IJACT 21-6-15

# Suggestions on ASMR Hazardous Controversy Study by Sample Survey

Gyoung Youl, Jeong

Associate Professor, Department of Broadcasting & Photography Arts, YoungSan University, Korea imager@ysu.ac.kr

#### Abstract

Recently we have a lot of Youtube contents and their influence. ASMR content is in vogue through YouTube recently But Just a few Studies have announced Youtube content's effect. The purpose of this paper is to examine whether ASMR helps improve mental stability and learning skills of teenagers who enjoy using it. To this end, a sample comparison of teenagers showed that the sample group that played ASMR had an advantage in psychological stability and learning effects over the comparison group that did not. As a result, half of the respondents felt positive differences in learning and psychological stability. Therefore, rather than unilaterally banning the use of ASMR content at school or at home, it is educationally effective to create an atmosphere where teenagers are understood and joined together. So We suggest that positive use of ASMR would be proposed as alternatives rather than unilateral measures such as banning ASMR content to teenagers.

Keywords: ASMR, Youtube, Adolescence, Sound Contents, SNS

# 1. INTRODUCTION

#### 1.1 Need for Research

Recently, single-person media broadcasting has provided free and daily space and time for users. And with the advent of various new media and contents based on videos, its influence is expanding [1].

Among them, YouTube is the world's largest video portal site created in the United States in 2005. It was launched as a video content platform company, but since implementing the content revenue distribution policy, various and numerous contents have now been pouring out.

Among them, ASMR is the content that has recently exploded among teenagers and has deeply affected their lives. ASMR is a sound content called "autonomous sensory meridian response". It is a video that stimulates the brain to induce psychological stability, and provides wind blowing, pencil writing, and rustling sounds.

In content, non-irritating video content is divided into ASMR, which induces human psychological stability, Oddly Satisfying, and Slime, which stimulates touch and hearing by playing with slime, a sticky liquid object [2].

As of October 2017, about 800,000 of the 10 million ASMR contents uploaded on YouTube, an Internet video sharing site, and as of August 2017, the number of subscribers to "Dana ASMR" and "MInuyu ASMR" [3], YouTube channels that specialize in producing ASMR content in Korea, reached 30-400,000 [4].

Overall, the cause of the ASMR craze is expected to be found in functions that provide rest and stability to teenagers with high stress, such as youth unemployment problems, and relieve stress. Therefore, we need to study how this ASMR content affects the lives and learning of adolescents who actually encounter it.

Manuscript Received: May 16, 2021 / Revised: May 28, 2021 / Accepted: June 4, 2021

Corresponding Author: imager@ysu.ac.kr

Tel:+82-51-540-7372

Associate Professor, Dept. of Broadcasting & Photography Arts, YoungSan Univ. Korea

### 1.2 Differentiation from Prior Research

ASMR has generally been studied abroad, and major studies have focused on psychology, neurology and gender studies. There is a lack of research on ASMR in Korea, and there is a lack of understanding and information about these new contents and acceptors.

Emma L. Barratt and Nick J. Davis of Swansea University, the first study conducted by ASMR to find out the true nature of ASMR, is optimistic, saying, "It is true that ASMR content gives psychological comfort and stability [5]. However, the conclusion of this paper states, "We conducted an investigation into the ASMR phenomenon for the first time," adding, "Given the benefits of reported ASMR in improving mood and pain symptoms, ASMR proposes to warrant further investigation as a potential means of treatment." This means that ASMR has not been fully medically verified, although many have been identified as the benefits of ASMR.

According to Julia Lala, another international researcher, the emotional sensations of ASMR make it physiologically restful, which increases positive excitement and tranquility and reduces negative stress and sadness. In addition, ASMR images are characterized by calming the body and creating complex sensations while generating strong stimulating sensations. For example, perfume has happiness with sadness [6],

In addition, video content dealing with ASMR mainly utilizes the auditory aspect, as it elicits specific responses with the 'Trigger effect' [7] on specific sounds of ASMR. Trigger, which makes you feel ASMR, appears differently depending on individual experience, and surgical measurements have shown that certain sounds commonly trigger stimuli. It usually finds stability through environmental noise such as scratching, wrinkling, tapping, wind blowing, and pencil squinting [8].

A paper on ASMR was also published in Korea. "Listening through earphones gives viewers the illusion of whispering in close proximity," said a paper published in the August 2016 Journal of Global Cultural Contents. "It is meaningful to present new possibilities through auditory-oriented content in an over-visual media environment."

There is also an academic analysis of why ASMR became popular among young people. For example, empirical studies have shown that the use of ASMR affects stress relief in high school students [9]. Shim Young-min, director of the National Health and Mental Center, also pointed out that people in their 20s and 30s have high levels of anxiety and stress among all age groups. He argued that monotonous and anti-ethnic stimuli, such as self-stimulating videos such as ASMR, can keep college students' consciousness in the present, preventing anxiety and helping relaxation [10].

# 2. RESEARCH METHOD

In this study, sample comparisons were conducted on students to see the practical impact of ASMR. It is a "sample comparison" through experiments on whether ASMR actually gives concentration and psychological stability to teenagers who are users.

Sample comparisons were made to measure whether ASMR content actually gives teenagers psychological concentration or stability. Samples are divided into two types depending on whether or not ASMR content was exposed to youth's math problem solving.

Sample A teenagers were told ASMR content when solving math problems, and Sample B teenagers were asked to solve math problems in an environment where there was no sound. Each sample consisted of 10 people, and the problem-solving was conducted for 20 minutes on Nov. 19 with "Random Sampling" for first-year students at Jinmyeong Girls High School without classification. Because of the judgment that differences in mathematics skills between the two samples could affect the experiment, the subjects were randomly selected and grouped.

<Table 1> is mathematical questions presented in both samples. It's an equation question from the second year of high school.

Number	Question			
1	$(xy^2)^3 \div \frac{y}{2x} \div (-\frac{x}{y^2})^2 =$			
2	$(3x^2y^3)^4 \div (-3xy^2)^3 =$			
3	4a-(a+6b-2a+b) =			
4	$(-2xy)^3 \times (-\frac{1}{xy^3})^2 \div 4x^3y =$			
5	$(x^2 - 6x) \times \frac{3}{x} =$			
6	$-3y(x+6) + (9x^3 - 18x^2y + 27x^2) \div \frac{9}{4}x^2 =$			
7	$3(2x^2 - x + 4) - 2(x^2 + 3x - 5) =$			
8	$(-\frac{1}{2}x^2y^3)^2 \div (3x^2y)^2 \div \frac{1}{6}xy^3 =$			
9	$\frac{12xy^2 + 4xy}{2xy} =$			
10	$12x^4y^4 \div 3x^2 =$			
11	$\left(\frac{xyz^3}{4}\right)^2 \times \frac{8}{xy} \div 2 =$			
12	$(2xy)^3 \div \frac{xy}{2} \times \frac{8}{x} - 2x(y+3) =$			
13	$(-\frac{1}{xy^3})^2 \div (3x^2y)^2 \times (-\frac{1}{xy^3})^2 =$			
14	$\left(\frac{1}{2} \times \frac{5}{2} x y^2 \times A\right) \times 8 = 15 x^2 y^4 A =$			
15	$A + (6x^2 - 3) + (7x^2 + x - 2) = 18x^2 - 9A =$			
16	$(2x^2y^2)\times(4xy)\div(8x)=$			
17	$16x^3y^2 - \{x(16x^2y^3 + x) - 7\} + 18x^2 + 35x =$			
18	$18 \rightarrow 2$ , $20 \rightarrow 1$ , $65 \rightarrow 1$ , $88 \rightarrow 4$ , $35 \rightarrow 0$ , $16 \rightarrow ?$ , ?=			

Table 1. Mathematical questions presented in both samples

There were a total of 18 problem-solving questions, and questions 4 and 18 were assigned two points, respectively, depending on the difficulty level, giving both groups the same time and problem (attached to the questionnaire).

The difference is whether to provide ASMR. The ASMR content presented to Sample A downloaded some content searched by the word "concentration ASMR" on YouTube.

# 3. RESULTS OF RESEARCH

# 3.1 Sample Comparison Results

As a result of solving math problems to measure the effectiveness of ASMR content on psychological stability and concentration of learning, it was found that there was a positive effect from the bottom line. The following <Table 2> shows any learning difference between the two sample groups, depending on the presence or absence of ASMR.

Reference	Student number	Sample Group A (with ASMR)	Sample Group B (without ASMR)
Individual Earned Score	1	16	12
	2	18	19
	3	18	19
	4	20	16
	5	17	12
	6	18	16
	7	19	17
	8	19	14
	9	16	16
	10	17	15
Overall Average		17.8	15.6

Table 2. Sample comparison score distribution results

As shown in Table 2, "Sample Group A," which played ASMR content when solving math problems, showed a score distribution of more than 16 points for all 10 teenagers, including one out of 20 points, and an average score of 17.8 points.

On the other hand, sample group B, which solved math without ASMR content, distributed from 12 points to 19 points. There was no perfect score. The average score was 15.6, a 2.2 point difference from sample group A. This is equivalent to 11 on a 100 basis. In other words, the group that played ASMR and solved math problems scored higher than the group that did not. This can be seen as a meaningful result of the exposure of ASMR content "helps teenagers' learning concentration" when solving the problem. Although the subjects were randomly selected and grouped to eliminate the difference in mathematics skills between the two samples, there was a difference between the samples as a result.

# 3.2 Qualitative Survey Results on the Reason for Selection

As a result of the survey, questions and answers were asked about the reasons for choosing ASMR content for teenagers who actually gave positive answers to the use of ASMR content.

First of all, the answers to concentration included "I think I can concentrate well," "I can concentrate well," "It helps me concentrate," and "Improve my concentration." This indicates that ASMR content is directly improving concentration for teenagers.

In addition, there were answers to stability such as "Listening to ASMR makes your mind calm," "Relaxing your mind," and "Relaxing your mind."

Other opinions include "Getting drowsy," "Feeling sleepy," and "Getting tired." Qualitative investigations using the above questions and answers show that ASMR helps improve concentration as well as mental stability.

# 4. CONCLUSION

Above this, we looked at how ASMR users' motivation to use ASMR users' psychological experiences positively affects adolescents' mental and learning experiences.

The sample comparison conducted in empirical experiments showed that the sample group that gave ASMR

had an advantage in terms of psychological stability and learning effects when solving math problems over the sample group that did not. This demonstrates the empirical effectiveness of ASMR content. Therefore, based on research so far, I make the following suggestions.

Rather than unilaterally banning the use of ASMR content at school or at home, it is to create an atmosphere where teenagers are understood and joined together. This paper proves that ASMR is not harmful to teenagers but rather beneficial.

However, it is regrettable that the reliability of the proof may be questioned due to the insufficient size of the sample itself. In the future, if more teenagers can use ASMR content and answer the survey, they will be able to conduct large-scale follow-up research.

So We suggest that positive use of ASMR would be proposed as alternatives rather than unilateral measures such as banning ASMR content to teenagers.

# **ACKNOWLEDGEMENT**

This study is financially supported by YoungSan University.

# REFERENCES

- [1] M. J. Jeong, "A study on the Motivation and Gratification of ASMR Users: focusing on flow experience," *Master Thesis of Kyungpook National University*, 2018.
- [2] J. W. Kim and J.Y Hur, "I can hear you, the rise of voice content," *Korea Creative Content Agency Issue Analysis*, 17(8), pp.1~8, 2017.
- [3] D. Y. Kim "Bonfire, train, glass cup, slime...I feel comfortable listening to the healing sound," *Joongang Sunday*, 2017.
- [4] Y. R. Kim, "Untreated content in vogue in 2030," Sisajournal, 2017.
- [5] Barratt. E.&Davis, N,J. "Autonomous sensory meridian response(ASMR): a flow-like mental state. PeerJ," Swanji University. URL: http://doi.org/10.7717/peerj.851, 2015.
- [6] Emma L. Barratt and Nick J. Davis, "Autonomous Sensory Meridian Response (ASMR): a flow-like mental state," 2015.
- [7] J. Andersen, "Now You've got the Shiveries Affect. Intimacy, and the ASMR Whisper Community, " *Sage journals*. pp.6, 2014.
- [8] http://asmruniversity.com/history-of-asmr/
- [9] Bopyung High School, "STEAM R&E Research Report: Exploring the Effects of ASMR on Relaxation of High School Students by Stress and App Development," 2016.
- [10] H. S. Ko and J.Y. Cho, "I like it because it's quiet and plain. Young people looking for self-produced content," *The Hankyoreh*, 2017.