Is Stress the New Drug? An Analysis on the Effects of Stress on the Prefrontal Cortex and the Addicted Brain

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Stress in our society is a problem that affects almost everyone. This investigation sought to discover whether high perceived stress levels are related to lower prefrontal cortex functioning, lower concentration levels and higher addictive profiles. 50 Participants were chosen randomly from ages 14-16. Participants were first given a test that would measure their perceived stress levels. They were then given the Yale Food Addiction Scale that would measure their proneness to addiction. Afterwards they were given a five minute concentration test. Results were then analyzed by giving a score to each test and comparing them. Participants with high levels of perceived stress were more likely to be prone to addictions and had lower levels of concentration. The opposite was true for participants with low levels of stress. They had low levels of addiction and high levels of concentration. A separate study was then conducted with six participants to see if they could actually lower their stress levels with daily meditation. They meditated 5 minutes everyday for three weeks. At the end of three weeks, they were then tested again for stress, addiction, and concentration levels. Daily meditation helped to lower stress levels, proneness to addiction, and increased concentration levels. This shows that perceived stress can be a good measure of an impaired the prefrontal cortex which may reduce a persons decision making, concentration levels, and proneness to addiction. Improving prefrontal cortex functioning through meditation may help reduce the damaging effects of stress.

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