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PEDAGOGICAL AND PSYCHOLOGICAL POTENTIAL OF ASMR AS A LEARNING TOOL IN EDUCATIONAL SETTINGS FOR CHILDREN'S AND STUDENTS' MENTAL AND SOCIAL WELL-BEING

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ABSTRACT

The aim of the theoretical framework is to examine the issue of autonomous sensory meridian response (ASMR) among scientific communities and enhance the knowledge horizons of students in medical and pedagogical fields. Considering the increasing public interest in ASMR, the article also addresses the parents of ASMR content consumers. The material reviews the current international research on ASMR and its effects on children and students. Using scientific methods of theoretical analyses, observation, and expert evaluation, the author popularizes in the specialized media the specifics and psycho-pedagogical effects of ASMR on the people who shape the generation Z and generation Alpha. The results highlight the need for in-depth theoretical and empirical research in order to gain a better understanding of the impact of ASMR on the mentioned young generations. Such research is crucial for establishing the connection between ASMR and mental health and socialization in these groups, as well as for understanding the relationship of the phenomenon under investigation with the existing scientific knowledge. Concerns regarding adverse consequences on the mental health and socialization of children and students are also shared.

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Introduction.

Over the past three years, the autonomous sensory meridian response, abbreviated as ASMR in the text, has gained public popularity among the individuals comprising the societies of Generation Z and Generation Alpha. This phenomenon spreads widely through communication channels on social media platforms such as Facebook, Instagram, TikTok, YouTube, and others, in the form of short and long audio and video content. The issue of the social phenomenon ASMR has escaped the attention of the scientific community and remains modestly discussed in the fields of medicine, psychology, and pedagogy. Many researchers from Generation X and Generation Y are skeptical about the significance of organizing ASMR-related studies, which sharply contrasts with the fact that ASMR audio and video content increasingly decorate the everyday culture of thousands of people worldwide.

Methodology.

The active social attitude of today's children and students belonging to Generation Z and Alpha towards ASMR audio and video content suggests ideas for theoretical analysis and highlights the need for empirical research in the fields of pedagogy, medicine, and psychology regarding the educational,

health, socializing, and emotional influences and effects that ASMR content generates in its users. A theoretical analysis of registered scientific interpretations on the issue of ASMR has been conducted. Direct observations within social media platforms that provide access to ASMR content discover thousands of active users, while the expert assessment of specialists in the field of psychology and pedagogy demonstrates a high degree of skepticism in their understanding of the connection between science and the aformantioned social phenomenon.

Results.

The author's observations within social media platforms that provide access to ASMR content reveal thousands of active users from all generational groups. However, consulting with specialists in the fields of psychology and pedagogy results in a high degree of reservation in understanding the link between science and the social phenomenon among Generation X, Y, and their predecessors. The illustrated dynamics (Figure #1) compare the relationship between the scientific methods used.

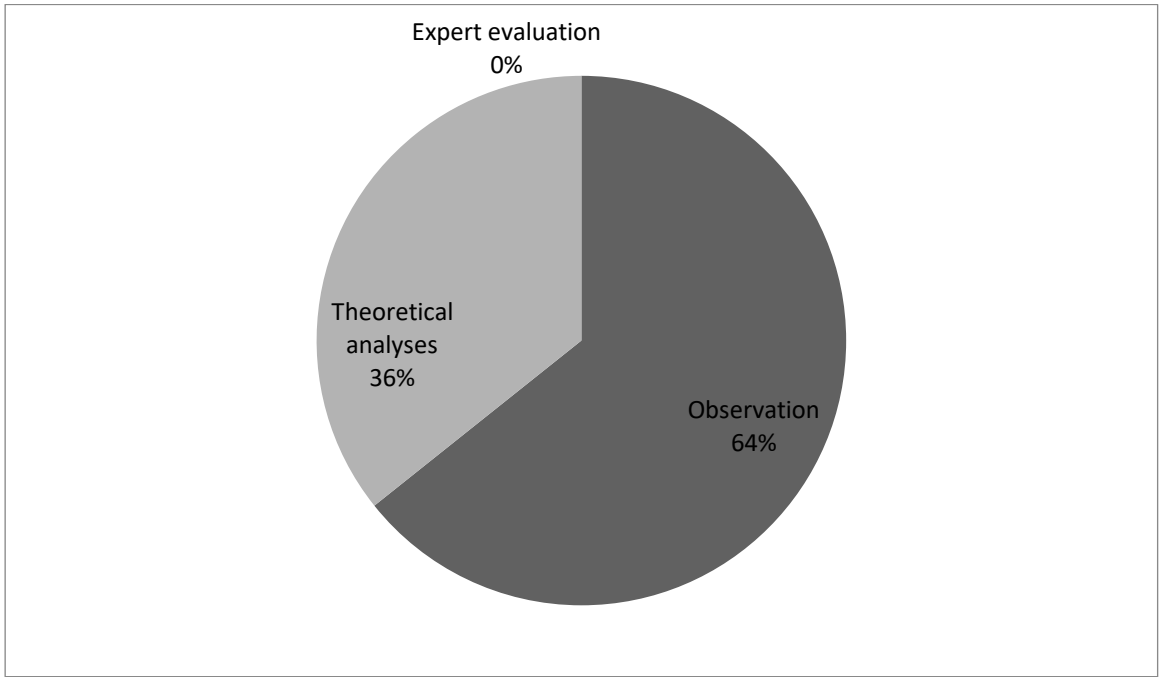

Figure1. *Comparison of results from used scientific methods*

The data from the observation shows that the number of ASMR content users is approximately 5 million. These users represent more or less all generations. This can be primarily explained by the modern way of life in which a significant part of the population (regardless of age) spends a considerable amount of time in the online environment. Social media platforms such as Facebook, Instagram, TikTok, YouTube, and others are the most preferred platforms, and it is understandable that ASMR content is mainly distributed there, which is why users from all generational groups come across them.

The theoretical analysis of the issue regarding ASMR and its relationship with education and psychology results in approximately two and a half million interpretations made by the older generations. The theoretical review of specialized literature on this issue also does not present strong arguments, as the problem is relatively new and interest in it has emerged in the last few years. For this reason, the author includes not only scarce specialized scientific publications but also interpretations from secondary online sources, where meaning is found.

Only the results related to expert assessment of the problem make a strong impression. Consulting with specialists in the humanities, who are representatives of the older generations, shows an extremely high degree of reservation in their understanding of the relationship between science and the social phenomenon.

All of this emphasizes the importance of conducting theoretical and empirical research to examine the influence of the social phenomenon of ASMR on young generations.

The abbreviation ASMR comes from the English phrase "autonomous sensory meridian response" and interest in ASMR has gained prominence in the last three years. The phenomenon is characterized by M. Hacket as a warm, pleasant, and tingling sensation that typically starts at the head and moves down the neck, spine, and throughout the rest of the body (Hacket, 2021). H. Reid mentioned that the sensation originates from the scalp and continues downward through the limbs in 2013 (Reid, 2013). Though there may be other definitions of ASMR in the literature and from various sources, they generally align with the aforementioned descriptions. In 2023, A. Okoye breaks down the concept of ASMR into its constituent words and provides individual explanations: autonomous (the sensation is a result of an involuntary reaction from within the body), sensory (the sensation triggers physical senses, including vision, sound, and touch), meridian (from meridian - a term used in traditional Chinese medicine for the flow of energy), and response (a spontaneous reaction to specific triggers) (Okoye, 2023).

After an in-depth reading of registered theoretical statements, it becomes clear that the concept of ASMR was introduced in 2010 by Jennifer Allen, an American cybersecurity specialist. She founded a community on Facebook, which gained widespread popularity. Currently, there are dozens of groups and pages with thousands of followers and members on the mentioned social network. But the concept of ASMR did not originate in 2010 by J. Allen, because ASMR has been reported and discoussed by people in online communities and forums long before that time. In 2019 two types of ASMR content are differentiated by A. Lockhart (for children and adults), and there are social media channels with over 1 million users (Lockhart, 2019). This is not a commonly known categorization and ASMR content can be enjoyed by people of various ages. Monitoring 716 participants in a study by A. Ramirez shows that ASMR communities are made up of people of all ages, relatively equal in terms of gender, with the majority residing in the United States and Europe (Ramirez, 2017).

In recent years, the popularity of ASMR content has been influenced by several factors. Technological advancements (Fijalkowski, 2022), increasing levels of anxiety worldwide (Styx, 2022), and the impact of the COVID-19 pandemic have all payed a role. During the time, people have found solace and sense of connection through ASMR, which offers gentle and soothing audio and visual experiences in an electronic environment (Maslowski, 2021). The creators of ASMR content are commonly reffered to as "ASMRtists". They use high-quality microphones to capture the intricate nuances of sound in their work. For many ASMRtists, this pursuit has evolved into a profession, gaining significant popularity and financial success. The youngest ASMRtist is 4-year-old Aoki (Lockhart, 2019). In 2019, a sustainable number of ASMR videos were created, with an estimated count of 45 million (Okoye, 2023). This translates to an average of around four million videos per month or approximately one million videos each week. While there is mention of an international day for the ASMR community on April 9th, it is important to clarify that this is not widely recognized at present.

ASMR is a sensation that can be triggered by various tactile, auditory, and visual stimuli, referred to as "specific triggers" by K. Vyas (Vyas, 2021). Upon reviewing ASMR content on different social media platforms, a range of triggers has been identified. These triggers include whispering, tapping, chewing food, unwrapping cardboard and plastic packaging, brushing sounds, scratching fluid, pouring water, sponge cleaning, makeup application with brushes, crinkling of nylon and paper, marker scratching on paper, hair cutting, pressing objects with hydraulic presses, and many others. According to Poerio, Blakey, Hostler, and so (2018) among all of the specific trigers, users tend to have a preference for gentle speaking, hair play or touch, whispering, and personal attention.

In 2019, C. McNeily proposed that ASMR first occurs in real-life situations and is triggered by light touches or specific sounds (McNeily, 2019). A year later Reddy and Mohabbat explained that the foundation of the ASMR phenomenon lies in neurological processes. They noted that specific areas of the brain associated with attention, social cognition, and sensory processing are activated during ASMR experience. Furthermore, individuals often experience a decrease in heart rate by an average of 3.41 beats per minute (Reddy & Mohhabat, 2020). Observations have shown that individuals experiencing ASMR tend to have lower heart rates and increased skin conductance, indicating heightened sensory arousal (Parker, 2021). The release of the neurotransmitter anandamide, known to influence happiness, has also been associated with ASMR experiences. This release is accompanied by increased theta wave activity in the brain, which activates the mind and body's natural resilience and promotes self-healing (Rice, 2022). In a study conducted by Engelbregt, Brinkman, van Geest, and So (2022) on 38 individuals, the effects of ASMR videos on mood, attention, heart rate (HR), electrodermal activity (EDA), electroencephalography (EEG), and personal factors were examinated. The findings indicated

that ASMR reduced feelings of depression in individuals affected by the phenomenon. Additionally, ASMR was found to lower heart rate in all participants and was associated with a state of arousal and focused attention.

According to K. Sweeney, there exists a connection between ASMR and misophonia, which refers to a strong dislike of certain sounds produced by the articulatory system, such as coughing, chewing, or yawning (Sweeney, 2023). Recent findings in 2023 confirm that individuals who have experienced ASMR are more likely to also experience misophonia (Sottosanti, 2023). A study conducted by Liu and Zhou involved 807 Chinese participants and resilted in the creation of the first digital library consisting of 12 ASMR videos categorized into three levels of intensity: strong, moderate, and weak. These videos were found to effectively trigger ASMR experiences, representing a significant contribution to the theory and practice of ASMR (Liu & Zhou, 2019).

In the context of the current year, 2023, G. Lopez's insightful prediction from five years ago stands affirmed. Lopez foresaw a promising future for ASMR content, with its trajectory showing continuous growth and popularity (Lopez, 2018).

Discussion.

The effects of ASMR can be explored in two primary areas: mental health and educational implications. To delve into the first aspect, it is essential to examine the underlying motivations, descriptive outcomes, and evidence-based arguments derived from contemporary research conducted by neurologists and psychologists who focus on the dynamics of the brain during ASMR experiences. According to Baratt and Davis, it is imperative to investigate the potent usefulness of ASMR in promoting mental health among patients with anxiety, depression, chronic pain, and sleep problems (Baratt & Davis, 2015). L. Styx suggests that the ASMR phenomenon can surve as a tool for enhancing mental well-being (Styx, 2022). Additionally, M. Wust highlights the potential therapeutic effects of ASMR as a short-term or complementary method for alleviating symptoms related to anxiety, depression, and insomnia (Wust, 2018). However, it is important to acknowledge that there may be instance of misconception, where individuals using ASMR content perceive it as helpful when it may not effectively facilitate coping with their anxious and depressive states. This observation serves as a reminder for psychologists to allocate their intellectual resources towards studying this acknowledged contemporary phenomenon and its true impact on mental health.

The second area of exploration regarding ASMR is the relationship between "ASMR - educational effects," which was first investigated in 2016 by A. Fran. The author recognized the relaxation as a key element for fostering creativity and innovation in education (Fran, 2016). According to R. Berger, visual, auditory, and tactile ASMR experiences have a beneficial impact on stressed children, aiding in their mental well-being by alleviating anxiety (Berger, 2022). This suggests that ASMR triggers could effectively assist children in transitioning from wakefulness to sleep through their primary activity, which is play. One popular activity among preschool-age children is playing with "squishies," objects of various sizes and colors that serve as tactile and visual triggers. S. Parker suggests that autonomous sensory meridian response can be utilized as an auxiliary pedagogical tool in children's education, similar to other forms of therapy such as music therapy, bibliotherapy, and dance therapy, which were initially underestimated in their earlt stages (Parker, 2021). The use of tactile, auditory, and visual triggers to induce ASMR experiences contributes to sensory education and enhances perceptual refinement in preschool pedagogy. These positive influences on children's imagination and intellectual development at a young age are noteworthy. Additionally, Galante and Alam propose the application of ASMR sensations as an innovative approach in therapeutic pedagogical activities for children on the autism spectrum (Galante & Alam, 2019).

In a 2020 study conducted by G. Y. Jeong, it was found that 66.7% of ASMR content consumers in Korea were students who utilized ASMR audio and video clips to enhance their concentration and improve sleep (Jeong, 2020). Similarly, in the same year, an experiment conducted by Hardan, Feriani, Sumerak, and so focused on the impact of ASMR on medical students and found a positive effect on their sleep quality. In a recent study conducted by Chan and Uusiantti, investigating the relationship between ASMR and psychosocial well-being among Finnish students (Chan & Uusiantti, 2022), two significant conclusions were drawn. Firstly, ASMR videos were found to release tension from the body and mind through relaxation, leading to a psycho-physiological state of decreased arousal. This counteracts the stress response and induces a calming state, ultimately resulting in improved sleep

quality. Secondary, ASMR was found to be effective in the enhancing the learning process and facilitating focus on academic content. These findings highlight the potential benefit of ASMR for students, including improved concentration, better sleep quality, stress reduction, and enhavce academic performance. Further research in this area can provide valuable insights into specific mechanisms and applications of ASMR in educational settings, paving the way for its integration as a beneficial tool for students' well-being and learning outcomes.

In our days, social alienation in real life, caused by the pandemic and saturated virtual existence, often leads people to feel isolated and emotionally lonely. This is a hypothetical reason why many of them seek a deceitful sense of closeness in their own constructed digital existence. To this postmodern everyday life with persistent use of computers, devices, phones, tablets, and other technical "crutches," one can add the accelerated rhythm and unhealthy lifestyle in developed cities, which deprive contemporaries of systematic contact with nature. Representatives of the generations Elders, Builders, Baby Boomers, X, and Y (unlike generations Z, Alpha, and the upcoming Beta in two years) are familiar with natural triggers - the smell of the earth, the rustling of leaves, the melodies of birds, and the overall richness and nuances of the charming mixture and diversity of nature. However, regardless of the era, human nature is designed to seek physical and mental well-being, but is it difficult to find it in a natural environment anymore? Are the natural triggers relevant to the artificial triggers in the electronic environment? And can the latter replace the former? What brings together the people who seek ASMR content? What similarities exist between them, and can some personality typologies be outlined? Could this phenomenon be a reason for the establishment of a new field in psychology? What are the reasons to virtualize intimacy and seek artificial soothing effects through technology in the electronic environment? Is it possible for relaxing software to replace human functions and the nurturing attitude of a real teacher in kindergarten and school? Is it possible for therapeutic software to be reliably responsible for the patient's mental health? Can ASMR be a phenomenon that determines some new syndrome related to mental health? Is it necessary for the mature generation to remember the traditions that have preserved them throughout the centuries and through them, guarantee the future of their descendants? Attracted by new technologies and pressed by dynamic life, mature generations seem to have forgotten the "legacies" of Steiner, Oberlin, Froebel, and Reichwein, which are so valuable in the work for the growth and development of children and students. For the latter, digital technologies, artificial intelligence, and social media are a natural environment from their very birth.

Conclusion.

The issue of ASMR is scientifically and socially relevant, and the lack of psychological and pedagogical research regarding its influence on representatives of Generation Z and Generation Alpha (contemporary preschool-aged children, students, and young people) raises question marks. It is necessary to conduct experiments at the national and international levels that provide greater clarity and certainty regarding the psychological impact and pedagogical effects of ASMR content. Through an interdisciplinary approach, psychologists and educators could collectively outline the usefulness of ASMR for the health and education of present and future generations of learners. Nevertheless, science should be in favor of society, proactively evolving and adapting to social dynamics and public manifestations. It is understandable that such research in the educational and psychological context presents a challenging and pioneering path, but if there are clear intentions to overcome the limitations imposed by difficulties and uncertainties, it is not impossible.

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