राष्ट्रदुत

#RESEARCH

Smoking Shrinks Your Brain

"As we've started looking at the brain more closely, it's become apparent that smoking is really bad for your brain."





noking shrinks the

Since people's brains nat urally lose volume with age, the findings, published in Biological Psychiatry: Global Open Science, help explain why smokers are at high risk decline and Alzheimer's dis-

"Up until recently, scientists have overlooked the effects of smoking on the brain, in part, because we were focused on all the terrible effects of 'smoking' on the lungs and the heart," says senior author Laura J. Bierut. professor of Psychiatry at Washington University in St. Louis. "But as we've started looking at the brain more closely, it's become apparent that smoking is also really bad for your brain."

Scientists have long known that smoking and smaller brain volume are linked, but they've never been sure which the instigator is. And there is a third factor to consider, genetics. Both brain size and smoking behaviour are heritable About half of a person's risk of smoking can be attributed

To disentangle the relationship between genes, brains, and behaviour, Bierut and first author Yoonhoo Chang, a graduate student, analysed data drawn from the UK Biobank, a publicly available biomedical database that contains genetic, health, and behavioural information on half-a-million people, mostly of European descent.

A subset of over 40,000 UK Biobank participants underwent brain imaging, which

to his or her genes.

can be used to determine brain volume. In total, the team analysed de-identified data on brain volume, smoking history, and genetic risk for smoking for 32,094 people.

Each pair of factors proved to be linked, history smoking and brain volume, genetic risk for smok and genetic risk for smoking and brain volume. Further, the association between smoking and brain volume depended on dose. The more packs a person smoked per day, the smaller his or her

predisposition leads to smok

bad," Bierut says. "A reduc-

tion in brain volume is consis-

tent with increased aging

This is important as our pop-

ulation gets older, because

aging and smoking are both

risk factors for dementia.

had never smoked.

to quit smoking."

says. "Smoking is a modifi

able risk factor. There's one

thing you can change to stop aging your brain, and nut-

ting yourself at increased

risk of dementia, and that's

brain volume

ing, which leads to decreased

"It sounds bad, and it is

not won the Dadasaheb Phalke Award even till the age of 90, though she is a much 'deserving candidate When all three factors for the honour. Actors, years were considered together, the younger than her, have been association between genetic risk for smoking and brain Achievement Awards, including the Dadasaheb Phalke Award, but volume disappeared, while the link between each of Vviavanthimala remained outside those and smoking behavthe framework. This happened iours remained. Using a stawhen she had practically quit films and had retired in the South. tistical approach known as 'mediation analysis.' the Earlier, during her very sucresearchers determined the sequence of events, genetic

cessful career, however, she went on winning a string of awards such as five Filmfare Awards and two BFJA Awards. She made her screen debut at the age of 16 with the Tamil film Vaazhkai (1949), and followed this with a role in the Telugu film Jeevitham (1950). Her first work in Hindi cinema was the social guidance film Bahar (1951), which she headlined, and achieved her breakthrough with the romance Naagin (1954).

And unfortunately the The first time. I met her in-pershrinkage seems to be irreson, was backstage at her solo dance performance at the King George versible. By analysing data on High School Hall in Bombay, where people, who had quit smoking vears before, the researchers I, then, lived. Her performance was found that their brains brilliant. So, I went backstage with remained permanently smallmy mother to congratulate her. I er than those of people, who was still in school and was a student both, Kathak "You can't undo the dam-Bharatanatyam, myself. She was age that has already been thrilled to see a young girl coming done, but you can avoid caus backstage to congratulate her. Her ing further damage," Chang two gurus, Sohanlal and Hiralal,



Bimal Roy must have admired her dedication to her work, be it 'dancing' or be it 'acting,' so, he repeated her in Madhumati, the most 'commercially' successful film in his entire career. Vyjayanthimala, in the title role, plays a tribal girl, very good in dance and song and invested the character with a throbbing life of its own. Her performance, in each song, from 'Aaja Re Main Toh Kab Se Khadi Iss Paar' to 'Zulmi Sang Aankh Ladi Toh Ghadi Ghadi Mora Dil Dhadke' to 'Papi Bichhua' reach far beyond being just a visual delight and place them firmly in posterity among the performance archives of Vyjayanthimala's films. 'Dil Tadap Tadap ke,' a duet, carries the essence of romance that forms the core of the story.



Vviavanthimala in *Naagin*

year. Sadly, everyone

have forgotten that she

even exists, with rare pictures

flashed of her present person on the

Internet. She has virtually stepped

back both, from films and from

dance performances, but this can-

Vviavanthimala also began her

not negate her rich and long contri

political career in 1984, when she

contested in Tamil Nadu general

elections. She contested for the

South Chennai constituency from

the Indian National Congress.

Vyjayanthimala defeated Era

Sezhiyan (leader of the Janata

Party) and won the election with a

margin of about 48,000 votes. Later. she also became a member of Lok

Sabha. But she did not remain very

active as an MP, and was content

awards is that Vviavanthimala has

One of the saddest irony of film

Lifetime

with her dancing classes.

bution to Indian cinema.

Kathak school, were her gurus, who later mastered Bharatanatyam also, when they migrated from Rajasthan to the South. They would also do the choreography of Vviavanthimala's dance numbers in her films for many years till they retired. However, it is not very clear

and Hiralal, entered her life as she had trained in *Bharatanatyam* from Sivaraja Iyer. She had her arangetram at the age of 13 and started performing in Tamil Nadu, later. She is, perhaps, the first danseuse actress in Hindi cinema, who reigned as the leading lady, not just for her beauty stuck to the classical dance styles for her film dances, though later on, she innovated and improvised her dancing skills to suit the periodicity of the film, its geographical backdrop and the character she was to play. From her performances on screen, it was evident that she did her homework well but producers and directors chose her, mainly for her beauty and for her skills as a trained classical dancer, and not for her acting skills. But she was not to blame. Her casting, opposite the best leading men of her times, ranging from Dilip Kumar through Ashok Kumar, Pradeep Kumar, Rajendra Kumar, Kishore Kumar and also Dev Anand, led to scripts that sidelined the character of the

for her solely, built around her film. Ladki, which was a super duper hit, filled with dances in every other frame. Kathputli, a Chakravarty, saw her, primarily, in a dancing role and though, the film was a super flop, Vyjayanthimala's dance numbers were a 'winner Later, she got the opportunity of portraving dramatic and signifi-



who were expert trainers in the

Sometimes, roles were written dancing talents and this was evident even with her second Hindi beautiful film, directed by Amiya cant roles in Gunga-Jumna, Naya Daur, Devdas, New Delhi, and

#VYJAYANTHIMALA



VYJAYANTHIMALA RECEIVING 'PADMA SHRI' FROM ZAKIR HUSSAIN.

Aasha, which became famous for her wonderful foxtrot innovation in the song 'Eena Meena Deeka.'

She proved her value, as a dramatic actress worth her name, only when she stepped into the role of "Chandramukhi" in *Devdas*, a role rejected by several actresses. In fact, scriptwriter, Nabendu Ghosh had disapproved of Vyjayanthimala for Devdas. But other actresses like Nargis had rejected to play the part and so, by default, it came to Vyjayanthimala. She told Bimal Roy, the director. "Dada, take me only if you think I am worth the character," and she was in

Following *Devdas*, she replaced Madhubala in B.R. Chopra's Naya Daur (1957), one of her biggest hits and shot right to the top with Bimal Roy's reincarnation suspense

ollowing *Devdas*, she replaced Madhubala in B.R. Chopra's Naya Daur (1957), one of her biggest hits and shot right to the top with Bimal Roy's reincarnation suspense drama, Madhumati 1958), perhaps, her most popular film ever, while her sensitive depiction of a prostitute in B.R. Chopra's Sadhna (1958) fetched

one of the biggest stars of Hindi cinema, by that time-

her the Filmfare Award for Best Actress, her first. She was, clearly,

drama, Madhumati (1958), perhaps, her most popular film ever, while her sensitive depiction of a prostitute in B.R. Chopra's *Sadhna* (1958) etched her the Filmfare Award for Best Actress, her first. She was, clearly, one of the biggest stars of Hindi cinema, by that time. In this period, she also returned to her

roots in the South' to do big Tamil

films, opposite the biggest stars of Tamil cinema, M.G.R. Sivaji Ganesan and Gemini Ganesan in films like Baghdad Thirudan (1960), Raja Bakthi (1960) and then, Nilavu

(1961), respectively Gunga Jumna (1961) saw anoth er flawless performance from her. It is to her credit that in spite of her South-Indian upbringing, her *Bhoipuri* dialect in the film is near perfect and deservedly fetched her another Filmfare Award for Best Actress. Some of her most outstanding 'dance' films, which will remain archived in history, are Naagin, Amrapali, Ladki, Jewel Thief, Pehli Jhalak, Aasha, New

Delhi, and many more. Vviavanthimala got her third Filmfare Best Actress Award for Rai Kapoor's Sangam (1964), one of the best triangles in Indian Cinema. She was spot on as the woman, who loves Rajendra Kumar, but who is married to Raj Kapoor. She tries to be the perfect wife and succeeds too, till a letter from her past catches up with her, and almost wrecks her marriage. While doing Sangam, it is said that she got involved in an ill-fated romance with Raj Kapoor.

By Rick Kirkman & Jerry Scott

her in Madhumati, the most 'commercially' successful film in his entire career. Vyjayanthimala, in the title role, plays a tribal girl, very good in dance and song, and invested the character with a throbbing life of its own. Her performance, in each song, from 'Aaja Re Main Toh Kab Se Khadi Iss Paar' to 'Zulmi Sang Dil Dhadke' to 'Papi Bichhua' reach posterity among the performance Dil Tadap Tadap ke,' a duet, carries the essence of romance that forms the core of the story. Hema Malini, herself a trained

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dedication to her work, be it 'danc-

ing' or be it 'acting,' so, he repeated

lancer, considered Vyjayanthimala her 'idol' and was humbled by her idol, when she went to visit the senior actress at her home in Chennai. when the latter was bestowed the Padma Vibhushan. Said Hema Malini. "It is the most memorable role model, the iconic viavanthimala, along with her ovelv family, at her Chennai resiife, still so full of dance in her. She talks dance, lives dance and has a glow and an 'aura' around her. I was as much in awe as I was many years ago. Had a nostalgic discussion has to learn a lot from her. It was a great moment for me to have been given so much love by this lovely lady, beautiful inside and out." The second and last time I met

Vyjayanthimala, in-person, was during the shooting of a dance number in Bimal Roy's Devdas (1955), being shot on a floor in Mohan Studios in Andheri. The scene being shot 'Chandramukhi' (Vyjayanthimala) dancing, in the presence of 'Devdas' (Dilip Kumar) and 'Chunilal' (Motilal) to the beautiful song number 'O Jane wale, Rukh Jaa Koi Gam' and though, she appeared to dance, smoothly and flawlessly, there were several takes. could not speak to her because we had to remain completely silent. But what surprised me was during the breaks in the shooting, none of the actors present exchanged a single word with each other. She was nominated for the Best Supporting Actress by Filmfare, the following vear. But she refused the award because she insisted that 'Chandramukhi' was an equal lead in the film, and not a supporting character. Another time, she refused to portray the role of Vijay's mother in Yash Chopra's Deewaar, as she was not interested in elderly roles and the role went to

goes, is history. Nirupa Roy gained great heights as a screen mother while Vyjavanthimala disappeared into permanent retirement. In Bombay, her life was entirely within the control of her maternal grandmother. Yadugiri Devi

because her mother. Vasundhara Devi lived in Madras. The domineering presence of Yadugiri Devi stopped Vyjayanthimala from did not like, or, if the matriarch did not approve of the hero cast, oppocalled upon to play, so, her personal life remained more or less 'invisifor a major part of Vyjayanthimala's youth. The outdoor shoots, the fee, the duration of each schedule had to be okayed by Yadugiri Devi.

Perhaps, it was after Yadugiri Devi became too old to control her grand-daughter's movements and life, or perhaps, after her demise, Vviavanthimala had the first taste of love. But all these stories are based purely on reports in glossy film journals, known for their gossip columns. But what is had a serious affair with Dilip Kumar, as they worked in several films, together. But they fell out and the story goes that during the shooting of *Sunghursh*, adapted from a Mahasweta Devi story, they did not exchange a single one, was over. They did not speak to each other for years till the ice melt, after Dilip Kumar married

During the making of Raj Kapoor's *Sangam*, the story goes that Raj Kapoor was smitten by Vyjayanthimala, and Raj Kapoor was known for falling 'head over heels' for his 'leading ladies.' But some conflict broke the relationship. Sometime later, Vviavanthimala fell in love with Dr. Chamanlal Bali, who was the Kapoor family's regular physician. He was *Puniabi*, a married man with growing children, but the pair got married, nevertheless, and Vyjayanthimala slowly began to back out from films, and retired to run her dance school in Chennai,

She gave up films almost completely. Bali passed away but her stepsons are said to have invested her earnings wrongly and also got her embroiled in court cases. She has a son. Suchindra, from her marriage to Dr. Bali, who passed away before he could grow up. The son tried his luck in Tamil films but, perhaps, could not make it. The question remains, 'why

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should she NOT be bestowed with

the Dadasaheb Phalke Award?'

#AWARENESS

World Wildlife Day

Even though, we might like to think so sometimes, humans aren't the only living things on Earth



he World is full of 'amazing' creatures medium. From the

'birds' of the air to wildlife abounds in the most unusual and unexpected places. Wildlife benefits us in many ways, and has since timed out of mind. World Wildlife Day is a day to remind us of our responsibilities to our world and the lifeforms we share it with. Even though, we might

like to think so sometimes, humans aren't the only living things on Earth. In fact, we're far outnumbered by other living things, from animals and plants to fungi and bacteria. Wildlife isn't just something that we passively observe, it's part of 'our world,' and some thing we need to care for World Wildlife Day is your chance to celebrate all wildlife, from the smallest insect to blue whales. No matter what you love about wildlife, you can spend the day taking action to help pro-

This day is all about raising awareness of 'wild flora and fauna' across the world. Whether you love animals. vou're passionate about plants, or vou're concerned about climate change, it's the day, that you can use, to educate yourself or others. You can celebrate the incredible biodiversity across the world and perhaps, get out there to flora and fauna that the world has to offer. Celebrating World Wildlife Day is a must for anyone who loves our planet.

Endangered Species through out the world. Whether plan or animal, the importance of these species, in every area of human life, from culinary to being threatened every year geringly high rate. CITES was continue to hemorrhage

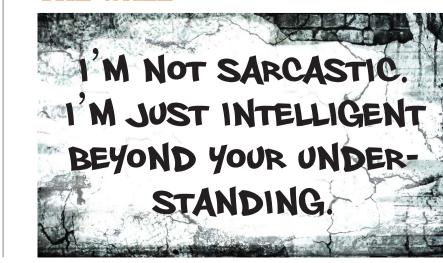
seen from again. On 20th December 2013 another step was taken to help spread awareness of the fragility of endangered species in the world. At its 68th session, the UN declared Day would be dedicated to a changing nature of our world lose, from the animal and plant kingdom, if we don't

Sometimes, the day high lights an endangered animal or group of animals, while in a specific issue affecting the world of wildlife

The day might not have been around for long com you are passionate about the Earth and everything on it, celebrating is a must!



THE WALL



BABY BLUES



THE REST OF THE COUNTRY IS HAVING A REAL WINTER, WHILE WE'RE STUCK WITH "SUNNY AND MILD"



ZITS







By Jerry Scott & Jim Borgman

