



## **4. Environmental Challenges: A Psychological Approach to Health & Disaster Management**

### **1. Smriti Singh**

Research Scholar,

Department of Psychology,

C.M.P. Degree College, University of Allahabad, Prayagraj,

Mahatma Gandhi Road, George Town, 211002, Uttar Pradesh, India

Email- [smritisingh69228@gmail.com](mailto:smritisingh69228@gmail.com)

### **2. Dr. Ranjana Tiwari, Ph. D.**

Assistant Professor,

Department of Psychology

C.M.P. Degree College, University of Allahabad, Prayagraj

CMP Degree College, M.G. Marg, George Town, 211002, Uttar Pradesh, India

Email- [rt.psy1982@gmail.com](mailto:rt.psy1982@gmail.com)

### **Abstract**

*This article aims to explore the reciprocal relationship between humans and their environment and its profound impact on health. It highlights the effect of natural (e.g., floods, droughts, earthquakes, landslides, tsunamis), anthropogenic (human-induced pollution, climate change), and built environment stressors (e.g., urban planning, lifestyle choices) on humans. Extreme climate change and natural environmental disasters cause significant societal damage, associated economic losses and health consequences from acute trauma, PTSD, depression, anxiety, to physical injuries. The built environment and anthropogenic stressors both bring physical and mental health issues and influence social well-being. The role of psychology has been emphasised in disaster management, including preparedness, response and the long-term recovery phase. Psychological support and interventions help to cultivate community resilience. There is an urgent need of comprehensive strategies that can protect the environment and provide psychological support to build holistic wellbeing at the individual and community level.*

**Key words:** Environmental stressors, climate change, disaster management, resilience, health issues, wellbeing



## **1.0 Introduction**

The environment is a wide range of surroundings in which human beings perceive, experience and react to events or changes. Human development, growth, behaviour, mind, body and emotions are affected by the environment and vice versa because the environment and humans have a reciprocal relationship. Any type of climate change directly affects human life. Global warming is one of the severe issues affecting human life. The natural, biological and built environment has its own positive and negative impact on human behaviour. Disequilibrium of any environment causes stress on human life, and we consider it environmental stress. Natural environmental stress like climate change, pollution (e.g., air, water, soil, etc) and deforestation are major challenges which threaten human health, economic prospects, organisms, food and water supply of people across the world (IPCC, 2013). A huge number of health problems come from the poor environment in which we live. The purpose of the present article is to understand the mental and physical sufferings of organisms caused by the environment and to develop insight to generate related mitigation strategies.

Severity of natural environmental stressors in three strata, like acute climate events, e.g. wildfires, hurricanes and floods, are responsible for instant psychological reactions, often resulting in acute stress disorder, post-traumatic stress disorder (PTSD), anxiety, depression and sleep disturbances. Sub-acute climate events like heatwaves and droughts have been linked to increased aggression, delinquent behaviour and elevated suicide rates. Heat has also been associated with hormonal imbalances, which can manifest as mood disturbances, cognitive impairments, and drought have been correlated with a heightened prevalence of depression and suicide in rural populations. Persistent climate event-related phenomena, e.g. rising sea levels and increasing global temperatures, contribute to widespread societal distress, which generates chronic anxiety, existential dread and ecological grief (Kern de Castro, E., & Reis, M., 2025). Long-term environmental degradation potentially leads to chronic stress, climate anxiety, existential crisis, and ecological grief. Climate change increases psychological pressure, like fear and helplessness. Modern lifestyle and rigid mindset are continuously pressing our health and adaptability.



## **2.0 Natural environmental stressors**

Natural environmental stressors are constantly and negatively forcing the productivity of ecosystems, organisms, populations, communities, reproduction and global development. A poor natural environment exposes pollution, which subsequently leads to significant health issues such as respiratory diseases, heat-related illnesses and cancer. Although these effects are not 100% evenly distributed across the population. Any type of climate change poses a potential emergence of many new infectious diseases. The natural environment also plays an indirect critical role in shaping human behaviour, emotion, motivation, and impulsivity. Intensity of light levels has an impact on circadian rhythm, conducive to mood and sleep disorders. Though direct balanced sunlight exposure to blue and green spaces is good for wellbeing and enhances physical activity. Eventually, lifestyle choices are also undergoing through climate change, like poor exposure to environmental ionising radiation and reducing the risk of the body's natural defences against diseases. Conversely, access to nature and green environments is linked to better cognitive functioning, increased self-discipline and impulse control, and improved overall mental health. The present article is an attempt to analyse the role of a few major environmental stressors on the overall health of humans (Van Den Bosch, M.,2017).

**2.1 Flooding** is an overflow of water from lakes, rivers, seas and oceans that poses a significant threat. It affects the whole ecosystem. In 2023, floods caused 1,917 injuries and left 115 people missing in India (as of October 2023). The NITI Aayog's Flood Report highlights the upsetting annual impression, with deaths averaging between 1,600 and 1,654 per year, special inclusion of 547 deaths in 2022 and an astounding 965 in 2010. In 2023, 5.4 million people were expatriates, with over 112,000 homes impacted. In 2023 alone, floods affected approximately 7.5 million hectares of land and damaged around 1.2 million houses. Loss of the agricultural sector is also immense, with an estimated 618,248 cattle lost per annum. Economically, annual loss ranges from ₹1,805 to ₹5,649 crore, with a history of recent decades higher average suffering was ₹4,745 crore. Economic damage from 1990 to 2017 amounted to \$54.63 billion. In 2018, Kerala floods caused an estimated loss of \$4.25 billion. According to the National Disaster Management Authority (2020), the most flood red zone states in India are Uttar Pradesh, Assam, Maharashtra, Bihar, and West Bengal. The highest recorded loss of life fatalities was 11,316 in 1977. Distressingly, floods now occur



more than once every five years. Beyond destruction, floods are potentially responsible for numerous physical issues like hypothermia, infections, drowning, exacerbation of chronic diseases, injuries, respiratory illnesses, and malnutrition. Flood significantly leads to psychological challenges like acute stress, anxiety, trauma, depression, PTSD, and prolonged distress. The increasing frequency and severity of flooding are worsened by human-induced environmental changes, with deforestation and the loss of wetlands being prime examples of altered land use. Human behaviour also devastatingly enhances sea-level rise and intensification of the water cycle, which further influences the flood issue (Singh, H., Nielsen, M., & Greatrex, H., 2023).

**2.2 Drought** is an abnormal low rainfall for prolonged periods. It poses a severe menace to plant life and the survival of organisms by producing nutrient deficiency, scarcity of oxygen, pure air and creating incensed wind erosion. Floods profoundly affect economic, physical, and mental well-being. In 2023, the annual global rainfall was recorded at 46.2 mm and resulting in an estimate of \$45 billion in global economic damage (Padrón-Monedero, A., Linares, C., Díaz, J., & Noguez-Zambrano, I., 2024). Drought condition intensifies malnutrition, increase the frequency of waterborne diseases like cholera, and respiratory problems stemming from dust storms and wildfires. The World Health Organisation (WHO) annual estimated report reveals that 55 million people were affected by droughts in 2020. The report also found that 700 million will be at risk of displacement by 2030. Protracted droughts also force social unrest, mass migration, and significant psychological stress. Between 2014 and 2017, neuro-rehabilitation centres reported the enrolment of 2,550 patients. Draught fosters physical health issues, including cervical and lumbar radiculopathy, vertigo, and stroke (Ruikar, Devashish, et al., 2019). Remarkably, numerous patients attributed their health issues to socio-cultural beliefs, which complicated their treatment. Organisations like the International Fund for Agricultural Development (IFAD) implemented Rehabilitation Programmes for Drought-Affected Areas, serving essential resources such as seeds, tools, and water system restoration. Likewise, the United States Department of Agriculture (USDA) offers drought recovery resources, including livestock feed compensation, reforestation aid, and emergency conservation programs (O'Brien, L. V., Berry, H. L., Coleman, C., & Hanigan, I. C., 2014).



**2.3 Earthquakes** and volcanic eruptions are both influential natural environmental forces and unleash a variety of devastating consequences. The type of eruption (explosive versus effusive) and Volcanic Explosivity Index (VEI) decide the severity of damage. The proximity between volcanoes and populated areas carries casualties and property damage (WHO, 2025). Dispersal of ash and hazardous gases, affecting air quality and visibility, depends on wind direction. Climate and weather conditions can influence the distribution of volcanic materials and potentially trigger secondary hazards like lahars and acid rain. The timing of an eruption affects the immediate response, and the impact of ash and gases worsens the health of the local public. Volcanic eruption carries death, injuries, polluted water and the risks of other diseases.

Collapsing structures and falling ash, followed by long-term homelessness and significant socioeconomic challenges. Mutilated transportation networks hinder the delivery of essential aid. Although economic factors also shape a community's ability to cope and recover, job and business losses can cripple local economies, while crop destruction leads to food shortages. Damage to infrastructure disrupts essential services like power and water supply, and public health. Such environmental stress brings habitat loss and potential climate effects, and ash-induced airport obstruction relief efforts and international travel (Şam, M., Sever, G., Yildiz Yüksel, H., & Aliyev, R., 2025). Such situations hastily inflict harm within minutes to hours, like severe crushing injuries, particularly to the head and chest, asphyxiation from dust inhalation or chest compression, hypovolemic shock due to blood loss, or exposure to extreme temperatures. After the event, deaths occur due to dehydration, hypothermia, hyperthermia, crush syndrome, wound infections, and post-operative sepsis. Range of physical injuries from minor cuts and bruises to severe fractures, crush injuries, and burns sustained over a prolonged period. Beyond the physical issues, it significantly affects survivors' mental well-being, with post-traumatic stress disorder (PTSD) and major depression being the most commonly reported psychiatric conditions. The prevalence of PTSD is 1.20% to 87%, followed by earthquakes (Mavrouli, et. al., 2023).

**2.4 A landslide** is the movement of rock, soil and debris down a slope due to gravity. It can occur from various factors, including heavy rainfall, earthquakes, volcanic activity or human activities like deforestation and construction. In India, the frequency of landslides between



2015 to 2022 is 3,782, where 2,239 are in Kerala, 376 in West Bengal, 196 in Tamil Nadu, 194 in Karnataka and 184 in Jammu and Kashmir. Landslides caused 269 deaths in 2022, down from 380 in 2021. The deadliest year in recent history was 2014, with nearly 500 fatalities. The severe landslide case in 2013 in Kedarnath, where more than thousands lost their lives (Cassidy, T., 2013). It can damage homes, streets and infrastructure which leading to property loss and displacing individuals. The abrupt occurrence of a landslide may lead to injuries or more than 18,000 deaths, especially for individuals within their trajectory. Survivors often experience PTSD, anxiety, and depression (Cassidy, T., 2013). The 2023 Riviere-Eternite landslide caused severe psychological distress among evacuees. It can obstruct roads and interrupt transportation and other utility services. It may change terrain, ruin ecosystems and cause soil erosion, affecting native plant and animal life and also influence water bodies by adding sediment and poisons and water supply sources. Clean-up and recovery initiatives can be expensive, impacting the local economy (Cretney, R., 2019). The National Land Records Modernisation Programme (NLRMP) is a comprehensive national strategy focusing on landslide risk reduction and rehabilitation. Kerala's Rehabilitation Project was approved by the Kerala government for survivors of the Wayanad landslide, which killed over 200 people in July 2024. In general, landslides present considerable dangers to both human safety and the ecological system(.....).

**2.5 A tsunami** is a series of vast ocean waves caused by a significant imbalance of water due to underwater earthquakes, volcanic explosions or landslides. Tsunami waves reach heights of over 100 feet (30 meters), coastal areas in minutes can cause massive casualties, like homes, infrastructure displacement and entire communities can be obliterated. The cost of recovery and rebuilding can be expensive, which impacts local economies, tourism, and livelihoods, especially in coastal regions (Kharin, E.P.2009). Globally, tsunamis caused over 250,000 deaths (W.H.O., 2021). The Indian Ocean tsunami killed 40,000 to 45,000 women than men; survivors suffered from severe injuries. The trauma of experiencing a tsunami can lead to long-term psychological issues, including PTSD, anxiety, and depression (Tsunami Evaluation Coalition, 2020). Damage to essential services like water supply, electricity, and healthcare facilities, followed by tsunamis, obscures rescue and recovery efforts. Significant damage to coastal ecosystems, wildlife habitats and freshwater resources, community education carries a severe negative impact of tsunamis on human life (R Solanki 2016).



**3.0 Anthropogenic environmental stressors** are significant burdens on the environment and the planet's ecosystems that are caused by human activities. This direct and indirect involvement of human actions negatively changes physical, chemical, or biological elements of nature and shows significant impacts on both ecosystems and human health. Global health and ecological stability are critically influenced by environmental pollution like encircling water, air, and soil contamination, together with excessive noise and escalating population. Widespread diseases, death, multiple health issues in children, damaged food sources and poor aquatic life are induced by harmful substances in polluted water (Lin, L., Yang, H., & Xu, X., 2022; Wang, J., et al. 2022; Deng, X., et al. 2020). Air pollution contributes to acid rain and climate change. Impurity of air starts from industry, transportation, and technology used in agriculture, leading to severe respiratory ailments such as asthma, bronchitis, COPD, lung cancer risk, cardiovascular illnesses, and potential cognitive impairments. Air and noise pollution are linked to elevated risks of cardiovascular diseases like heart attacks, strokes, and hypertension. Toxins produced by soil pollution can contaminate food, water supplies, and cause various health problems. Excessive sound pollution negatively impacts human well-being by causing hearing damage, stress, and sleep disruption, with links to cardiovascular issues (Peris, E. 2020 & Münzel, T., et al. 2024). Rapid population growth aggravates resource demand, waste generation, and greenhouse gas emissions, straining natural systems. Sustained exposure to high levels of noise pollution from traffic and industry can result in permanent hearing loss (Kuzma, S., L. Saccoccia, and M. Chertock, 2023). Light pollution from artificial sources can negatively impact both wildlife and human health.

Anthropogenic environmental stressors exert a broad spectrum of detrimental effects on human health. Climate change spreads infectious diseases, vector-borne illnesses like malaria and waterborne diseases, and can trigger outbreaks in extreme weather. Pervasive presence of pollution, noise, and absence of green spaces compoundly impact various mental health issues, including stress, anxiety, and depression. Diverged chemical pollutants in air, water, and food, and radiation, elevate cancer risks. Early life exposure to certain pollutants can lead to developmental problems. Global warming increases the incidence of heat-related illnesses, and other environmental degradation also threatens food and water security, leading to shortages and malnutrition. Prolonged climate change can lead to pollen seasons and worsen allergies. Overall, these anthropogenic pressures pose considerable threats to both the



integrity of the ecosystem and human well-being. There is an urgent need for supportable practices, rigorous pollution control actions, and all-inclusive climate change mitigation practices to protect health and the environment (Singh, D., et al 2021).

#### **4.0 Built Environment**

The **built environment** profoundly influences each facet of our lives, and it is the concrete framework of human existence. It encompasses far beyond just the buildings where we reside, work, and pursue recreation. It covers the complicated distribution systems that transport vital services like water and electricity directly to our homes and workplaces. Significantly, it also includes the extensive web of roads, bridges, and transportation systems that empower our movement and connectivity from and within the country. Lastly, the built environment is the sum of all man-made structures and places precisely designed to enable human living and working. It also covers the production and maintenance of complex infrastructure as well as the consumption of an enormous quantity of materials.

The built environment influences mental and physical health, with factors like social isolation, poverty, crowding, stress depression. The choice of life style as not walking or not taking stairs, contributes to noncommunicable diseases (NCDs). In the US, fewer than half of adults meet the recommended activity, which causes premature deaths due to heart attacks. A sedentary lifestyle (over nine hours daily sitting) drastically increases the risk for Type 2 diabetes, heart disease, cancer, and premature mortality. Zoning and car reliance fostered suburban sprawl, discouraging physical activity. Social disparities persist, with "food deserts" common in low-income and minority neighbourhoods.

The built environment plays a dual role in disease prevention and containment, directly affecting health (e.g., indoor air quality) and indirectly shaping behaviours. Our understanding of health emphasises holistic well-being and long-term prevention. Now urban planning promotes physical activity and healthy diets, social interaction, and access to nature. This includes making cities pedestrian and cyclist-friendly through zoning changes, strategically locating essential services near residences, and maintaining safe sidewalks. Sometimes, narrow streets and parking buffers enhance pedestrian safety. Building design,



like visible stairs, boosts exercise, use of single-floor homes benefits individuals with disabilities and the elderly. Access of natural light and green spaces in buildings improves mental well-being. This connection between the built environment, physical activity, and mood is crucial for future city planning. Chronic disease containment in humans involves supportive and therapeutic environments, addressing health disparities (Evans, G. W., 2003)

## **5.0 Role of psychology in mitigating environmental stressors**

Human activities are the fundamental root of climate change and environmental degradation. Climate change is not only connected with environmental phenomena, but it is also strongly connected with anthropological issues. Understanding of this issue on psychological dimensions that underpin human behaviour, decision-making, and adaptation in the face of environmental stressors (R Solanki, 2016).

Psychology critically helps to understand risk perceptions at the community level and the way of interpreting environmental threats. Perception of risk directly influences the willpower of individuals and fosters pro-environmental behaviours. Cognitive biases, lack of awareness, and perceived helplessness are barriers for scheming effective environmental interventions. Adopting psychological factors for sustainable practices like rational choice theory, prospect theory, social cognitive theory and decision-making models will motivate individual for right action. Psychology crucially addresses the leading role of environmental stressors in increasing anxiety, depression, and eco-distress. Interventions based on mindfulness-based cognitive therapy, stress inoculation training and exposure therapy, training of right coping mechanisms and resilience strategies will help to rehabilitate the survivors. Particularly, mindfulness will help individuals to remain grounded in the present, reduce future anxiety in an uncertain environment (Altizer, S. Ostfeld, R. S. Johnson, P. T. J. Kutz, S. and Harvell, C. D., 2013). Relaxation techniques like yoga, pranayama, and meditation will help to manage stress and well-being in the face of environmental threats.

### **5.1 Disaster Management and Psychological Readiness:**

Extreme environment changes cause disaster, and their management leads to mitigation, preparedness, response, and recovery stages. The role of psychology is well considered at



each stage. Mitigation strategies, such as resilient building code, minimise physical damage and the well use of land planning, also indirectly reduce psychological pain. Preparedness means psychological readiness. It enhances emotional control, improves situational responses with the help of training programs, emergency supplies and drills. The response phase is an immediate action, like urgent medical care and fulfilling basic needs. It intrinsically gives psychological comfort in crisis. Lastly, the purpose of the recovery phase is to restore affected communities, providing psychological support and fostering long-term resilience and well-being. The recognition of psychological impact in disaster management has gained traction, albeit slowly. In 2014, the case of MV Sewol ferry in South Korea prompted policy guidelines and budget allocation for psychological support by the Ministry of the Interior and Safety (MOIS). In India from state to central governments have a disaster management system along with psychological support centres. However, beyond temporary measures, there is a need for continuous inclusive and mandatory strategic psychological plans on disaster management (Brown, J. M. Ciavola, P. Masselink, G. McCall, R. and Plater, A. J., 2016).

### **5.2 Understanding and Fostering Resilience:**

The most common psychological disorders, like Post-Traumatic Stress Disorder (PTSD), panic attacks and depression, are outcomes of extreme climate change (environmental disasters). Resilience is the only way to cope with such trauma. Psychological attributes like optimism, extraversion, conscientiousness, mood regulation, and positive emotions empower resilience. Amalgamation of personal, psychological, social, and contextual factors directs the power of individual resilience. Strong bonds, solidarity, stable relationships, and supportive social organisations also act as protective mechanisms ((Percy, C., Chen, Y. F., Bibi, A., Coles-Jordan, D., Dodson, E., Evans, T. & Van Der Bruggen, M., 2011). It is strongly required to train community members to give psychological first aid to survivors. Such integrating psychological insights will help to enhance community-level resilience. The purpose of mitigating researches is to identify and promote factors that foster resilience.

In conclusion, the imbalance between humans and their environment causes environmental stress. Understanding of human cognition, reasoning, and behaviour will help to promote



exercises. There is a need for more intense research to enhance effective psychological interventions, more ways of psychological preparedness for environmental stressors, community resilience and wellbeing.

### References:

- Altizer, S. Ostfeld, R. S. Johnson, P. T. J. Kutz, S. and Harvell, C. D. 2013. Climate change and infectious diseases: From evidence to a predictive framework, *Science*. Vol. 341: 514–519. doi: 10.1126/science.1239401
- Belov, S. V., Shestopalov, I. P., & Kharin, E. P. (2009, October). On the relation between endogenic activity of the Earth and solar and geomagnetic activity. In *Dokl. Earth Sci* (Vol. 428, No. 1, pp. 1142-1145).
- Brown, J. M. Ciavola, P. Masselink, G. McCall, R. and Plater, A. J. (2016). Preface: Monitoring and modelling to guide coastal adaptation to extreme storm events in a changing climate, *Natural Hazards and Earth System Sciences*. Vol. 16: 463-467. doi: 10.5194/nhess-16-463-2016.
- Cao, Y., Wang, J., Jian, F., Xiao, T., Song, W., Yisimayi, A., & Xie, X. S. (2022). Omicron escapes the majority of existing SARS-CoV-2 neutralizing antibodies. *Nature*, 602(7898), 657-663.
- Cassidy, T. (2013). *Environmental psychology: Behaviour and experience in context*. Psychology Press.
- Emery, J. (2018). How green is our valley?: five-year study of selected LIS journals from Taylor & Francis for green deposit of articles. *Insights: the UKSG journal*.
- Evans, G. W. (2003). The built environment and mental health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 80(4), 536-555.
- Gan, W. Q., Davies, H. W., Koehoorn, M., & Brauer, M. (2012). Association of long-term exposure to community noise and traffic-related air pollution with coronary heart disease mortality. *American journal of epidemiology*, 175(9), 898-906.
- Ha, K. M. (2021). Mitigating psychological impact: The experience of Korean disaster management. *Community mental health journal*, 57(3), 416-423.
- Hahad, O., Kuntic, M., Al-Kindi, S., Kuntic, I., Gilan, D., Petrowski, K., ... & Münzel, T. (2024). Noise and mental health: evidence, mechanisms, and consequences. *Journal of Exposure Science & Environmental Epidemiology*, 1-8.
- Health–Europe, T. L. R. (2023). Noise pollution: more attention is needed. *The Lancet Regional Health-Europe*, 24, 100577.
- Kerala’s largest rehabilitation project begins at Wayanad. (2025, April 1). <https://www.constructionweekonline.in/projects-tenders/kerala-wayanadlandslide>
- Kern de Castro, E., & Reis, M. (2025). Contributions of Health Psychology to Climate Change: A Review. *International Journal of Environmental Research and Public Health*, 22(4), 634.
- Kuzma, S., L. Saccoccia, and M. Chertock., (2023). 25 countries, housing one-quarter of the population, face extremely high water stress.
- Lin, L., Yang, H., & Xu, X. (2022). Effects of water pollution on human health and disease heterogeneity: a review. *Frontiers in environmental science*, 10, 880246.



- Manisalidis, I., Stavropoulou, E., Stavropoulos, A., & Bezirtzoglou, E. (2020). Environmental and health impacts of air pollution: a review. *Frontiers in public health*, 8, 14.
- Mavrouli, M., Mavroulis, S., Lekkas, E., & Tsakris, A. (2023). The impact of earthquakes on public health: A narrative review of infectious diseases in the post-disaster period aiming to disaster risk reduction. *Microorganisms*, 11(2), 419. <https://doi.org/10.3390/microorganisms11020419>
- Münzel, T., Hahad, O., Daiber, A., & Landrigan, P. J. (2023). Soil and water pollution and human health: what should cardiologists worry about?. *Cardiovascular research*, 119(2), 440-449.
- National Disaster Management Authority. (2025.) Floods. National Disaster Management Authority. <https://ndma.gov.in/Natural-Hazards/Floods>.
- O'Brien, L. V., Berry, H. L., Coleman, C., & Hanigan, I. C. (2014). Drought as a mental health exposure. *Environmental Research*, 131, 181-187.
- Padrón-Monedero, A., Linares, C., Díaz, J., & Noguer-Zambrano, I. (2024). Impact of drought on mental and behavioral disorders, contributions of research in a climate change context. A narrative review. *International journal of biometeorology*, 68(6), 1035-1042.
- Percy, C., Chen, Y. F., Bibi, A., Coles-Jordan, D., Dodson, E., Evans, T., & Van Der Bruggen, M. (2011). The contribution of human psychology to disaster management: mitigation, advance preparedness, response and recovery. *WIT Transactions on the Built Environment*, 119, 195-208.
- Peris, E. (2020). Noise pollution is a major problem, both for human health and the environment. *EEA Newsletter*, 1(2020), 1-4.
- Provencher, H. L. (2007). Role of psychological factors in studying recovery from a transactional stress-coping approach: Implications for mental health nursing practices. *International Journal of Mental Health Nursing*, 16(3), 188-197.
- R Solanki (2016), Effect of Climate Change on Mental Health, *International Journal of Indian Psychology*, Volume 3, Issue 4, No. 58, ISSN 2348-5396 (e), ISSN: 2349-3429 (p), DIP: 18.01.054/20160304, ISBN: 978-1-365-24976-1
- Ruikar, Devashish, et al., (2019) "Challenges Faced in Semi Urban & Rural Rehabilitation Center: A Single Center Prospective Study from India (P2.6-048)." *Neurology*, vol. 92, no. 15 supplement, Apr., p. P2.6-048. DOI.org (Crossref), [https://doi.org/10.1212/WNL.92.15\\_supplement.P2.6-048](https://doi.org/10.1212/WNL.92.15_supplement.P2.6-048).
- Şam, M., Sever, G., Yıldız Yüksel, H., & Aliyev, R. (2025). Earthquake effects on youth: understanding psychological challenges and support needs. *BMC psychology*, 13(1), 72.
- Shi, Z., Qin, S., Zhang, C., Chiu, Y., & Zhang, L. (2020). The impacts of water pollution emissions on public health in 30 provinces of China. *Healthcare* 8 (2): 119.
- Singh, D., Karambelas, A., Chhatre, A., DeFries, R., Kinney, P., & Davis, K. F. (2021). A systems lens to evaluate the compound human health impacts of anthropogenic activities. *One Earth*, 4(9), 1233–1247. <https://doi.org/10.1016/j.oneear.2021.08.006>



Year-7 Volume: II, April-June, 2025 Issue-26ISSN: 2582-1296 (Online)

**The Asian Thinker**

A Quarterly Bilingual Peer-Reviewed Journal for Social Sciences and Humanities

**Website:** [www.theasianthinker.com](http://www.theasianthinker.com)

**Email:** [asianthinkerjournal@gmail.com](mailto:asianthinkerjournal@gmail.com)

---

- Singh, H., Nielsen, M., & Greatrex, H. (2023). Causes, impacts, and mitigation strategies of urban pluvial floods in India: A systematic review. *International journal of disaster risk reduction*, 93, 103751.
- Southern African countries launch climate-resilient health initiative with WHO support | WHO|Regional Office for Africa.(2025,May21).<https://www.afro.who.int/news/southern-african-countries-launch-climate-resilient-health-initiative-who-support>.
- Thomas, A., Cretney, R., & Hayward, B. (2019). Student Strike 4 Climate: justice, emergency and citizenship. *New Zealand Geographer*, 75(2).
- Van Den Bosch, M. (2017). Natural environments, health, and well-being. In M. Van Den Bosch, Oxford Research Encyclopedia of Environmental Science. Oxford University Press. <https://doi.org/10.1093/acrefore/9780199389414.013.333>
- Wang, X., Deng, X., Fu, Q., Zhou, Q., Feng, J., Ma, H., & Zheng, C. (2020). A weakly-supervised framework for COVID-19 classification and lesion localization from chest CT. *IEEE transactions on medical imaging*, 39(8), 2615-2625.