
Farifteh Emamghorashi, M.Ed.
American Psychological Associate
Reston, Virginia
202-440-1381
فریفته امام قرشی
fariftehe@gmail.com
http://www.mycounselor.us/

Heat and Its Impact on Human Psychology

Adapted from the *Psychology Monitor Journal* (June 2024)

Psychologists and researchers are urgently working on a project examining how high temperatures affect human logic and behavior. Global warming has highlighted the importance of this issue for maintaining mental health. Summer has arrived, and in some areas, like Texas and Arizona, temperatures regularly rise above 100 degrees Fahrenheit. In 2023, 569 people in Phoenix, Arizona, died due to extreme heat. Last year, the world experienced its hottest summer, and it's likely that this year will be even hotter.

Heatstroke and heat-related strokes are well-known dangers, but the psychological effects of heat are equally significant. Irritability, bad temper, impatience, and oversensitivity caused by heat are known to create irreparable issues.

Individuals with mental health problems can become dangerous to society and their families during extreme heat. Anger and violence can escalate, sometimes leading to catastrophic consequences. Heat also negatively affects the brain development of young people and children. Additionally, those who take psychiatric medications are more sensitive to heat. Heat exacerbates depression in depressed individuals and increases anxiety and anger in people with mental illnesses.

The first danger of heat is dehydration, which leads to a drop in blood sugar and salt levels, resulting in heat exhaustion. Symptoms include extreme fatigue, dizziness, dry skin, and a rapid heart rate. If dehydration is not properly addressed, it can lead to heatstroke, which can severely affect the brain.

A 2022 study revealed that 10% to 28% of individuals who experience heat exhaustion suffer permanent brain damage. Heatstroke is a serious issue that can be fatal. In 2021, about 8% of people who called for emergency help were suffering from heat exhaustion and were transferred to hospitals, where they were admitted to psychiatric wards. These individuals experienced mental health issues due to heat stress, including increased drug use, anxiety, stress, self-harm, schizophrenia, and childhood psychiatric disorders.

Rising temperatures also cause death and psychological issues in older adults. A 2021 study found that in summer, 2.2% of the elderly experienced a decline in mental health, and 0.9% of deaths were related to heat. Depression in heat is accompanied by symptoms such as insomnia, loss of appetite, and social withdrawal, caused by hormonal imbalances in the brain, particularly serotonin, dopamine, and norepinephrine.

While winter depression is characterized by weight gain, oversleeping, and overeating, summer depression presents the opposite.


Farifteh Emamghorashi, M.Ed.
American Psychological Associate
Reston, Virginia
202-440-1381
فریفته امام قرشی
fariftehe@gmail.com
http://www.mycounselor.us/

Crimes involving anger and assault increase in the summer, with burglary rates rising by as much as 9%. In homes without air conditioning or cooling systems, physical altercations are more frequent compared to those with cooling options. Psychologists and environmental researchers are working to raise awareness about how heat affects the brain and mental health, emphasizing that beyond heat-related deaths and dehydration, behavioral disasters caused by heat can be irreversible.

Four tips for maintaining mental health during summer:

1. Recognize your concerns and protect your family, especially children, from the summer heat. While we cannot fight global warming, we can help ourselves and our loved ones.
2. If you are on asphalt or concrete, seek refuge under trees or near green plants. The oxygen produced by plants during the day can enhance our ability to cope with the heat.
3. Heat may prevent us from going outside, but social interactions and spending time with others can make us feel better, even in the heat.
4. If depression keeps you indoors, and you experience loss of appetite and insomnia, consult your doctor. Hormonal imbalances in the brain are no joke, and it's important to take them seriously.

Farifteh Emam Ghorashi