



# A DESKTOP PLANT Can Be A Workplace STRESSBUSTER

## Agencies

Does office work make you feel anxious and burnt out? Do the fast-approaching deadlines and boss meetings strike terror in your heart and set your pulse shooting up through the roof? Surprisingly, a potted plant placed right by your desk might help to remedy your daily sufferings, at least to some extent.

According to CNN Health, a group of researchers from Japan carried out an experiment to study the stress-relieving effects that plants can potentially have on employees at a busy workplace. The experts conducted their study on the employees of a

Japanese electric company to figure out the variations in their stress levels, before and after a 3-minute long involvement with a plant.

The study which got published in the journal HortTechnology revealed a slight drop in the anxiety score of employees with anxiety and a considerable drop in the resting heart rates of the other 27 percent.

The previous research on this subject was mostly carried out in controlled settings involving indirect plant interaction.

This study is unique in the sense that it not only analysed the stress-busting effects of gazing at a plant in actual office environment, but also the effects emanating from actively

taking care of the plants.

A positive trend was observed in the mental well-being of the employees when they were encouraged to take "nature breaks" lasting for three minutes, told Dr. Masahiro Toyoda, lead author of the study and professor at the University of Hyogo, told CNN Health.

According to Dr. Charles Hall, Ellison Chair of International Floriculture at Texas A&M University this research is the "latest of those that continue to point out that plants are beneficial to humans."

He further added that "it's something we inherently knew but has suddenly been quantified. And so now, we're seeing the numbers behind the reasoning."

The methodology of this experiment involved the use of State-Trait Anxiety Inventory index (STAI) and heart rate measurements of the employees, both in the morning and night.

The first week of the study was the control phase during which the workers measured their pulse rates by hand at the time when they felt stressed and then once again after staring for three minutes at the computer screen instead of a plant.

Before the commencement of the control phase, the workers were taught about how to care for a plant and were asked to choose their favourite one.

During the following two weeks, the subjects first measured their pulse under stressful conditions but

the second reading was taken after gazing for three minutes at the plant kept on their desk.

A slight drop in STAI scores was observed during the two weeks, however, a drop in pulse rate was quite apparent in more than one-fourth of the workers.

A drop in resting heart rate indicates the suppression of the body's fight or flight mechanism that sets in when an individual is faced with a stressful situation.

The researchers pointed to a few reasons that might have contributed to the aforementioned outcomes.

From the point of view of the attention restoration theory, a positive correlation is seen between concentration levels and looking at nature.

Furthermore, the affection involved in caring for the plant might have also played an instrumental role.

However, it was noted that this approach didn't suit everyone and in some cases, led to a further increase in anxiety.

Hall explained to CNN Health: "I think the anxiety among those in the study where their anxiety increased, it was because of that particular phenomenon that all of a sudden they're responsible for taking care of a plant and then all of a sudden the plant's not doing well and they have some anxieties from that."

While on the other hand, there were people who gradually got accustomed to the presence of plants

and stopped responding to their stress-reducing effects.

The study took 63 employees under its ambit who were aged between 24 and 60 and spent an average of 40 working hours in the office.

Amid the rising cases of work pressure-induced mental disorders, the authors stated that "the adoption of greenery into the office environment is becoming widespread as the need for improving mental health becomes greater."

If by chance, keeping a plant on your desk is not possible, the experts suggest that gazing outside the window for three minutes or taking brief strolls outside the office building can induce similar positive effects.

## Excess Smartphone Use Linked To Mental Distress, Suicidality

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Using smartphone for long hours every day may do you more harm than you can probably think of. Researchers have found that spending a lot of time with the device and on social media may lead to mental distress and suicidality among adolescents.

The findings, published in the journal CMAJ (Canadian Medical Association Journal) contains guidance for physicians, parents and teachers on how to help teenagers manage smartphone and social media use for a healthy balance between sleep, academic work, social activity, interpersonal relationships and online activity.

"Physicians, teachers and families need to work together with youth to decrease possible harmful effects of smartphones and social media on their relationships, sense of self, sleep, academic performance, and emotional well-being," said lead author of the study Elia Abi-Jaoude from Toronto Western Hospital in Canada.

This review of evidence, led by the Hospital for Sick Children (SickKids), focuses on smartphone use and does



not consider online gaming.

"For adolescents today, who have not known a world without social media, digital interactions are the norm, and the potential benefits of online access to productive mental health information -- including media literacy, creativity, self-expression, sense of belonging and civic engagement -- as well as low barriers to resources such as crisis lines and Internet-based talking therapies cannot be discounted," the authors wrote.

The researchers recommend that doctors should ask teenagers to reduce social media use rather than eradicate

## Foreign Language Learners May Continue To Make Same Mistakes They Point Out In Peers

Learners of foreign languages can hear the errors in pronunciation that fellow learners tend to make, but may continue to make the same mistakes themselves despite years of practice, according to a study which may lead to better ways of providing external feedback in language courses.

The researchers, including those from Ludwig Maximilian University (LMU) of Munich in Germany, said one of the hurdles in learning a foreign language is knowing the right way to pronounce words, in which learners are typically prone to specific sets of errors.

In their study, published in the journal PLOS One, they revealed that people laugh at these mistakes in pronunciation made by their peers, even though they make the same mistakes themselves. This reaction, the researchers said, points to a paradox in which learners register errors when made by others, but find it virtually impossible to eliminate the same typical errors in their own pronunciation even after years of practice.

"Learners have a tendency to overestimate the quality of their own pronunciation," said Eva Reinisch, study co-author from LMU. "As a rule, they believe that their English is better than that spoken by their fellow students at language schools, although they make the same set of errors," Reinisch said.

According to the study, this exaggerated assessment of one's own ability is a significant factor explaining why it is difficult to learn the sounds of a foreign language.

In the study, the scientists asked 24 female German learners of English to read out 60 short sentences like "The family bought a house", "The jug is on the shelf", and "They heard a funny noise". Weeks later, the same learners were invited to the lab again, and asked to listen to recordings of four learners -- three from others, and one of their own -- and were asked to grade the pronunciation of each sentence. The



recordings were manipulated in such a way that the female speakers sounded like male speakers to ensure that participants would not recognise their own productions, the study noted.

"This element of the experimental design is crucial. It was essential that none of listeners would be aware that their own productions were included in the test sample, otherwise their assessments couldn't be taken as unbiased," said Holger Mitterer, another co-author of the study from the University of Malta in Malta. In all cases, the listeners rated their own pronunciation as better than others did, even when they were unable to recognise that it was their own recording, the researchers noted. "We were surprised that the experiment so clearly pointed to the significance of overestimation of one's own abilities in this context," Reinisch added.

The researchers said the results could be due to familiar accents being easier to understand than accents that are less commonly spoken. "One is best acquainted with the sound of one's own voice, and has no difficulty understanding it," Reinisch said. "Perhaps this familiarity leads us to regard our pronunciation as being better than it actually is," she said. Another possible factor contributing to the finding, the scientists said, is known as the 'mere exposure' effect in which

people rate things which they are more familiar with -- such as the sound of our own voice -- as more congenial.

According to the researchers, the findings emphasise the importance of external feedback in language courses, since it increases the learners' awareness of deficits in language production and comprehension. A lack of feedback, according to the study, increases the risk of learners feeling that they have already mastered the unfamiliar articulation patterns in the new language, while that may not be the case. "As long as we believe that we are already pretty good, we are not going to put in more effort to improve," Reinisch said.

## Daily Exposure To Ozone Pollution Linked To Higher Early Death Risk: Study

### Press Trust Of India

Daily exposure to ground level ozone in cities worldwide is associated with an increased risk of premature death, according to a study based on data from over 400 cities in 20 countries across the world.

The study, published in The BMJ journal, show that over 6,000 early deaths each year would have been avoided in the selected cities if countries had implemented stricter air quality standards.

Researchers, including those from the London School of Hygiene and Tropical Medicine in the UK, noted that ground level ozone is a highly reactive gas commonly found in urban and suburban environments, formed

when pollutants react in sunlight.

Ozone is made up of three atoms of oxygen, and is a highly reactive gas.

Recent reviews suggest that 80 per cent of the world's population in urban areas are exposed to air pollution levels above the World Health Organization (WHO) threshold of 100 microgrammes per cubic metre (g/m3), they said.

Most previous studies have found positive associations between ground level ozone and mortality, but differences in study design and quality make it difficult to draw consistent conclusions across different regions.

The team analysed deaths and environmental measures -- weather and air pollutants -- in 406 cities in 20 countries, with overlapping periods between 1985 and 2015.

The researchers derived daily average ozone levels -- above a maximum background level of 70 g/m3 -- particulate matter, temperature, and relative humidity at each location to estimate the daily number of extra deaths attributable to ozone.

A total of 45,165,171 deaths were analysed in the 406 cities.

On average, a 10 g/m3 increase in ozone during the current and previous day was associated with a 0.18 per cent increased risk of death, suggesting evidence of a potential direct association.

This equates to 6,262 extra deaths each year in the 406 cities that could potentially have been avoided if countries had implemented stricter air quality standards in line with the WHO guideline, the researchers said.