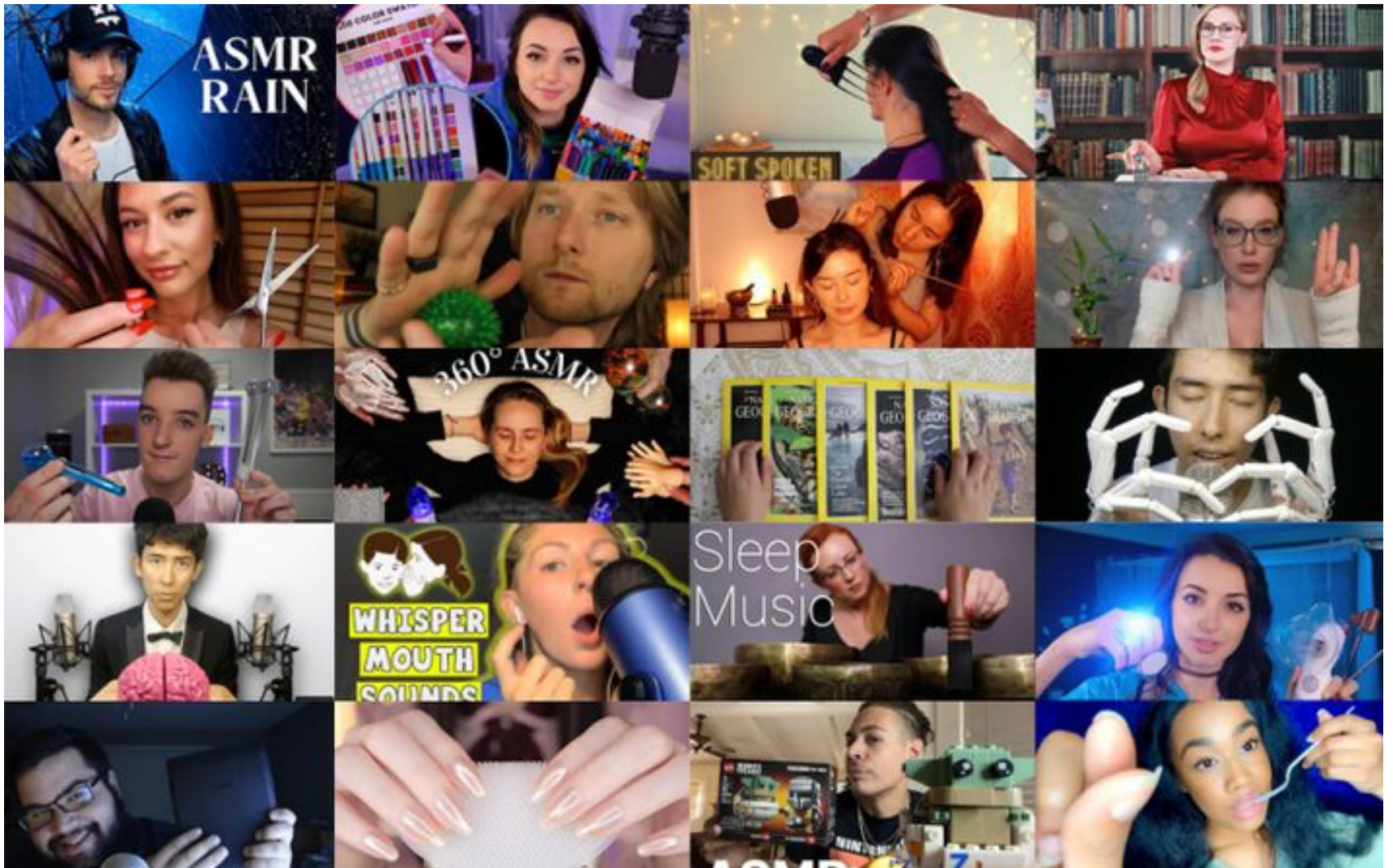


NATIONAL GEOGRAPHIC

By Jini Reddy

Published 3 Mar 2022

<https://www.nationalgeographic.co.uk/science-and-technology/2022/03/asmr-or-not-unpicking-the-science-behind-a-sensory-phenomenon>



ASMR content online takes many forms – from whispering or playing with Lego into a microphone, to depictions of relaxing experiences such as massaging, stamping library books or turning the pages of National Geographic magazine. The phenomenon has created a thriving online community of ASMRtists, such as these on YouTube.

PHOTOGRAPH BY 'ASMR' SEARCH / YOUTUBE

ASMR or not? Unpicking the science behind a sensory phenomenon

The euphoric-but-relaxing responses to soothing visuals and quirky, textural sounds has spawned an online wellbeing phenomenon. But what is ASMR – and why do only some people feel it?

IN THE VIDEO, a ritual is unfolding: a woman is placing beautiful objects just so on a table, haloed by a soft light. Tranquil piano music plays in the background. When the set-up is complete, a second woman comes into view. The first begins to offer her a soothing massage, using essential oils and a small tension-relieving tool called a [Gua Sha stone](#). Traditional Chinese acupuncture rounds off the treatment. Her client looks visibly relaxed – but she is not the only one. Even though I'm staring at a screen, a soothing sensation flows from my head to my shoulders and I feel a deep feeling of wellbeing.

I've experienced the same sensation while having my hair braided as a child, while watching slabs of clay being moulded and slapped, and once while listening to pigs in a sty crunching apples and carrots. I know – I'm a lone weirdo. Except I'm not. For these 'good feelings' have a name: [ASMR](#), [Autonomous Sensory Meridian Response](#). And judging by the never-ending scroll of ASMR-related content on YouTube – from scenarios like the above, to sonic triggers ranging from tapping fingertips on cork, cutting fabric and whispering into a microphone, to turning the pages of [National Geographic magazine](#), amongst much else – millions more feel it too.

Science vs trend

So far so zeitgeisty, but is ASMR real? It certainly is to its fans. But what does the science say? [Dr. Craig Richard](#) is a professor of biopharmaceutical

sciences at Shenandoah University in Virginia, and an ASMR expert. Richard first experienced what he describes as a 'wonderful brain fuzziness and relaxation' while watching a TV show (Bob Ross – The Joy of Painting) as a child. So fascinated was he by the phenomenon that he has created an online resource, [ASMR University](#), and wrote a book on the subject, the aptly named *Brain Tingles*.

"ASMR is a deeply relaxing feeling often accompanied by light and pleasurable brain tingles. It's often stimulated during moments of positive, personal attention from a kind or caring person whispering, speaking, acting, and moving in a gentle way," he says. "It may be likely that about 10-20% of the global population is able to experience ASMR."

Richard and his colleagues conducted a [brain scan study](#) to find out what was happening on a physiological level when ASMR is triggered: "It showed that specific areas of the brain are active when someone is experiencing ASMR. Some of these regions highlight the likely involvement of [dopamine](#) and [oxytocin](#)," he says.

"Oxytocin, also known as the 'love hormone' may be central to ASMR because the behaviours that trigger oxytocin release are similar to the behaviours that trigger ASMR. Additionally, oxytocin is [known to stimulate feelings of relaxation and comfort](#), which are similar to the feelings described when experiencing ASMR."

Aside from simple relaxation, reported benefits include a reduction in anxiety and insomnia, along with, as Richard puts it 'perceived' benefits for people suffering from chronic pain and depression.

A tough study

As for refining those benefits in a clinical setting, there is work to be done.

“There have only been a handful of studies examining the neurological and physiological basis of ASMR. We’re still at a very early stage in the research field but interest and acceptance is starting to pick up,” says [Giulia Poerio, a psychology lecturer at the University of Essex](#), and an advocate for ASMR research – itself is a tricky prospect. “Practical challenges include the ability to elicit ASMR under laboratory conditions, and often people report experiencing ASMR less intensely in the lab than in their everyday lives. Other challenges include recruiting people who don’t experience ASMR [as controls], and identifying ‘true’ ASMR responders.”

ASMR content online takes many forms – from whispering or playing with Lego into a microphone, to depictions of relaxing experiences such as massaging, stamping library books or turning the pages of National Geographic magazine. The phenomenon has created a thriving online community of ASMRtists, such as these on YouTube.

Photograph by **'ASMR' Search / YouTube**

By this Poerio means “those that get the head orientated tingling” – and therefore have a physiological and neurological response to the trigger. What exactly is going on within a responder is a matter of debate, but early findings are intriguing. “In the [Functional MRI \(fMRI\) study](#) 10 ASMR-sensitive participants watched ASMR videos in the scanner. Periods of tingling were associated with increased activity in several brain regions associated with self-relevant thought, reward activation, emotional arousal and [somatosensory](#) processing [the ability of the body to interpret a bodily sensation],” says Poerio.

“Although these results are preliminary and based on a small sample size they suggest that ASMR is a complex state associated with increased activation in neural regions associated with emotion, empathy, and affiliative behaviours.”

In terms of the physiological sensations, the results are less enigmatic. “Our own research indicates that the [ASMR response is characterised by reliable](#)

“On the other hand, I’ve created many videos revolving around the [‘scalp check’ trigger](#), which is my favourite because of fond memories of my mother playing with my hair and experiencing ASMR through that. I like to add elements of Traditional Chinese medicine, spiritual healing and massage in these videos and discuss any health and personal growth tips I’ve come across. I generally try to incorporate ASMR triggers into my videos in a way that feels more realistic and natural.”

Coco believes that ASMR helps to bring closeness and intimacy to social interactions (for those experiencing it first-hand), all of which meets a need in an ever more fragmented world, and encourages people to be more mindful in their daily lives.

“To experience the sensation of ASMR, you need to pay close attention to your senses including sight, sound, touch, smell or taste. In doing so you are able to live fully in the present moment,” she says.

A mixed response

And yet, not everyone experiences ASMR. When I try explaining it to a few friends, they look at me blankly. When I show them a video, I feel as though I’m sharing something illicit. There’s still no reaction, other than giggles and raised eyebrows. Richard puts this down to biological reasons – [the differing of gene sequences, say](#) – life experiences, cultural influences or even mindsets. That, and a misunderstanding of what exactly ASMR is.

“It can often be difficult to get across the difference between ASMR content, and ASMR as an emotional experience; people often conflate the two,” says Giulia Poerio. “ASMR content includes the types of stimuli that might elicit ASMR – [whispering, tapping sounds](#) – in some but not all people. [But] ASMR as an emotional experience describes the relaxing tingling sensation in response to certain stimuli. Because people can view ASMR content online, they can often assume that any emotional response – either positive or negative – is ‘ASMR.’

“It can often be difficult to get across the difference between ASMR content, and ASMR as an emotional experience.”

Dr Giulia Poerio

“It is also often challenging to get across the idea that ASMR as a sensation existed before [YouTube](#) and ASMR content online,” she adds. “People tend to report it from childhood in real life interpersonal scenarios, especially those involving soft touch.”

And what about those who actively can’t bear any of the triggers? Craig Richard cites a [study](#) on this, published in the Journal of Clinical Psychology in 2017, in which people who experience ASMR stimuli feel annoyed, angry or deeply uncomfortable.

“This response is not ASMR but rather [misophonia](#),” says Richard, of a disorder in which people have abnormally strong and negative reactions to ordinary sounds that humans make. But for now at least it seems such sufferers are drowned out by the approving roars – or rather gentle whispers – of the converted.

Louise Pepper, a radio presenter, is one. “When I used to do shift work, I used ASMR to help me fall asleep when I needed a nap during the day. And if I wake up in the night and my mind is racing, I use it as a distraction, to help me relax. I see it as a little treat.”

Stephanie Barnes, who works in the hectic world of public relations describes it as a ‘wonder’. “It helps me to centre myself and clear my negative energy.” As for this writer, watching ASMR acts as a kind of meditation, a hotline to a delicious trance-like state.

Distraction, treat or lifesaver, given the turbulent times we live in – and thanks to the power of social media – it is perhaps little wonder that more and more are turning to this easy-to-access, free form of self-care, even if the science hasn't yet revealed much about it.

"The response from the scientific and ASMR community has been fantastic and we're working with researchers from all around the world." Says Giulia Poerio. "Of course there will still be healthy scepticism, which is needed in science – but that's why we do research.

"There are many experiences that are non-universal which are now readily accepted by the scientific community – [synesthesia](#), [sleep paralysis](#), [aphantasia](#)," she adds. "You don't need to have first-hand experience to accept them as genuine phenomena worthy of empirical investigation. I'm sure ASMR will follow the same path."

[Jini Reddy](#) is an author and freelance journalist based in London. Follow her on [Twitter](#).

Additional reporting by Simon Ingram