



By

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What if I told you that there are people who are able to feel a sensation without any sort of tactile input? Specifically, there are people who feel tingles by just watching videos or hearing sounds. In fact, there is a whole community dedicated to this phenomenon, which is known as Autonomous Sensory Meridian Response (ASMR). ASMR is a perceptual sensation and experience that is often described as a relaxing, tingling sensation in the scalp or spine in response to particular visual or auditory stimuli known as triggers. Common triggers include whispers, massage videos, tapping, hair brushing, and crinkling sounds.

With the emergence of digital content intended to trigger ASMR there has been a rise in awareness and prevalence of this sensation. YouTube has played a key role in shaping content and establishing an ASMR community. As an observer and passive participant in the community I have witnessed the evolution and growth of content from its humble days of [grainy head massage videos](#) to the [sophisticated and professional quality of today's videos](#).

Although there is an entire community based around ASMR its existence is a contentious topic. Most pro-ASMR arguments are based on personal, anecdotal experiences. There have been studies that examined reactions and perceptions through surveys, social constructs of the community, brain activity, and speech patterns of voices that induce ASMR. All of these studies attempted to uncover this sensory phenomenon in a controlled manner. What has yet to be done is an examination of data out in "the wilds" of the digital frontier. What do I mean by "the wilds"? The Internet.

The Internet contains a wealth of data in message boards and comments. This data is raw and not moderated. The ASMR community tends to congregate around Reddit and YouTube videos to discuss their reactions and experiences with ASMR. A question that surfaces is whether there are shared experiences and perceptions when individuals sense ASMR? Specifically, are there universal perceptions felt by individuals who experience ASMR? If there are, how can we leverage ASMR in a useful way? Naturally, as a User Experience researcher I sought to answer these questions by examining reactions and comments on the web using sentiment analysis.

Data collection and analysis

The main use of sentiment analysis is to discern trends and patterns in message and review boards. The technique is often used to gain insights about products or even political campaigns, and there are different strategies ranging from simple key word searches to more complex algorithms that reveal how users and the public view a topic of interest. For my investigation I analyzed data from a comment section of a YouTube video and a Reddit forum dedicated to a video called [The Top 120 Binaural ASMR Triggers: A 4.5 Hour Tingle Fest!](#) by well-known ASMR content creator Heather Feather. I chose this particular video since it had over two million views. The video was four hours long and featured an array of triggers from whispering and lip smacking to performing tasks such as an eye exam and typing on a keyboard.

I used a sentiment analysis technique known as keyword spotting. I scoured hundreds of comments and selected those that contained phrases and words pertaining to perception, such as "tingles" or "chills." I kept a tally of these perceptions and experiences to investigate how often users felt a particular sensation.

Behavioral patterns, perceptions, and uses

My foray into sentiment analysis supported that there were patterns and behaviors associated with the perception of ASMR. A total of 128 comments were found to contain perceptions and experiences of ASMR by the video viewers. Patterns included a variety of sensations associated with body parts, changes in mental states, therapeutic uses, and surprisingly, negative experiences. Responses can be broken down into four main topics: sensations, anatomical associations, effects and uses, and negative experiences.

Sensations

The most frequent sensation reported by far was a tingle. This is not surprising because most casual conversations, articles, and discussions repeatedly use this term to describe the sensation of ASMR. Other terms that surfaced more than once included tickling and chills. People also reported feeling shivers, shocks, and being massaged. A majority of these sensations were linked to specific areas of the body.

Anatomical associations

The most referenced body region associated with sensations was the back. Specific areas included the spine, left lower back, and right lower back. The head, scalp, ear, neck, hip, and leg were also mentioned (Table 1).

"It was always when I heard things in my right ear that I got super tingly in my spine and it was awesome." - Elizabeth Ellis, how she perceived Heather Feather's ASMR video.

Effects and uses

Users reported having shifts in emotional states and wakefulness. Seventeen individuals mentioned that they felt relaxed both while viewing the video and after viewing the video. Forty-four people left comments stating that they felt sleepy or fell asleep. A couple people admitted to feeling sexually aroused.

Comments revealed that ASMR was used for therapeutic reasons or as a relaxation tool. Many described using ASMR to relax, fall asleep, unwind from a stressful day, and to decrease anxiety and restlessness.

"Thank you so much HF [Heather Feather], your ASMR videos are so very helpful for anxiety and restlessness. You're a hero." - Slyfox00, expressed gratitude for helping manage anxiety and restlessness.

Negative experiences and sensations

There were a handful of comments where people reported having unpleasant and negative feelings and sensations while watching ASMR videos. This was unexpected, as many people regard ASMR as a delightful experience. Negative emotions included anxiety, being terrified, spooked, scared, upset, and angry. Reactions included cringing, wincing, and clenching. One person reported feeling pain while watching the video.

"My back started hurting is that the feeling ur [sic] supposed to get???" - Kaleb, confused by the pain he experienced.

How can we leverage ASMR?

My short and quick analysis of YouTube and Reddit comments demonstrated that there are shared experiences and uses when watching ASMR videos. Given this, what are the next steps to understanding ASMR and how can this experience be leveraged to enhance digital experiences and apply them in a meaningful manner that has benefits?

A noticeable amount of comments revealed that individuals were using ASMR videos as a sleeping aid or as a therapeutic/relaxation strategy. This user behavior opens up the possibilities of how ASMR can be applied in a meaningful and useful way. Watching an ASMR video could be a solution for those who suffer from restlessness and have trouble sleeping. Honing in on what aspects of these videos users find soothing and comforting is necessary to develop an effective tool.

The video game industry could take advantage of ASMR. The gaming industry fully incorporates vision, sound, and tactile modalities through impressive visuals and dynamic sounds. Implementing ASMR sensations would add an extra dimension to create a more immersive, evocative, and richer gaming environment.

There are other digital platforms that could potentially benefit from using ASMR; further investigation is necessary to do the following:

1. Determine if there are specific patterns and shared perceptions.
2. Determine whether there are certain triggers that are associated with positive and/or negative experiences.
3. Explore how people are using ASMR.
4. Investigate if there are physiological changes (i.e., heart rate, blood pressure) and changes in emotion in response to ASMR.

More research and exploration needs to be done to understand this fascinating phenomenon. As we move forward, techniques we can use include a deeper level of sentiment analysis with multiple ASMR video and forums, examining the affects on heart rate and emotional/mental states, and exploring integrating ASMR in different mediums such as video games, behavioral therapy, and sleep aids. With further investigation the full potential of ASMR can be unleashed in ways that enhance therapeutic relaxation tools and digital experiences.

Darshana Tuladhar, when not observing and analyzing human behavior and interactions, enjoys birds, playing the violin, drinking root beer, and salsa dancing, preferably simultaneously.