intervention is justified on all grounds. The average government expenditure on mental health per capita worldwide between 2018-2023 by region is demonstrated in figure 1 below:

Figure 1: Mental Expenditures by Region



Source: *Statista (2024)*

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Given such a scenario, it is crystal clear that mental health is currently posing a burden to the government of various regions. The graph reported in figure 1 clearly shows that Europe is at the top least in per capita mental health expenditures, followed by Eastern Mediterranean, America, South-Asia and Africa being the least in ranking. This clearly shows that mental health is a public health concern that should be addressed with urgent and strategic means. Mental health systems are under strain; as it is reported that 50% of persons worldwide experiencing mental health issues do not receive treatment, and this figure rises to nearly 90% in areas with limited resources (Roland, Lawrance, Insel & Christensen, 2020). Furthermore, 75 percent of mental illness is projected to begin before the age of 18 (McManus et al., 2019), and today's youth face the additional burden that comes with growing up in the gloom of a climate disaster that is not their fault (Hayes, 2018). The above assertions and reports entail that climate change puts at risk the ambitions of countries working to achieve a universal healthcare system by increasing mental and physical health demands while disrupting service delivery, with extreme weather endangering health care systems and food supply chains. This if left addressed will likely lead to a chronic macroeconomic deterioration that will have a global disruptive impact. Even the regions with lesser percentages of average per capita mental health expenditures are of great concern when viewed from an absolute and not relative dimension. For instance, Africa and South-Asia when viewed from an absolute and internal analysis, demonstrated a huge concern given the population size, existing health care system and sickness incidence. Global mental health is indeed an issue that should not be neglected.

It is often believed that the more the number and need for mental health workers, the more it can be estimated there is higher mental illness incidence in such areas. As there are no readily available statistics to measure the mental illness incidence, the closest proxy to measure such a variable is the number of mental health workers needed. A prevailing hypothesis is that the more the number of mental health workers, the higher the mental incidence in that particular region. Figure 2 below shows the regional statistics distribution of mental health workers by 100,000 population.

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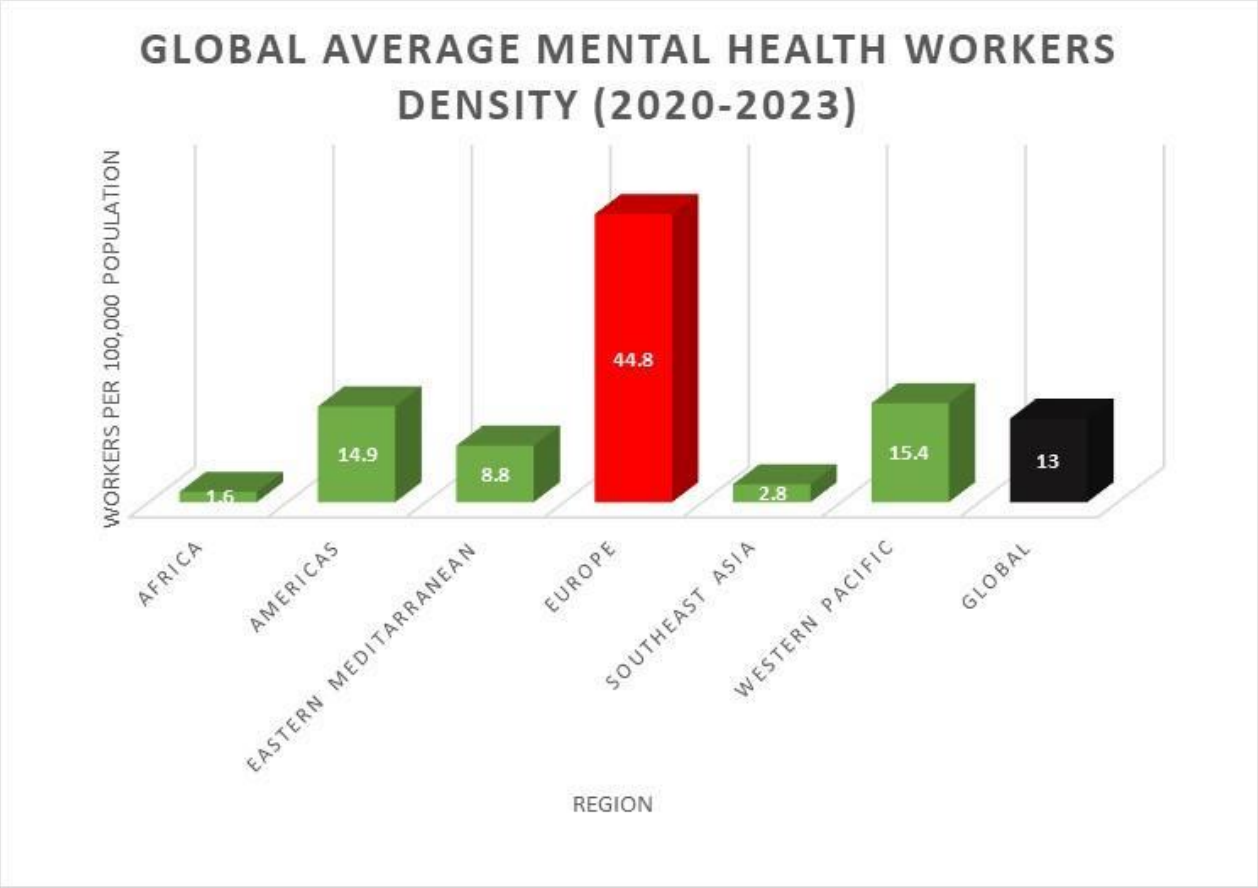
Figure 2: Average Mental Health Workers Density (2020-2023)



Source: *Statista (2024)*

A look at the graph in figure 2 clearly shows that Europe is topping the chart in terms of the density of mental workers statistics. This has public health implications given that it reflects the rising rate of mental illness which calls for more corresponding mental workers. The UK being a component of the European continent is unfortunately placed in this category and given the rising incidence of mental health workers, it calls for further policy interventions. Compared to the second ranked region (Americas) which has an incidence of 14.9%, the discrepancy with the Europeans is clear and significant.

UK Climate and Mental Health Policies/Action

One cannot deny the global attention given to climate change and its related effects. In response to this, nations of the world engaged meaningful policies in that regard. The UK was not counted off in the list of countries or nations that engaged strategic response steps and policies to mitigate the effect

The primary climate-related health hazards in the UK are summer droughts and heatwaves, flooding and corresponding mental health challenges, connections between air pollution, pollen, and elevated temperatures, degradation in the quality of food and water, and an increase in diseases transmitted through insects (Climate Adapt, 2023). T

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The UK Climate Change Act 2008 at the national level mandates the government to conduct 5-year evaluations of risks associated with climate change and develop a National Adaptation Plan for reacting to the risks that have been identified, with a focus on threats to well-being and health (Ma, Moore & Cleary 2022).

Within the context of the health and care sector, England through the institution of the NHS, emerged the world's first healthcare system to commit to achieving net zero carbon emissions (for example, the amount of power utilized by medical institutions) by 2040. Carbon emissions that it is unable to regulate but may influence (such as greenhouse gasses from manufacturers in the chain of production) is projected to be lowered to zero by 2045.

A person's psychological, social, and emotional well-being are all part of their mental health. A person's ability to manage life's typical stressors and perform well at work depends on their mental health. Mental health disorders are the leading cause of disability in the United Kingdom. In any given year, one in four adults experiences a minimum of one mental health condition. Poor mental health can result from a number of economic, social, biological, and psychological issues. The stigma linked to mental illness is estimated to be the main barrier stopping people from seeking treatment and medical attention (Statista, 2024). Long-term underfunding of mental health services was evident, as the number of psychiatric beds in the UK has been steadily declining since 2000. There were over 24.5 thousand beds for psychiatric care in 2018. On the contrary side, from about 8.2 thousand in 2000 to 12.7 thousand in 2020, there were more psychiatrists working in the UK (Statista, 2024).

It can be clearly seen from the above that the United Kingdom (UK) has been intentional in responding to the issue of climate change and mental health of UK residents and to also contribute to global concern on the subject matter. However, the various ways climate change adversely impacts physical health have been treated as recognized for a while, the implications on mental health have been less thoroughly established in literature.

The essay is focused on carrying out an analysis of the effect of climate change on mental health in the United Kingdom. The paper will present a methodological framework for the diverse and multiple channels by which climate change impacts on a person’s mental health. In connection to this, this methodological analysis will lead to the conceptualization of the variables that link or mediate the effect of climate change on human mental health and corresponding well-being. There will be an exploration of an evidence-based analysis of climate change modifies the variables that impact on mental health; this will take care of the expression of the diverse pathways of effect. The essay recognizes that despite the mental health dangers and risks associated with climate change, adopting a strategic climate action can also be a window of opportunity to harness its impact and engage proactive and preventable measures

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Social Determinants of Health

Numerous interrelated factors have an impact on mental health and wellness. According to Patel et al. (2018), social and environmental factors, particularly those experienced during the early stages of life, interact with biological, neurological development, and psychological processes in order to shape each person's unique mental health via influencing biochemical processes in the brain. It is however important to add that genetic influence is a significant determinant of mental health as omitted by Pat et al. (2018). The impact of genetic influence on mental health of individuals cannot be over emphasized. These relationships also evolve during the course of a person's life and in response to changes in local and global circumstances. Thus, a biopsychosocial approach is necessary to comprehend these impacts and interconnections. There is continuing research to identify the primary "active ingredients" that may affect a person's mental health or sickness by combining findings from several fields (Compton & Shinn, 2015).

A number of frameworks have been created in an attempt to effectively condense and classify the various factors influencing a person's mental state and behavior levels (Pote, 2021). Although the frameworks vary in specifics, there is a consensus among researchers that the well-being and health of a person are influenced not only by internal causes but also by the social and environmental context in which they exist (Gislason, Kennedy & Witham, 2021). This should come as no surprise, since it is commonly known that external factors determine whether a plant or animal survives or perishes. However, recognizing the influence of social and environmental factors on a person's psychological well-being suggests that, rather than focusing only on treating the symptoms of extreme distress, mental health programs should also engage in creating the ideal environment for human flourishing.

Compton and Shinn (2015) assert that the factors influencing mental health and wellness are disrupted by climate change. This essay offers a framework to help conceptualize and spark imagination on the complex picture of interaction and dynamic impacts on an individual's psychological well-being and mental health, and how they communicate with and are dismantle by climate change. It draws inspiration from several existing models (WHO, 2010; Liu et al., 2019) that understand social factors that are indicative of health. However, it is worthy to note that the climate change disruptive tendencies on the variables that determine mental health is dependent on a number of factors. The disruption of positive mental health determinants by climate change does not take place in a linear paradigm. As pointed out from the introduction, if proactive policies and interventions are put in place, the impact will be minimal and may not call for a global or national concern.

Determinants of Mental Health Within the Climate Change Framework

Figure 2 presents a framework that is made up of layered layers of determining categories that interact with one another to affect an individual's overall psychological well-being and mental state. Over time, there are changes in the factors, their interconnections, and their impact on mental health and wellbeing. Alterations across the life course, an increase in the frequency and intensity of extreme weather events, exposure to various consequences of climate change, and the amount of time that has passed since the climate impact are some examples of changes throughout time.

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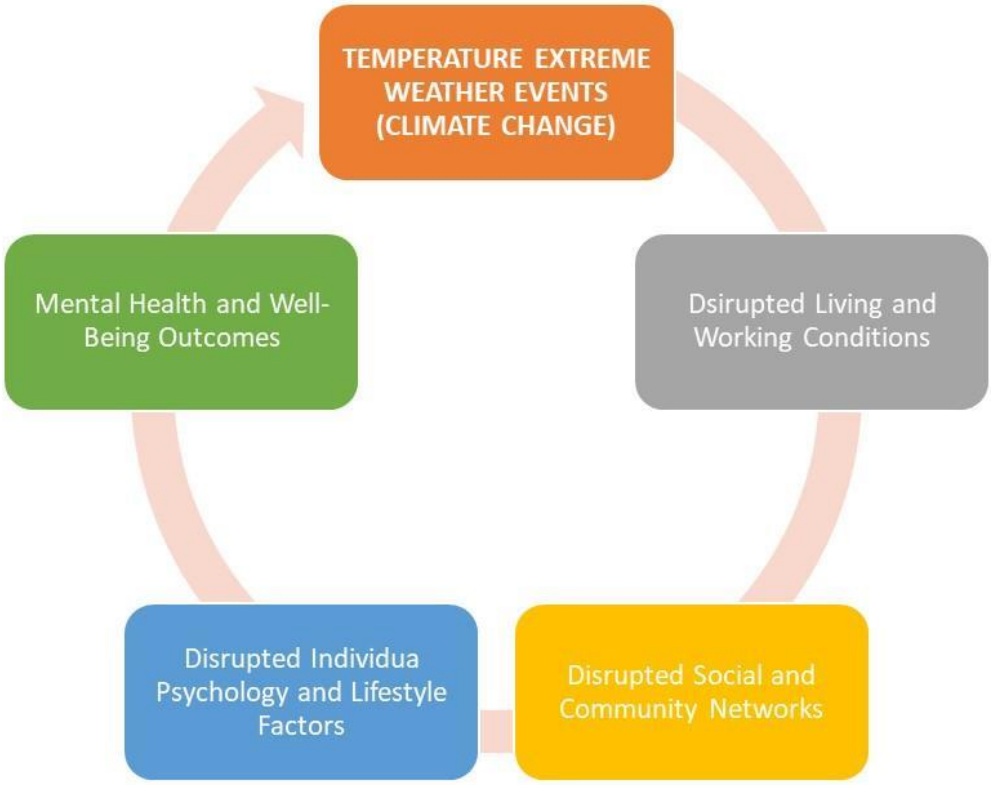

Figure 2

With inspiration from the Lancet Commission for Global Mental Health and Sustainable Development and Bronfenbrenner's Ecological Systems Theory, the framework shown in figure 2 above was adapted from Whitehead and Dahlgren model (Patel et al., 2018; Dahlgren & Whitehead 1991).

The framework outlines five cycle analysis of mental health and wellbeing determinants that interact with one another and with climate change. A person's unique psychology and lifestyle characteristics, such as their own values, attitudes, and behavior, interact with their biology, demography, and other factors including pre-existing mental illness and physical health. Their broader social and community networks, as well as personal interactions, the attitudes and values these groups and networks uphold, and the degree of cohesiveness within their communities, all have an impact on and are influenced by this. When it comes to climate change, the cycle and its drivers shift throughout time in tandem with changes in the individual's own environment, life stage, and the global environment. They also interact with more general historical occurrences, like exposure to extreme weather events in the past, or with specific personal experiences.

The cycle clearly shows that climate change affects mental health through a series of pathways. An extreme weather event demonstrated in climate adversely affects living working conditions, which affects social disrupted social community networks, this leads to a disrupted individual psychology and lifestyle factors and thus leads to mental health and well-being outcomes. However, adding to the cycle, from the perspective of empirical experience, many UK residents engage in poor health choices like vaping, smoking and related absurd choices. These engagements have a direct impact on the mental well-being of the practitioners. The cycle

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above failed to include this detail which is prevalent in the UK. Literature abounds on the relationship between vaping, smoking and disrupted mental health. This also calls for a policy action from the government of the UK it is a significant public health concern.

Health protection, health improvement and the role of healthcare services

In the year 2022, the Government of published a call for information-based research to underpin a new, a decade cross-government mental wellness and health plan. The government declared in January 2023 that mental health will be included in a Major Conditions Strategy rather than existing as a stand-alone plan. It stated that a coordinated approach will guarantee that mental health issues are taken into account in addition to problems with physical health (Garratt, 2023).

The NHS Long Term Plan highlights the UK government's present mental health commitments through 2023–2024. The National Audit Office and the Health and Social Care Committee Expert Panel have reviewed the Government's performance in relation to its commitments. They have expressed concerns that there will remain a disparity between the number of people with mental health disorders and those receiving care, even if the obligations are fulfilled.

The government unveiled a new suicide prevention plan for England from 2023 to 2028 in September of 2023. The goal stated in the NHS Long Term Workforce Plan is to add approximately 11,000 additional training spots for mental health nurses by 2031–2022, a 93% increase. By 2028/29, there would be a 38% increase in the number of mental health nursing positions.

As outlined in the previous section, it is pertinent to ensure that the government does not focus on just mental health curative projects but on preventive and proactive dimensions. This can be achieved through an analysis of the cycle as depicted in figure 2 on the various channels through which climate change variables affect mental health and well-being. The NHS long-term plan should also channel its acts and fundings to conducting studies that will ensure minimal gas emissions which are one of the direct causes of climate change. An understanding of these complex interactions is very important so as to provide a dependable solution to the problem of climate change and its adverse effect on mental health.

CONCLUSION

This essay has been able to analyze the effect of climate change on mental health in the UK. The analysis was not conducted with empirical survey data but rather was synthetically evaluated from literature and macroeconomic statistics. There has been a growing global awareness of the critical importance of mental health and wellbeing to quality of life, its indivisibility from physical health, and its dependence on a range of interconnected factors in individual, economic, political, social, and environmental conditions (mental health factors). Despite this, mental health has frequently been overlooked as the "poor cousin" of physical health in awareness, research, and support. There are answers to the climate catastrophe and its detrimental impacts on mental health and wellness; the harm to society's conscience and psyche will only worsen if leaders take longer to implement them. As such, expecting a generation of youth to grow up with greater psychological resilience in the face of climate change would be utterly unjust. However, they are being asked to do so due to decades of past generations'

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inaction. As a result, the UK owe it to youths and her children to prioritize addressing the root causes of climate change while also funding evidence-based interventions to assist their mental health in the face of this ongoing disaster.

All forms of climate action are dependent upon and linked to psychological reactions to climate change, mental well-being, and an overwhelming sense of agency to confront the issue. Our relationships with the environment and with one another are essential for both good mental health and taking the necessary steps to ensure a safe climate. Furthermore, making adjustments that meet society's need for a safe climate can have a significant positive impact on mental health and overall well-being.

This essay has demonstrated how, particularly in the face of insufficient corrective action, the emotional, psychological, and social costs of climate change will escalate as more people personally experience it and as public awareness of the issue grows. All of this highlights how urgently global leaders in particular need to move to cut greenhouse gas emissions in order to prevent these unfair costs on society and help communities prepare for a warming planet.

To guarantee the justice and acceptability of the low carbon transition and to ensure that resources are allocated where they will have the greatest impact and need, actions must be based on the requirements of the populace. The various ways that climate change can affect mental health and wellbeing have been briefly discussed in the paper; creating effective interventions and corrective measures requires an awareness of these pathways and how they differ in various cultural contexts. Lastly, although there are serious risks associated with climate change to mental health and wellness, there are also advantages to taking action. There is a pressing chance to create a more sustainable, healthy, and better future for everybody because of the effects of climate change.

Personal Reflection

My personal reflection experience is anchored on the cycle propounded by Gibbs (1988). The Gibbs reflective model is composed of six steps. What happened during the experience under study is the focus of the first three phases. The last three phases discuss ways to improve my knowledge for comparable circumstances that I might come across in the future.

Description

In order to reduce the amount of research each of us had to do for a graded written group work project, my group—which included more than three other students from my course—and I split up the portions. We believed we could piece it together in the afternoon, the day before the deadline, so we didn't set aside time to sit together to compose the work together. However, it became clear that the portions were worded differently as soon as we sat down. We had to rework most of the assignment in order to make it work. Even though we had given ourselves ample time to write our portions on our own before the deadline, we still needed to allow a significant amount of time for revisions in case anything went amiss. Two group members had to postpone their evening activities in order to finish the work before the deadline.

Feeling

Before we got together and learned we still had a lot of work to do, I was happy with how we had divided up the task. When we discovered we couldn't turn in the assignment exactly as it

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was, I got really furious. I knew the rewrite would work, but I needed more encouragement to get on with it. I felt somewhat bad about a few group members having to cancel their activities, which inspired me to put in more effort and complete the task earlier in the evening. In hindsight, I'm delighted we went with the effort-related methodology.

Evaluation

One of the things that went well was that every group member produced excellent work by the deadline. We were also motivated to work harder that evening because two group members had to cancel plans. That strengthened the team's will to work hard. However, we made the mistake of assuming that each person would write in a unique style, rendering the group's overall time plan useless.

Analysis

I came to the conclusion after giving it some thought that I need to have looked up cooking times and utilized a timer to help with my preparation. But all in all, it was a fun evening, and although my meal received some attention, that wasn't our main focus. My gregarious demeanor made them feel at ease and contributed to their enjoyment of the evening, as I discovered when I caught up with a few of my friends after the event and heard their positive feedback.

Conclusion

A group must first decide on the appearance and feel of each region before dividing the task into portions. Had we followed through on this, we could have assembled the teams and submitted them with minimal reworking. Additionally, I will continue to ask people to identify their talents, and I may recommend adopting a reliable model. Lastly, I learned that we occasionally check the decisions made by our group to make sure they are not the result of groupthink.

Action Plan

I should rehearse in advance the next time I throw an evening so I can employ a tried-and-true technique. I'll feel more prepared and self-assured as the occasion gets closer because of this. Additionally, tried-and-true ways could consult with an expert in the field for guidance.

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