

## THE RELATIONSHIP BETWEEN AUTONOMOUS SENSORY MERIDIAN RESPONSE AND MALADAPTIVE DAYDREAMING AMONG ADOLESCENTS

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### **Abstract**

*The researchers examine the connection between the autonomous sensory meridian response (ASMR) and maladaptive daydreaming (MD) in Pakistani adolescents. A total of 395 individuals aged 13 and older were recruited as a sample to examine the problem of whether maladaptive tendencies of day dreaming were correlated with ASMR experiences. Participants with any medical or psychiatric history were excluded from the research. Results revealed that there was a negative correlation between ASMR responsiveness and maladaptive daydreaming such that people who are more responsive to ASMR are less susceptible to excessive and immersive daydreaming. As a result of these findings ASMR can be used as a stabilizing sensory experience, which helps with emotional regulation and potentially reduces maladaptive cognitive patterns and processes. The paper demonstrates the applicability of ASMR in adolescent mental health and suggests its applicability in forms of a natural intervention to decrease maladaptive daydreaming.*

### **Introduction**

Human beings go through different stages of growth and development right from the time of beginning till their death. Each of this stage is characterized by different and unique characteristics, which are different from the previous stage. The stage of growth that is manifest by the beginning of puberty and come to an end by the accomplishment of physiological and psychological development is known as adolescence (Kapur, 2015). Adolescence is a stage of life with particular health, developmental needs and human rights. A time to build up skills and knowledge, to deal with emotions, relations, obtain characteristics and capabilities that are essential for enjoying the adolescents years (World Health Organization, 2017).

In recent times adolescent experience various issues. Among other daydreaming is an evident issue. Klinger (2009) and McMillan et al. (2013) argue that daydreaming is a common form of imaginative activity in the developmental process of adolescence, as it serves as an effective internal space in which the development of identity, objectives, and social cognition can be explored. This is a safe mental exercise, which is useful in most development of young people. According to the studies, maladaptive daydreaming (MD), which is the pattern of immersive, obsessive, and time-absorbing fantasy beyond the control, seems to be the outcome of dysregulation of this imaginative space in some adolescents (Bigelsen & Schupak, 2011; Pietkiewicz et al., 2018). It has been found that MD is associated with significant disturbances in normal functioning, academic concentration, emotional stability, as well as actual-life social interactions, and the process becomes more and more significant as a mental health concern among the youth (Soffer-Dudek et al., 2023).

Autonomous Sensory Meridian Response (ASMR) is a recently researched sensory-emotional experience that is characterized by a tingling sensation that usually begins at the head and moves along the spine and limbs in reaction to some audio or visual stimuli (Barratt). Due to its purported relaxing, enjoyable, and sleep-inducing effects, ASMR has become quite popular, especially among teenagers and young adults, despite just recently being acknowledged as a

topic of psychological research (Poerio et al., 2018). In order to achieve physical relaxation, emotional relief, or dissociative-like immersion, people with ASMR frequently look for triggers including whispering, tapping, slow motions, and situations involving personal attention (Fredborg et al., 2017). Due to the lack of established diagnostic criteria, its prevalence is still difficult to measure, although internet activity indicates that millions of people globally identify as ASMR responders (Smith et al., 2020). People with maladaptive daydreaming are frequently reported to spend long periods of time in the fantasy, are highly emotionally involved, and react to particular stimuli that lead to immersion, all of which are psychological implications, affective consequences, and potential connections to maladaptive cognitive styles (Bigelsen et al., 2016). The result of this growing interest is that maladaptive daydreaming is addictive, follows a fictional form, and is triggered by specific stimuli that encourage immersion, whereas regular daydreaming is common and is often harmless (Poerio et al., Fredborg et al. (2017) also state that such people who undergo ASMR report high levels of absorption and flow-like immersion, which means that ASMR can be associated with such cognitive states that demand intense attention and a dissociative-like awareness change. In order to promote immersion, both ASMR and MDD frequently rely on sensory triggers (such as music, whispering, and repeating sounds). The ASMR videos have been found to induce emotional regulation as well as calmness (Poerio et al., 2018), maladaptive daydreaming (Bigelsen et al., 2016) has been associated with fantasy proneness, which denotes an everyday mental characterization of bright inner imaging and imaginative ability.

### **Theoretical Concept**

No empirical research exists on the connection between ASMR and maladaptive daydreaming, although there are several theoretical paths that lead to potential overlapping.

The absorption construct put forward by Tellegen and Atkinson (1974) is one of the most pertinent theoretical models connecting ASMR and maladaptive daydreaming. The word absorption is used to explain the tendency of a person to become engrossed in his or her imagination or senses that he or she loses the awareness of his or her environment. Absorption in their perception is associated with heightened sensitivity to emotional stimulation, sensory signals and mental pictures. This concept is very pertinent to comprehending ASMR and MDD and has been used to explain a variety of immersive psychological phenomena.

It has been established that trait absorption is an attitudinal tendency toward total engulfment in sensory or imaginative experiences, which is more prevalent in ASMR responders (McErlean & Banissy, 2017). Another key indicator of the intensity of maladaptive daydreaming is absorption (Somer et al., 2017).

### **Objectives of the study**

To find the relationship between ASMR and maladaptive daydreaming (MDD) in adolescents, this study addresses a gap in the literature by examining how these immersive experiences may frequently interact with ASMR content, it is critical to understand this connection. Clearing up the ambiguity around the problem of whether ASMR acts as a coping factor, risk factor, or a neutral factor as far as excessive daydreaming is concerned, the results could be used to inform mental health treatment.

### **Methodology**

#### **Design of the study**

The Autonomous Sensory Meridian Response (ASMR) propensity and maladaptive daydreaming among Pakistani teenagers were investigated in this study using a cross-sectional, correlational quantitative approach. Because it enables the evaluation of naturally existing differences in both psychological constructs and aids in determining the direction and strength of their link at a specific moment in time without changing factors, this approach seemed suitable.

### **Setting of the study**

The research was conducted in Pakistan, a country that consists of both rural and urban regions and represents the combination of the modern educational openness and the traditional cultural values. Its diversity makes it a suitable place to find differences in teenagers' ASMR encounters and daydreaming habits. Information was gathered from the district's schools, colleges, academies, and community centers

### **Target Population**

Adolescents of any gender, the ages of 13 and above who were literate in Urdu or English, enrolled in school, or members of the community made up the target audience. Since ASMR responsiveness and the maladaptive daydreaming are more often reported and developmentally relevant during this age group, adolescents were selected as subjects of the study.

### **Sampling Technique**

Since it was not possible to collect a comprehensive list of all adolescents in, a convenient sample strategy was used. At the time of data collection, participants were selected based on their availability, accessibility, and willingness to participate. Teenagers were addressed in communal areas, academies, college hallways, and classrooms. The study only included participants who willingly gave their consent or assent and met the inclusion criteria.

### **Sample size**

The initial sample size of 400 participants was reduced to 5 responses that were incomplete hence making it a final sample of 395 participants.

### **Inclusion Criteria**

- Adolescents aged 13 and above.
- Literate in Urdu or English,

### **Exclusion Criteria**

- Past of severe mental disease (e.g., psychosis, acute psychiatric crises).
- Current distress or difficulty understanding the questionnaire.

### **Tools and measurements**

The ASMR-15 Questionnaire (Roberts et al., 2019), which consists of 15 items measuring ASMR sensations, altered consciousness, relaxation and affect, was used to determine ASMR propensity. Each statement was scored by participants using a five-point Likert scale that went from strongly disagree to strongly agree. Previous studies have shown that the scale has excellent internal reliability.

The Short Maladaptive Daydreaming Scale (MDS-5) (Soffer et al., 2024), a brief (five-item) scale, was used to investigate maladaptive daydreaming, which measures the frequency, severity, and behavioral consequences of the maladaptive daydreaming. Each of the items is graded on a Likert-type scale, with higher scores representing more intense daydreaming. Information about gender, age, place of residence, degree of education, and acquaintance with ASMR were also gathered using a demographic sheet.

### **Procedure**

Community organizations, college administrations and school authorities gave their permission to provide data after ethical approval of the institutional review board. The goal of the study, the voluntary nature of participation, the confidentiality of responses, and the opportunity to withdraw at any moment were all explained to the participants. Adolescents were asked to provide written consent, while individuals under the age of eighteen were asked to provide parental or guardian approval. Data was collected in quiet classrooms, libraries and grounds and it only took 15 to 20 minutes to complete a questionnaire.

### **Ethical concerns**

Ethical considerations were observed throughout the entire process of research. These were clearly presented to the participants with the aim of the study, the anonymity of the answers as

well as their right to discontinue participation without any consequences. No identifying information was collected therefore providing full anonymity. All information was stored securely and was only utilized to study. Adolescents exhibiting discomfort or trouble during the data collection process were approached amicably and left the study and referred to information regarding the available mental health services or school-based counseling.

### Statistical Analysis

The SPSS version 27 was used to analyze data. The data was analyzed in descriptive and inferential statistics. The means, SD and frequencies were used to summarize the scale scores and demographic traits. The product-moment correlation coefficient of Pearson was used to examine relations between maladaptive daydreaming and ASMR inclination. The degree of maladaptive daydreaming was assessed with the help of simple linear regression to determine the predictive effect of ASMR. The significance level of  $p < .001$  was applied to all the statistical tests.

### Results

This section consists of interpretation of the tables and resulting data.

**Table 1**

*Demographic characteristics of participants at baseline*

<i>Variable</i>	<i>category</i>	<i>n</i>	<i>%</i>
<b>Age</b>	<i>16-20 years</i>	<i>62</i>	<i>15.8</i>
	<i>21-25 years</i>	<i>124</i>	<i>31.6</i>
	<i>26-30 years</i>	<i>76</i>	<i>19.4</i>
	<i>30 and above</i>	<i>130</i>	<i>33.2</i>
<b>Gender</b>	<i>Male</i>	<i>125</i>	<i>31.6</i>
	<i>Female</i>	<i>169</i>	<i>42.8</i>
	<i>Prefer not to say</i>	<i>101</i>	<i>25.6</i>
<b>Education</b>	<i>Intermediate</i>	<i>121</i>	<i>30.6</i>
	<i>Bachelor's</i>	<i>146</i>	<i>37.0</i>
	<i>Master's</i>	<i>128</i>	<i>32.4</i>
<b>Daily Time Spent</b>	<i>Less than 2 hours</i>	<i>86</i>	<i>21.8</i>
	<i>2-4 hours</i>	<i>107</i>	<i>27.1</i>
	<i>5-7 hours</i>	<i>111</i>	<i>28.1</i>
	<i>8 or more</i>	<i>91</i>	<i>23.0</i>
<b>Frequency</b>	<i>Rarely</i>	<i>102</i>	<i>25.8</i>
	<i>Sometimes</i>	<i>107</i>	<i>27.1</i>
	<i>Often</i>	<i>102</i>	<i>25.8</i>
	<i>Daily</i>	<i>84</i>	<i>21.3</i>

The following is a summary of the demographics of the 395 participants in the study. The majority of respondents (31.6%) were between the ages of 21 and 25, followed by those over 30 (33.2%), with lesser percentages being between the ages of 26 and 30 (19.4%) and 16 and 20 (15.8%). Gender-wise, 42.8% of participants were female, 31.6% were male, and 25.6% chose not to reveal their gender. With 37.0% having a bachelor's degree, 32.4% having a master's degree, and 30.6% having an intermediate certification, educational attainment was very evenly distributed across levels. The quantity of time participants spent on the relevant activity varied as well: 28.1% spent five to seven hours a day, 27.1% spent two to four hours, 23.0% spent eight hours or more, and 21.8% spent less than two hours. In terms of engagement frequency, 27.1% said they engaged occasionally, 25.8% said they engaged seldom and 25.8% said they interacted frequently, and 21.3% said they engaged every day. All things considered, the sample shows a wide dispersion in terms of age, gender, education, and degree of activity participation.

**Table 2**

*Pearson Correlation between ASMR and maladaptive Daydreaming*

Scales	1	2
1. ASMR		-.188**
2. MD	-.188**	

$p < 0.01$ ;  $n = 395$

Pearson product-moment correlation coefficient test was conducted to examine the relationship between ASMR proneness and maladaptive daydreaming. There was statistically significant negative relationship between ASMR proneness and maladaptive daydreaming ( $r = -.188$ ,  $n = 395$ ,  $p < 0.01$ , two-tailed). This indicates that, a greater level of ASMR responsiveness is related to a reduced level of maladaptive daydreaming. Descriptive Statistics indicated that the sample included mean ASMR and MD score that were in moderation, which implies the variability of both constructs among the participants.

**Table 3**

*Simple Linear Regression Predicting Maladaptive Daydreaming from ASMR use*

Variable	B	SE B	$\beta$	t	p
Constant	13.254	0.652		20.341	<.001
ASMR Use	-0.079	0.021	-.188	-3.783	<.001

$N = 395$ ,  $R = .188$ ,  $R^2 = .035$ , Adjusted  $R^2 = .033$ , ANOVA:  $F(1391) = 14.315$ ,  $p < .001$ .

A simple linear regression was done to investigate whether ASMR use predicts maladaptive daydreaming among participants. The overall regression model was significant,  $F(1391) = 14.32$ ,  $p < .001$ , that indicate ASMR use significantly predicts level of maladaptive daydreaming. 3.5% of the variance in maladaptive daydreaming ( $R^2 = .035$ , Adjusted  $R^2 = .033$ ) is explained by the model.

The result showed that ASMR use was a significantly negative predictor of maladaptive daydreaming.

### Discussion

Contrary to the escapist and time-wasting nature mentioned in maladaptive daydreaming studies, ASMR has been affiliated with the release of stress and improved affective control (Somer, 2002; Somer et al., 2017). As Roberts et al. (2019) and McErlean and Banissy (2017) state, ASMR is associated with states that can counteract compulsive, immersive, and often emotionally dysregulated state of maladaptive daydreaming, including greater calmness, lower physiological arousal, and greater mindfulness-like absorption. The negative relation between ASMR and maladaptive daydreaming in the present study aligns with the previous studies which describe ASMR as a sensory experience that is characterized by emotional regulation, relaxation and grounding of attention. Although direct empirical research which compares ASMR and maladaptive daydreaming together are very few, the previous studies do show some considerable points of intersection.

### Conclusion

Findings of this study revealed a negative correlation between ASMR and maladaptive daydreaming implying that individuals who are more responsive to ASMR normally report to have less maladaptive daydreaming. Based on these findings, it is possible that ASMR can serve as a stabilizing sensory experience, which reduces the immersive imagining and thought drifting which are characteristics of maladaptive daydreaming.

### Implications

The paper focuses on the role of ASMR as a potentially natural method of enhancing emotional regulation and reducing daydreaming that is maladaptive. This suggest that the use of ASMR-related activities could be explored in an order to suggest mental health interventions.

Moreover, the results can be used to develop an additional study of sensory-emotional experiences and their role in the decrease of compulsive thought patterns.

### Limitations

The use of self-reported methods can include a biasing factor, and the study has a cross-sectional nature, which limits causal conclusions. No other psychological or environmental factors were taken into account, and the geographic and demographic constraints of the sample do not allow generalizing it.

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