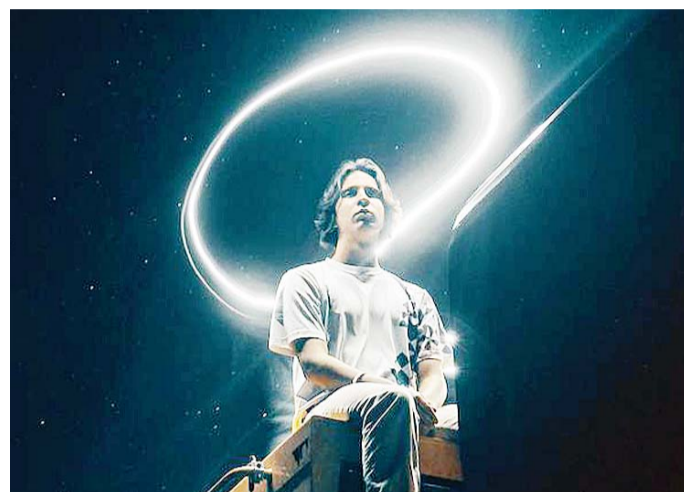


#MIND&BODY

The study demonstrates that some regions of the cerebral cortex involved in cognitive processing and mood show sensitivity for light intensity.

How Light Affects Our Mood



New findings clarify how quantity and quality of light affect mood. In a new study published in the Proceedings of the National Academy of Science, the research team used functional MRI to reveal how light-intensity signals reach the brain, and how brain structures involved in mood process those signals.

The study demonstrates that some regions of the cerebral cortex involved in cognitive processing and mood show sensitivity for light intensity.

The discovery has implications for understanding mood problems like seasonal affective disorder and major depressive disorders, as well as how to treat them, says lead author Jerome Sanes, a Brown University professor of neuroscience affiliated with the university's Carney Institute for Brain Science.

Identifying this pathway and understanding its function might directly promote development of approaches to treat depression, either by pharmacological manipulations or non-invasive brain stimulation in selected nodes of the pathway or with targeted bright-light therapy," Sanes says.

Goggles & Brain Scans

The findings build on previous research by study co-author David Berson, professor of neuroscience, who in 2002 discovered special light-sensing cells in the eye. Unlike rods and cones, these "intrinsically photosensitive retinal ganglion cells" are not involved in what's known as "object vision" or "form vision," Sanes says, but mainly function to sense light intensity.

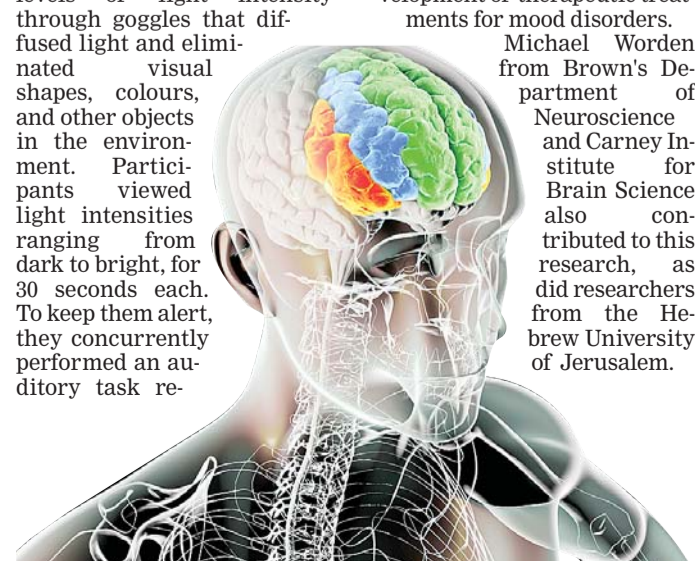
Prior research, some of it by Berson, found that some animals have a mood-regulating neural pathway linking these photosensitive retinal cells to areas in the prefrontal cortex involved in mood disorders.

Sanes says that the new study was designed to determine whether a similar pathway existed in humans and whether they could find evidence that the pathway had functional similarity to the light-sensitive retinal ganglion cells.

To determine whether a light-intensity-encoding pathway modulates the human prefrontal cortex, the researchers used functional MRI to explore whole-brain activation patterns in 20 healthy adults.

In a relatively simple experiment, according to Sanes, participants viewed four different levels of light intensity through goggles that dif-

fused light and eliminated visual shapes, colours, and other objects in the environment. Participants viewed light intensities ranging from dark to bright, for 30 seconds each. To keep them alert, they concurrently performed an auditory task re-



Michael Worden from Brown's Department of Neuroscience and Carney Institute. Participants viewed light intensities ranging from dark to bright, for 30 seconds each. To keep them alert, they concurrently performed an auditory task re-

Jahangir Intimately knew His Animals (...2)

Once Jahangir was away from Agra for few days and when he came back one of his pet lion saw him and ran to meet his owner escaping clutches of care takers into the Deewan-e-Aam. Soon chaos ensued and commoners and ministers alike were running helter skelter shelter afraid of a huge lion running in Deewan-e-Aam during a crowded court time. Finally Jahangir had to get down from his Emperor's seat and calm the lion and the lion refused to go back into the lion stable at any cost. Thus Jahangir and the courtiers had another royal company by their side through the day's court proceedings as the lion refused to be coaxed back from Deewan-e-Aam leaving his owner and the proceedings could not be stopped to allow Jahangir to go back to his palace taking his lion along.

It was common for Jahangir to take his pet lion/tiger for meetings with ambassadors and other emperors. But having a lion perched on emperor's seat next to its owner Jahangir in Deewan-e-Aam was an uncommon sight for Agra citizens and nobles. The Christian priests recorded this incident in their letters. Many Mughal paintings depict Jahangir with lion on stroll while meeting Persian ambassador etc. Jahangir was a curious naturalist and had keen sense of observation. *Jahangirnama* is filled with observations about animals.

On this day Salbahan arrived from Burhanpur and exhibited to my view my late brother Danyaal's horses and elephants. One of the elephants he had brought was named Mast-Alast. I liked its looks, so I named it Nur Gaj. An amazing thing was witnessed in this elephant. Beside both ears were bumps the size of small watermelons, and there was also a bump on the place



Anjali Sharma
Senior Journalist & Wildlife Enthusiast

Once someone told Jahangir that lion and tigers cannot change their true nature and will kill any human if given an opportunity. So Jahangir kept his home bred lions and tigers in his bedroom for many months and even in his Dewan-e-Khas and none tried to kill him.

Another incident mentioned about Jahangir's pet love is about his pet lion. Once Jahangir was away from Agra for few days and when he came back one of his pet lion saw him and ran to meet his owner escaping clutches of care takers into the Deewan-e-Aam. Soon chaos ensued and commoners and ministers alike were running helter skelter shelter afraid of a huge lion running in Deewan-e-Aam during a crowded court time. Finally Jahangir had to get down from his Emperor's seat and calm the lion and the lion refused to go back into the lion stable at any cost. Thus Jahangir and the courtiers had another royal company by their side through the day's court proceedings as the lion refused to be coaxed back from Deewan-e-Aam leaving his owner and the proceedings could not be stopped to allow Jahangir to go back to his palace taking his lion along.

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Jahangir & Abbas I.

Having a lion perched on emperor's seat next to its owner Jahangir in Deewan-e-Aam was an uncommon sight for Agra citizens and nobles.

#AKBARNAMA

where fluid drips out from elephants when they are in rut. The bump on its forehead was larger than has been seen in other elephants. I thought it looked very handsome and awe-inspiring. He was a keen and expert hunter too as noted in *Jahangirnama*. On Monday the fourteenth (February 20), while on the road, it was heard that two Mar. i 607-Mar. i 608 91 lions were menacing travellers between Panipat and Karnal. I got my elephants together and set out. When I reached the place they had been spotted, I got on a female elephant and ordered the other elephants to encircle the lions as a qamargha. By God's grace I shot them both and eliminated the evil of these two, which had blocked the people's way.

This is what he wrote about his pet turkey that he got as gift: Although His Majesty Firdaws-Makani (Babur) wrote in his memoirs of the shapes and forms of some animals, apparently he did not order the artists to depict them. [85a] Since these animals looked so extremely strange to me, I both wrote of them and ordered the artists to draw their likenesses for me, the Jabangirunvna so that the astonishment one has at hearing of them would increase by seeing them in form. One of the animals was larger in body than a peahen and significantly smaller than a peacock. Sometimes when it displays itself during mating it spreads its tail and its other feathers like a pe-



cock and dances. Its beak and legs are like a rooster's. Its head, neck, and wattle constantly change colour. When it is mating they are as red as can be-you'd think it had all been set with coral. After a while these same places become white and look like cotton.

Sometimes they look turquoise. It keeps changing colour like a chameleon. The piece of flesh it has on its head resembles a cock's comb. The strange part about it is that when it is mating, the piece of flesh hangs down a span from its head like an elephant's trunk, but then when it pulls it up it stands erect a distance of two fingers like a rhinoceros' horn. The area around its eyes is always turquoise-coloured and never changes. Its feathers appear to be of different colours, unlike a peacock's feathers. He even made his elephant caretaker a Raja. Quote from *Jahangirnama*

Kishan Das, the overseer of the elephant department and stable who had held the two offices since His Majesty Arsh-Ashyani's time and who had been hoping for a long, long time to be made a raja, was awarded the title of raja and given a rank of 1000.

Jahangir's elephants bitten by a mad dog, quote from Jahangirnama I knew that any animal bitten by a mad dog would certainly die, but until now it wasn't known to be true of elephants. One night during my reign, however, a mad dog got into the area in which one of my personal elephants, Kachhi by the name, was tied and bit the leg of the female elephant that was my elephant's companion. [56b] The female immediately roared, and the elephant keeper came running and drove the dog away into a thorn brake in the vicinity. A little later it came back out, went to my elephant, and bit it again on the leg. The elephant stepped on the dog and killed it. One cloudy day a month and five days later, a clap of thunder hit the female's ear while it was grazing. All at once it bellowed, its limbs began to tremble, and it threw itself on the ground. It got up again, but it drooled for seven days until suddenly it bellowed in distress. No treatment the elephant keepers tried, did any good. On the seventh day it fell down dead. One month after the female elephant's



Hiran Minar near Lahore.

World Product Day

Products are one of the main aspects of businesses everywhere that helps keep people moving and the economy growing. However, how products are developed and how resources are used can be a tricky thing to understand, especially in the global context. If you work in an industry where your products affect the lives of individuals each day or are just looking to understand how the product industry works, then check out this day known as World Product Day, a day dedicated to helping others share their experiences in the economy through their company jobs.



During a hunt he had spotted a deer and tried to kill it, but accidentally killed his own favourite, Mansraj. The emperor becomes so sad that he ordered to bury deer in the ground where it died and build a tower called Hiran Minar. This is a very rare example of love towards a pet, a gesture of love towards wildlife in a time when the western world was even not familiar with such intentions.

an elephant calf usually comes out feet first. When the calf was separated from the mother, the mother kicked dust on it with her feet and began to show love and reassurance. The calf remained down for an instant, and then it got up and went for the mother's udders.

Jahangir's tribute to his pet a tomb to rival Taj Mahal in middle of river in Lahore

Hiran Minar was built at the site of a game reserve in honours of Mughal Emperor Jahangir's pet antelope, due to his fondness of nature and relationship between human's pets and hunting. Therefore, Hiran Minar was built during the reign of the Mughal Emperor Jahangir in a hunting reserve used by the Mughal royals. During the reign of Emperor Salim from 1605 to 1627, Sheikhpura had the status of a royal hunting ground. The minaret itself was built in 1606 as a monument to Emperor Jahangir's beloved pet antelope, Mansraj, or "Light of the Mind". Who had been trained to lure wild animals to the tank in order to be hunted? The practice of building such tomb-markers over the skulls of game animals is an ancient Persian custom. Mughal Emperor Jahangir ordered a tower and a grave to be made for his deer, Mansraj. During a hunt he had spotted a deer and tried to kill it, but accidentally killed his own favourite, Mansraj. The emperor becomes so sad that he ordered to bury deer in the ground where it died and build a tower called Hiran Minar. This is a very rare example of love towards a pet, a gesture of love towards wildlife in a time when the western world was even not familiar with such intentions.

Concluded
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#EVENT

In an intense book session, the 13-year-old child prodigy poet, Dania Khan, took one on an incredible poetic sojourn. In conversation with Jaipur's Indo-English poet, Jagdeep Singh, at the Ashok Club in Jaipur, the young poet touched on aspects of Greek Mythology, death, loneliness, fear, guilt, etc.

An Evening of Poetry and Awe



Tusharika Singh
Freelancer writer and city blogger

Meet Dania Khan. She is all of 13 years old and is already a published poet. That surely is no mean feat! Her poetry anthology 'Labyrinth', published by Rupa Publications, has as many as 50 poems. And if that's not intriguing enough, the foreword of her anthology has been written by the renowned author, Ruskin Bond. With Dania's collection of poems I was mesmerized by her observation, her critical interpretation of things. In some of the poems, the reader might feel himself/herself submerged in the whirlpool of conflicting emotions while in some, the reader will feel emancipated. Such is the young poetess's construct of words that it leaves you both chained and liberated, all at once", writes the noted author for the prodigy poet.

The Jaipur poet, who is studying Mythology, love, darkness, grief, death, Dania's poetry reflects a deep and realistic understanding of the vicissitudes of life. Her poems also give references to nature like leaves, grass, nectar, trees, moon, etc. Like Wordsworth, Dania also feels there is a divine element in nature if only one can perceive it. In fact, the poet also takes inspiration from the great bard, Shakespeare to write her poetry. "Shakespeare's plays, even the tragedies, are elegant and I have tried to bring that elegance into my poems. Even though his tragedies may have blood and gore but they have a sense of elegance in them as there is an emotion attached in that violence", tells Dania.

Even a cursory glance through her book, brings out Dania's fascination with nature. In her 50 odd poems, there are as many as forty references to nature ranging from leaves, trees, nectar, stars, moon, grass etc. Elaborating on her ardent



Dania Khan.

conversation with Indo-English poet and writer, Jagdeep Singh she threw light on where she derives her inspiration from, her journey as a poet, her future plans and much more. Below are some interesting excerpts from their conversation:

From the lens of an 'almost teenager'

Even though Dania started writing at the age of 8, her trust with writing poetry took place at the age of 10. However, most of the poems in her anthology were written during the lockdown when she was between the age of 11 and 12 years. "At the age of 11 and 12, one is at the threshold of teenage. It is an age when you are not a child and have started almost maturing. One starts seeing the world through a different lens - not that of parents or friends but through your own



Dania Khan in conversation with Jagdeep Singh.

lens. The poetry stems from both my imagination and my observations of the world around", shares Dania.

The process of getting her poetry anthology was not a cakewalk though. "Many publishers were not keen on a child author and some were even averse to the idea of publishing poetry in general", tells Dania while talking about the process of getting her book published.

Poetry based on a multitude of themes

Touching themes like Greek Mythology, love, darkness, grief, death, Dania's poetry reflects a deep and realistic understanding of the vicissitudes of life. Her poems also give references to nature like leaves, grass, nectar, trees, moon, etc. Like Wordsworth, Dania also feels there is a divine element in nature if only one can perceive it. In fact, the poet also takes inspiration from the great bard, Shakespeare to write her poetry. "Shakespeare's plays, even the tragedies, are elegant and I have tried to bring that elegance into my poems. Even though his tragedies may have blood and gore but they have a sense of elegance in them as there is an emotion attached in that violence", tells Dania.

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A view of the audience.

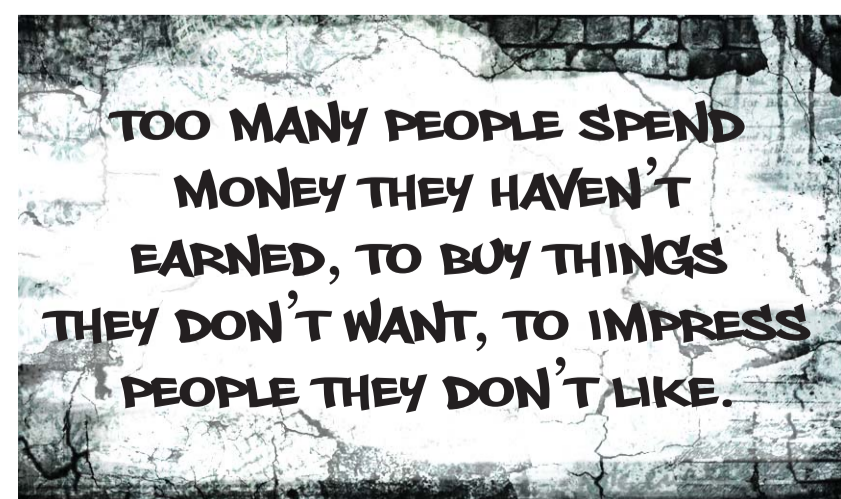
love for nature, Dania says: "In addition to writing, I also love to paint and draw. And when I am drawing nature comes easy to me as compared to human faces or figures. So my captivation for nature stems from there. It feels ethereal and almost divine to me. Moreover, nature can also be perceived and interpreted in many different ways. I try to incorporate that feature of nature in my poetry."

The Process of Writing Poetry

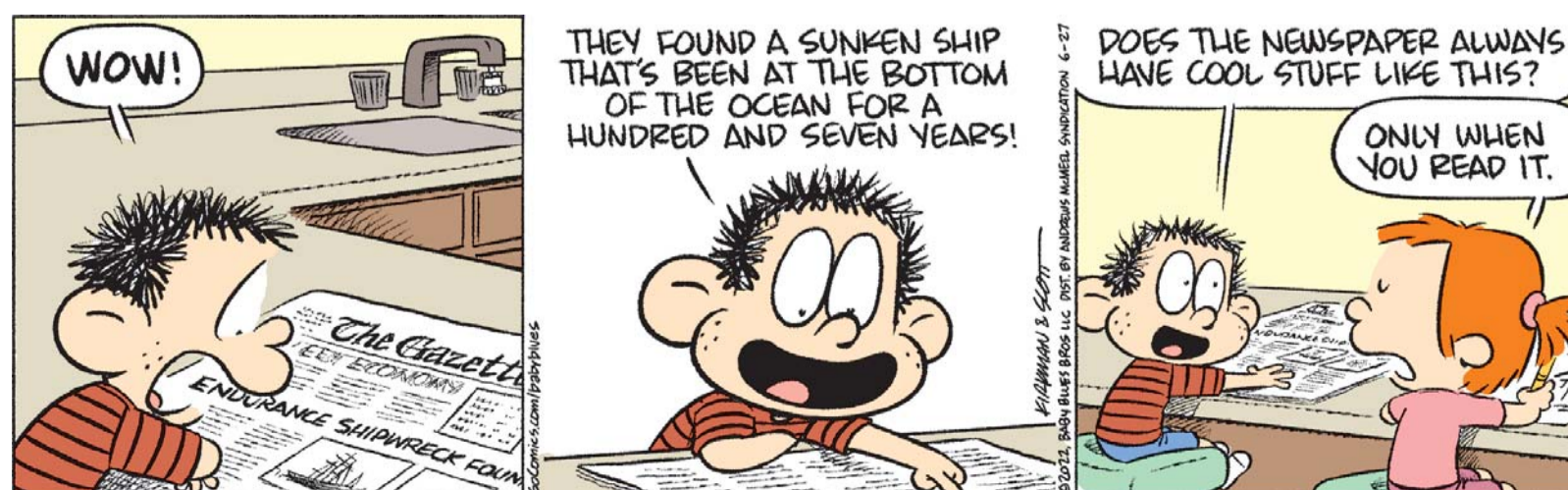
On being asked about her writing process, Dania said: "A poem comes when it comes. When it comes, it is very natural but if the inspiration does not come I cannot write. I seldom revise my poetry. During the publishing process, I might move some words here and there but that's about it. "While answering a question from the audience on what happens if a poem comes to her during an ongoing class, she said that she always keeps a notebook in her bag to scribble her ideas and thoughts and if something strikes during her school hours, she makes it a point to quickly jot it down and homes it later at home.

While talking about her favourite poet, Dania revealed that she loves to read poet Pablo Neruda's original work in Spanish. A blogger and social media influencer who loves to review books on Instagram, Dania is also passionate about astro physics and quantum physics. Currently, she is writing short stories as well.

THE WALL



BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS



By Jerry Scott & Jim Borgman