

www.seminar.net

ISSN: 1504-4831 Vol 18, No 1 (2022)

https://doi.org/10.7577/seminar.4669

University students' Autonomous Sensory Meridian Response (ASMR) experiences in the light of a well-being theory

Chan Ko Wai

Faculty of Education, University of Lapland, Finland

E-mail: kchan@ulapland.fi, https://orcid.org/0000-0002-3189-5447

Satu Uusiautti

Faculty of Education, University of Lapland, Finland

E-mail: Satu. Uusiautti@ulapland.fi, https://orcid.org/0000-0002-2409-6460

Abstract

Autonomous sensory meridian response (ASMR) is an atypical and multisensory phenomenon in which specific audio-visual stimuli elicit a pleasurable, head-oriented tingling sensation and feelings of relaxation. The purpose of this research was to analyze the ASMR experiences of university students in the light of well-being theory. Two-phased, in-depth semi-structured interviews were conducted with three Finnish university students who identified themselves as ASMR experiencers. Data were analyzed using interpretative phenomenological analysis. Coding was guided by the domains of well-being in the PERMA model: positive emotions, engagement, relationships, meaning, and accomplishment. The objective was to explore the effect of students' ASMR experiences on their well-being. The findings show that ASMR videos enhanced the well-being of the participants through a mindfulness-like experience. The potential of ASMR videos to promote psychosocial wellbeing is intriguing, and this research provides a new understanding about ASMR experiences and their meaning.

Keywords: ASMR, interpretative phenomenological analysis (IPA), mindfulness, PERMA, psychosocial wellbeing

©2022 (Chan Ko Wai, Satu Uusiautti). This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

Introduction

University studies are demanding. For example, in Finland, a third of all students experience study-related stress and worries (Kunttu et al., 2017). At the same time, new ways of dealing with stress and of enhancing well-being are being found and tested, including Autonomous Sensory Meridian Response (ASMR), which has been found to bring temporary relief to those suffering from depression (Barratt & Davis, 2015; Fredborg et al., 2018). Thus, this research uses theoretical analysis to focus on university students' use of ASMR experiences for well-being.

ASMR is a multi-sensory phenomenon typically characterized by dynamic tingling sensation spreading across the scalp, moving downwards along the line of the spinal cord, and then propagating to the arms and legs (Cash et al., 2018). In this context, autonomous refers to the personal ability to facilitate or produce the sensation at will. Sensory is defined as the sense organs transmitting nerve impulses to the brain or senses themselves in response to an external trigger. Meridian refers to the highest point or apex, symbolized a sense of euphoria —in Eastern tradition, the meridian is used to illustrate the pathways taken by the qi, or life energy, as it flows through the human body (Stefanov et al., 2013). Response refers to how an individual reacts to a triggering stimulus or thought (Del Campo & Kehle, 2016). ASMR is not only triggered by different types of external stimuli, but also by some internal stimuli, such as focusing attention, recalling the memory of a previous ASMR, meditating, or altering one's state of mind (Tihanyi et al., 2018). ASMR is rarely elicited by random external stimuli, but rather requires particular types of stimuli that are often specific to the individual. A survey study by Barratt and Davis (2015) found that whispering, low-pitched repetitive noises (e.g., tapping sounds), close-up attention, and videos depicting slow and socially intimate situations (e.g., hair-brushing) were commonly cited as eliciting tingling sensations during ASMR engagement (Barratt & Davis, 2015; Barratt et al., 2017; Fredborg et al., 2017). Most individuals like to watch ASMR before bed, in quiet and relaxed environments, and with binaural headphones (Kovacevich & Huron, 2019).

A remarkable characteristic of ASMR is that not everybody experiences it (Valtakari et al., 2019), implying that there are innate differences between people who experience ASMR and those who do not (McErlean & Osborne-Ford, 2020). Fredborg et al., (2017) utilized the Big Five Personality Inventory and found that ASMR experiencers obtained higher scores on Neuroticism and Openness-to-Experience. Similarly, the perspective—first or third-person— from which the stimulus is presented may also differentially affect one's ASMR experience (Fredborg et al., 2017). McErlean and Osborne-Ford (2020) considered whether ASMR is related to the personality traits of absorption. The findings showed that ASMR experiencers scored higher in absorption when compared to age and gender control groups. This suggests that ASMR experiencers have a greater inclination for experiential

involvement and the ability to fully engage in current experience (Jamieson, 2005; Tellegen, 1981). Moreover, greater absorption has been linked to an elevated openness-to-experience (Glisky et al., 1991; Weibel et al., 2010), which has been found to be also enhanced among ASMR experiencers (Fredborg et al., 2017; McErlean & Banissy, 2017). Thus, the combination of increased absorption and openness-to-experience may contribute to the individual's likelihood of experiencing ASMR (McErlean & Osborne-Ford, 2020).

In order to investigate a phenomenon such as ASMR, it is necessary to determine and differentiate the characteristics of ASMR experience from other examples of atypical sensory associations such as synesthesia, frisson, and misophonia (Smith et al., 2019). Synesthesia is defined as the union or blending of the senses in which one stimulus, such as a number or letter, automatically initiates a secondary sensation, such as seeing a color (photism) (Smith et al., 2019b). The same cognitive or perceptual stimuli can automatically trigger the same atypical sensory response (e.g., synesthetic photisms or ASMR tingles) in both ASMR and synesthesia. Barratt and Davis (2015) found that 5.9 % of ASMR experiencers also have synesthetic experiences, and the two phenomena have been found to overlap (Fredborg et al., 2017). Frisson refers to the chills that happen during an emotional response to music (Del Campo & Kehle, 2016). ASMR and frisson both involve an affective constituent, and both experiences are related to substantial individual differences in stimuli (Del Campo & Kehle, 2016; Smith et al., 2019). Some studies have sought connections between misophonia and ASMR; in a large-scale misophonia study, half of the participants reported having ASMR experiences (Rouw & Erfanian, 2018), while a similar study found that ASMR experiencers are more likely to have misophonia (McErlean & Banissy, 2018). Those with misophonia have automatic and negative emotional reactions to a particular sound, which is the opposite reactions to specific audio stimuli experienced in ASMR. Additionally, the triggering sounds for both misophonia and ASMR originate from human movements and behaviors, suggesting that ASMR and misophonia may be two ends of the same spectrum of synesthesia-like emotional responses (Barratt & Davis, 2015). In a study by Del Campo and Kehle (2016) on the relationship between ASMR and aesthetic chills, the authors concluded that the two phenomena share several similarities, as mentioned above, suggesting that mindfulness is an essential component in both and that both may promote facets of happiness or subjective well-being.

Theoretical Framework

The purpose of this research was to analyze ASMR experiences from a theoretical perspective of well-being. Well-being can be defined in numerous ways and this study takes a positive psychological approach.

There are two research traditions within the psychological literature on this subject: the hedonic and eudaemonic perspectives (Huta & Waterman, 2014). Hedonic refers to someone's perceived experience of pleasure or happiness (Umucu et al., 2019) and conceptualizes wellbeing in terms of positive affect combined with high life satisfaction levels (Diener et al., 1999). The eudaemonic research tradition, or psychological wellbeing, refers to the belief that well-being comes from the fulfillment of one's true nature (Umucu et al., 2019) and conceptualizes well-being in connection with personal growth, the fulfillment of intrinsic needs, and meaningful life experiences (Huta & Waterman, 2014). Traditionally, media effects research has been dominated by a hedonic perspective on well-being and has treated media as a root of mood enhancement (Zillmann, 1988); however, some recent research has focused on media use and its effects on eudaemonic well-being (Oliver & Bartsch, 2011).

In the current study, the wellbeing theory or PERMA (Positive emotion, Engagement, Relationship, Meaning, and Accomplishment) model (Seligman, 2012) is used to explore how short-term ASMR experiences contribute to psychosocial well-being. Seligman's well-being theory integrates the hedonic and eudaemonic views of well-being, defining optimal wellbeing as occurring when these two components exist within an individual at the same time (Seligman, 2012; Umucu et al., 2019). The use of this theory allows for the measurement of each element using both objective and subjective approaches (Forgeard et al., 2011).

In Seligman's original Authentic Happiness Theory (2002), he posited that happiness could be defined in terms of three domains: positive emotion, engagement, and meaning (Tansey et al., 2018). His revised theory is called the PERMA model and consists of five core elements: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment (Tansey et al., 2018). He concluded that the well-being theory enhances flourishing by encouraging the five pathways or core elements (Hidayat et al., 2018). The elements of PERMA and ASMR-related research are presented in the next section.

Positive emotions

Positive emotions are the feelings of happiness, joy, cheer, and other descriptors of good feelings (Jones et al., 2014) and could include feelings of deep pleasure (Hidayat et al., 2018). Positive emotions can enhance attention, help generate creative and flexible ideas, and broaden the self-concept to include others more readily (Kok et al., 2008). They have also been associated with greater self-regulation (Tice et al., 2007), task persistence, and goal adoption (Fishbach & Labroo., 2007). In other words, college students' feelings of strong positive emotions are likely to enhance their absorption in learning, resulting in better academic achievement (Hidayat et al., 2018).

Rising public acknowledgment of ASMR media suggests that people are upsurge using

ASMR videos as therapeutic tools for a variety of issues, including for the treatment of sleep and mood disorders (Poerio et al., 2018). ASMR also provide temporary relief to individuals with depression, stress, and chronic pain, as found in a study by Barratt and Davis (2015) in which 50% of participants said their mood improved even in sessions where no tingling sensation was produced, and 30% said that achieving the sensation was vital to mood improvement (Barratt & Davis, 2015). In the same study, 69% of those who scored moderate to severe on the Beck Depression Inventory claimed that using ASMR relieved their depressive symptoms and were aware of the more elevating effects of using ASMR than those without depression (Barratt & Davis, 2015).

In 2018, a large-scale online experiment was conducted where participants viewed a set of three videos —two ASMR and one control— and then reported if they had experienced tingles and their affective response (Poerio et al., 2018). After watching both ASMR videos, ASMR-experiencing participants felt significantly more excited, calmer, and less stressed compared to non-ASMR-experiencing participants (Poerio et al., 2018), and results that were consistent with those in Barratt and Davis (2015). Thus, it can be inferred that watching an ASMR video with inaudible or unintelligible whispering forces the listener to focus and concentrate on the sound and voice itself, reducing extraneous impressions from the surroundings and promoting positive emotions (Klausen, 2019).

Engagement

Engagement refers to the connection one feels to the activity one is doing or the feelings of being absorbed in and focusing on an activity (Seligman, 2012). A high level of engagement in an activity is also referred to as 'flow' (Csikszentmihalyi, 1990), or a feeling of being 'in the zone' (Tansey et al., 2018). Fully mindful absorption entails being lost in the moment, and a subjective flow state is fully realized in retrospect activities (Nakamura & Csikszentmihalyi, 2014).

Mindfulness is often connected with engagement and is defined as intentionally focusing one's awareness on the present-moment experience in an accepting way (Baer & Krietemeyer, 2006). In one study, body awareness was defined by the participants as experiencing oneself through being aware of the body from within and empowering one's identity (Gyllensten et al., 2010).

Barratt and Davis (2015) refer to ASMR as a 'flow-like' phenomenon obtained by viewing a state of intense focus performed by others followed by a diminished awareness of the passage of time. Anecdotal reports of ASMR describe a state of focus, or of a more substantial 'presence' and relaxation, that is similar to the non-active aspects of flow (Barratt & Davis, 2015). This passive feature is notably resonant in ASMR experiences, and both states —ASMR and flow— encompassing the sensation of deep relaxation and wellbeing, although the passive feature of flow is task-directed, while ASMR seems to involve

entire passivity from the experiencer (Barratt et al., 2017). Jackson and Marsh (1996) utilized a modified version of the Flow State Scale that taps into the passive aspects of flow. The findings showed that participants with greater susceptibility to flow reported a higher number of ASMR triggers, highlighting a link between the two phenomena. This suggests that flow may be necessary to achieve sensations associated with ASMR (Barratt & Davis, 2015). Intriguingly, some of the most popular ASMR triggers, such as the hand movements of specialists, in immensely focused states (e.g., carrying out medical exams) or engaged in repetitive tasks (e.g., folding towels), are typical examples of being in a state of flow (McErlean & Banissy, 2017). Thus, ASMR is induced by obtaining a flow-like state that is facilitated by observing others in a similar state; this transference of a state from performers to audience has been examined in studies on the role of mirror neurons (Barratt & Davis, 2015). Additionally, participants prefer content that is happy, inviting, relaxed, and lacks danger, which suggests that popular ASMR videos centering on the manipulation of objects may induce an effortless, flow-like feel to content that is conducive to ASMR induction (Barratt et al., 2017).

Relationship

A positive relationship is understood as the feeling of being cared about by others, being socially integrated, and supported and involves a sense of connectedness, love, and shared emotions (Tansey et al., 2018). Previous research has found that having good relationships with friends is positively related to self-esteem, and that an increase in the perception of friendship quality is associated with the elevation of well-being (Bagwell et al., 2005). Furthermore, college students who socialize more frequently and have more romantic and social relationships have a tendency to be happier than students without these relationships (Diener & Seligman, 2002).

Poerio et al. (2018) investigated whether ASMR videos produced feelings of connectedness. The results revealed that spoken word ASMR videos made ASMR participants feel more socially connected than non-ASMR participants, a result that did not occur when watching ASMR videos with sound but no spoken word (Poerio et al., 2018). This suggests that increased connectedness may be an additional benefit of ASMR because of the social and interpersonal context of the ASMR trigger. One possible explanation is that ASMR simulates a form of social grooming, such as being calmed and comforted by another through the tactile-like tingling sensations induced by ASMR triggers. This grooming simulation enhances well-being and interpersonal bonding through diminutions in heart rate and the circulation of endorphins (Poerio et al., 2018). ASMR videos create a form of embodied and technologically mediated presence, tactile sensations, and distant intimacy or closeness through sonically binaural qualities as well as through narratives supported by sound in the form of ASMR role-play videos, vibrations, and images. Thus, ASMR can be characterized as a form of 'social audio-grooming,' as

ASMR videos provide first-person-like social attention and care in the form of technologically mediated grooming (Klausen, 2019).

Meaning and Sense of Purpose

Meaning is a feeling of doing something meaningful and connected to something bigger. People need meaning in life to give them a sense of fulfillment and makes life worthwhile. A higher perception of meaning has been reported to have a positive association with life satisfaction and academic achievement in students (Hidayat et al., 2018). A student's sense of purpose is usually closely related to their sense of meaning in life and frequently involves a pro-social or altruistic intent such as the commitment to helping others or improving the world (Noble & McGrath, 2015).

Accomplishment and Sense of Achievement

Accomplishment refers to an individual's perception of making progress toward goals and having a sense of achievement in one's life (Seligman, 2012). Accomplishment is described by Seligman (2012) as the desire to achieve something (e.g., having a persevering attitude) the achievements themselves (Tansey et al., 2018). Interestingly, accomplishment has a strong association with meaning because someone who accomplishes something is likely to derive intense feelings of meaning from the experience (Hidayat et al., 2018).

Method

The purpose of this study was to determine how university students' experiences of ASMR illustrate the elements of well-being. The following research question was set: How do the elements of PERMA appear in university students' ASMR experiences?

In ASMR, experiencers perceive both emotional and technologically mediated experiences. The current study used the phenomenological approach to explore and find the meaning of both types of ASMR experiences (Langdridge, 2007). Of the different phenomenological approaches, Interpretative Phenomenological Analysis (IPA) was chosen for this exploration of ASMR experience in relation to psychosocial wellbeing. The data were collected through semi-structured interviews conducted over four months (from December 2019 to March 2020) with university students from the University of Lapland. A total of three participants were interviewed, aged 26 and 27; two were studying for a master's degree, and one was pursuing a bachelor's degree. All of them were Finnish (two males and one female). The identity of each interviewee has been kept anonymous and hereafter labeled as A, B, and C.

Informed consent was required before completion of a demographic questionnaire. The design of the informed consent followed the ethical principles of research with human participants provided by the Finnish National Broad on Research Integrity as committed to

by the University of Lapland. As such, informed consent for the current study included ensuring that the participants were informed of the nature of the research, the potential benefits, and the risks of their participation. The participants were informed that they had the right to confidentiality and to withdraw from the study at any time (Kohonen et al, 2019).

The data collection method involved a qualitative phenomenological inquiry that consisted of two phases. In the first phase, the participants answered ten semi-structured in-depth questions by email. The email interview was followed by a supplementary interview phase done using Skype. In the first phase, the three students received the interview questions through email, and they were sent reminders one week before the deadline in case of no reply. The supplementary interviews were conducted based on listed points requiring clarification based on the email interview data. The follow-up questions sought clarifications, explanations, or elaborations of the university students' ASMR experiences.

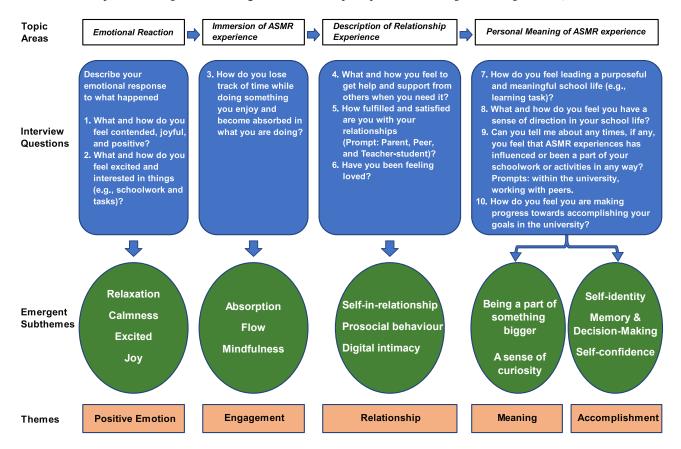
An email interview was chosen for the first phase because it allowed the participants time to reflect on their answers to the questions without pressure (Beck, 2005). The email interviews began with a few structured questions regarding demographics, then asked semi-structured questions about interviewees' feelings toward their ASMR experiences concerning day-to-day activities and behavior. The interview questions are shown in Figure 1, such as "What and how do you feel contented, joyful, and positive?" and "Have you been feeling loved? How?". The open-ended interview questions allowed participants to develop their narrative by exploring their experiences of ASMR as they focused on the details of ASMR experience and the meaning in relation to well-being and involved indepth discussion of the details of the participant's experience of psychosocial well-being after ASMR exposures.

The data analysis followed standard IPA methods (Smith et al., 2009) involving several readings and re-readings of the initial transcript to identify significant quotes and areas of interest for ASMR-related responses and the five PERMA domains. Then, concise phrases representing units of meaning were coded; the process was repeated for each transcript to identify emergent themes. Subsequently, conceptual connections were made between subthemes, and these were condensed into clusters. The transcripts were individually analyzed before the identified themes were considered together to form a group analysis, and the codes were organized into interconnected hierarchies (i.e., themes, subthemes, and categories). Figure 1 shows how the subthemes emerged from the narratives of the corresponding interview questions and gave rise to four topic areas: emotional reaction, the immersion of ASMR experience, description of relationships experience, and personal meaning of the experience. The subthemes were then applied to the similar themes of the PERMA model. The coding scheme was based on the five dimensions of the PERMA model. All transcripts were coded qualitatively into categories, so that the coder first read

each transcript and marked details, then observations and notes were written, and the final data was entered into a spreadsheet. The coding stage was guided by the five domains of wellbeing that form the PERMA framework with the exact words of the interviewees being compared to the dimensions associated with PERMA. The most frequent and significant codes were identified and categorized into themes (Mirehie & Gibson, 2020).

Figure1

Flow process of the emergent subthemes and subsequent application to the themes of the PERMA model, identified through IPA. Adapted and modified from Yerbury and Boyd (2019)



Results

Positive Emotional Experiences

The first subtheme related to the PERMA framework is positive emotions. In the data of this research, ASMR was described using a range of emotions that included relaxation, calmness, excitement, and joy. Feelings of relaxation and calmness when engaging with ASMR were the most common. For example, participant B used ASMR to seek relaxed and calm feelings and to relieve a worried mind.

Participant B: "I noticed that specific videos relaxed my mind after a busy day... It certainly calms me down and makes me more balanced after running around or

worrying too much the whole day."

For participant C, ASMR videos helped him relax and made him feel calm. This was beneficial to him because he felt it reduced stress and promoted better sleep. He also felt his mind became more focused, as busy thoughts did not occupy him during ASMR experiences. In addition, he described frequent feelings of joy and excitement in response to ASMR videos.

Participant C: "I get more 'headspace' in my brain with these via calming, soothing, and relaxing sensations. ASMR experiences ... joy and positiveness ... also feel super-excited."

As evident in the interviewees' statements, ASMR videos generate a range of positive emotions that comprise one facet of wellbeing in the PERMA framework (Seligman, 2012). Some of these emotions were described as joy or excitement, which are associated with pleasure. Other emotions were implied from the participant's descriptions about the relaxation and calmness of expanding 'headspace' via the repetitive sound in ASMR videos. The participants' descriptions of their experiences showed that ASMR videos release body and mind tension through relaxation, leading to a psychophysiological state of decreased arousal that opposes that of the stress response and is experienced as a calming state and improved quality of sleep.

Engagement Experiences

In the current study, engagement manifested as mindfulness and full immersion (absorption and flow) in the ASMR videos and activities. The participants described feeling as if time was passing quickly and noted that time during ASMR engagement is different from real-world time and can lead to time loss or a lack of awareness of time passing. They described the experience as feeling like a connection of the mind, body, and sound.

Participant A focused their attention on the body, breath and sensations, as well as an awareness of what arises in each moment. The natural repetitive walking sounds in ASMR videos decreased his physiological arousal (heartbeat rate), turned his awareness to the present-moment, and stopped his mind from wandering. Participant C reported that ASMR triggered a tingling sensation and the 'headspace' needed to stop repetitive and spiraling rumination.

Participant A: "ASMR video help me to focus on breathing deeper and feel a presence... feel how heart rate drops ... forget all the stress and worries."

Participant C: "ASMR gives me more headspace... Tingling sensation helps me have an awareness of my body and the surroundings ... mindfulness meditation."

Moreover, experiencing ASMR made Participant C more aware of the present-moment. He

even noticed that the experience enhanced his love for his girlfriend.

Participant C: "When I watch an ASMR video with my girlfriend next to me, I'm watching the video and get the body feels more present."

The participants also expressed feeling that ASMR videos helped them to engage in their studies. Participant A reported that his ASMR experiences allowed him to reach deep "immersive" and "flow" states of consciousness and provided him with relaxation as well as satisfying, meaningful experiences of his schoolwork. Likewise, Participant B listened to non-talking sound ASMR videos when in a noisy working environment and found she became absorbed in the task, experienced time loss, and worked longer than intended.

Participant A: "When I feel excited and interested in things ... my schoolwork ... focused on what I do ... flow mode... listening to ASMR videos might help me to relax and concentrate better to do my schoolwork."

Participant B: "I listened to long, triggering sound videos while working ... helped me to concentrate on my work better... no-talk ASMR videos that had helped me to lose track of time... putting me in flow ... do some longer writing work or thinking work."

Participant C felt that time went by quickly. He mentioned that ASMR engagement time is different from real-world time and can lead to not noticing real-world time and experiencing time loss. He identified a connection of mind, body, and sound.

Participant C: "It feels as if my body and mind... become one... sometimes happens during ASMR videos."

The above in-depth immersion reflected a state of flow that Seligman (2012) regarded as one domain of wellbeing in the PERMA framework. Indeed, in describing flow, Csikszentmihalyi (1990) posits that this state of mind/body, which necessitates an optimal balance between challenge and skill, results in happiness (Mirehie & Gibson, 2020).

Relationships and Connectedness Experiences

The third sub-theme associated with PERMA is relationships that emerged from participants mentioning the importance of ASMR in shaping their digital-intimacy experiences. Numerous statements described the presence of others in the interaction of ASMR videos as generating a sense of self-in-relationship to others, prosocial behavior, and digital intimacy relationships.

Participant B noticed that she was more sensitive to the love of others after watching ASMR affirmation and kindness videos. The soft and kind words of ASMR videos changed her prior self-negative thoughts, enhanced her self-compassion, and increased her feelings

of acceptance, resulting in an awareness that everyone has challenging life experiences and makes mistakes (common humanity) and actions of kindness and understanding for herself (self-kindness).

Participant B: "I often feel loved by my friends and family...the affirmations and kind words make me think positive and gentle thoughts about myself, and they help me not be so hard on myself."

When it came to prosocial behaviors, Participant B noted that the non-speaking and affirmation ASMR videos increased her acceptance and tolerance of difference in her peers. In stressful situations, such as business meetings and group work, she could see more clearly, understand what was happening and accept others more quickly, which seemed to help her move forward with the task. Thus, watching ASMR videos decreased her reactivity and increased her response to cognitive flexibility in group working environments.

Participant B: "Listening to ASMR videos calmed me down and made me feel less irritated ... at work in the group ... so I have listened to ASMR videos to calm myself down before meetings."

Participant C described prosocial changes in his behaviors as an increased awareness of others' feelings and experiences. ASMR videos with slow painting movements enhanced his ability to sense others' inner experiences and to be more present to their feelings. Furthermore, the specific discussion contents of ASMR videos enhanced participant C's ability to have present-focused awareness, understand others' perspectives and identify how to help them. These types of ASMR videos also increased his acceptance of help from others for his university studies.

Participant C: "When I watched the ASMR video with my girlfriend next to me ... watching Ross painter's ASMR video with some friends at the same time... sharing the sensation of ASMR made it more powerful."

Participant C: "Some of the ideas, discussions, and subjects of the ASMR videos enhance the ideas for helping others ... get help from my friends when I need some help ... of thoughts or feelings."

These types of ASMR videos also induced the participants' awareness of how to connect with others and the world. The digital intimacy enhanced through the ASMR videos affected real life, as virtual stimulating triggers with simple and slow movements created new forms of closeness.

Experiences Related to Meaning

The fourth sub-theme associated with PERMA is meaning, and this sub-theme was present

in the experiences of all the interviewees, though with some variations in how explicitly they were described. Participant C had a more in-depth understanding and stronger emotional attachment, engagement, and relationship to ASMR videos and to his environment and activities, all of which created meaning for him. Seligman (2012) suggests that a central part of the meaning domain is a feeling that you are doing something meaningful and are part of something bigger (Mirehie & Gibson, 2020).

Participant C saw ASMR videos as a platform that allowed him to connect with others and the world in a meaningful way, giving him a sense of being a part of something bigger than himself. Meaning was essential not just to him, friends, and family, but rather to a much larger group, such as the whole human race. Also, he expressed that the slow and repetitive hand movements in the videos triggered him to connect with the ASMR community.

Participant C: "Maybe these "unintentional ASMR" ... his delicate hand movements, and a sense of something larger happening ... help me to connect to the world ... a platform for a meaningful life."

Participant C actively engaged in ASMR videos to extend his curiosity and exploration of a meaningful life. He also described the repetitive and mundane movements as the primary trigger of this effect.

Participant C: "As a child, I was very shy and didn't meet new people very much...so I try to know people's true meanings in life ... In offices, the sound of paper, typing, and intense focus gives me shivers and good feelings... as with the ASMR videos."

As noted above, this theme was more prominent in the experiences of the high-level ASMR participant C. For him, ASMR videos and experiences were a central part of life, and the associated activities provided him with meaning, which is consistent with Seligman's (2012) conception of the meaning domain.

Experiences Related to Accomplishment

The fifth subtheme related to PERMA is accomplishment, and this subtheme emerged from the participants' descriptions of the sense of achievement achieved through ASMR. ASMR experiences related to enhancing self-identity, memory and decision-making, and self-confidence were associated with a sense of achievement. In addition, ASMR helped the students to accomplish study tasks by enhancing focus and concentration. This was described by all participants.

Participant A: "When I feel excited and interested in things ... my schoolwork ... focused on what I do ... flow mode... listening to ASMR videos might help me to relax and concentrate better to do my schoolwork."

Participant B listened to non-talking sound ASMR videos while in noisy working

environments. Doing so helped her to become absorbed in the task, resulting in experience of time loss and working longer than intended.

Participant B: "I listened to long trigger sound videos while working, and those helped me to concentrate. I was much more restless while working when I was not listening to ASMR videos. I felt better about myself after having been able to concentrate on my work better. Listening to no-talk ASMR videos that had consistent sounds helped me to lose track of time. The videos put me in flow when I had to do some longer writing work or thinking work."

Participant C said ASMR videos gave him the coping skills needed to deal with different tasks in the university, such as examinations, playing music, and other social activities.

Participant C: "I feel that some videos help me create a student identity... ASMR helps me be aware of the daily tasks in school or gives me more ideas about social life...everything is connected."

ASMR videos enhanced Participant C's ability to remember something by creating a psychological link between his past experiences and current memory, extending the new ideas into his future meaningful life, music, and the world. ASMR videos also helped him focus on the present-moment, make decisions, and solve problems.

Participant C: "ASMR is something can calm you down and relax you ... helps me to concentrate. ASMR gives me more headspace... reminding me... affect my goals as well."

In sum, the ASMR experiencers described ASMR as contributing to their accomplishments in many ways, such as by increasing focus, concentration, and self-confidence in a way that allowed them to, for example, study more effectively. They also used ASMR videos to promote their achievements and accomplish tasks.

Discussion

Summary of Findings

Through an analysis of the participants' recollections and expressions of ASMR experiences, this study gives insight into the phenomenon of ASMR engagement on multiple dimensions of well-being. Seligman's first PERMA element, positive emotions appeared as joy, excitement, relaxation, and calmness experienced from watching ASMR videos. These findings are consistent with earlier work on ASMR in which experiencers reported frequent tingling, increased levels of excitement and calmness, and decreased levels of stress after watching a range of ASMR videos associated with complex emotional ASMR experiences (Poerio et al., 2018). The present findings suggest that spoken voices and repetitive hand movements are responsible for these complex emotional responses.

These results are consistent with previous research that found both spoken and sound-only ASMR videos triggered significantly more excitement, instilled a sense of calm, and decreased stress (Poerio et al., 2018).

Engagement, the second pillar of PERMA, emerged in the ASMR experiences in the form of mindfulness, full absorption, and a flow-like mental state. The present findings suggest that ASMR experiences can cause time loss and absorb the experiencer in an activity. This result aligns with Barratt and Davis's (2015) finding that the passive component of flow is associated with the ASMR experience and concur with a study in which increased absorption was seen when ASMR experiencers engaged in music or concentrated on a work-related task, which are typical examples of flow-inducing activities (McErlean & Osborne-Ford, 2020). The interviews also indicated that the participants used ASMR videos to alleviate negative feelings by enhancing both self-regulation of attention and non-judgmental awareness of the present moment. The participants also stated that ASMR videos made them more aware and accepting of the present-moment, including their inner emotions and body sensations, and distracted them from repetitive or spiraling thoughts. These findings are consistent with the results of previous studies on increased mindfulness in ASMR (Fredborg et al., 2018).

Relationship is the third PERMA domain considered in this study. Strengthening existing intimate relationships and the development of altruistic behaviors after watching ASMR videos were found to be essential aspects expressed by the participants. Sound-only (e.g., slow, repetitive painting movement) ASMR videos enhanced participants' sense of love towards others. On the other hand, spoken-only (e.g., with affirmations and positive discussions) ASMR videos strengthened their awareness of others and made them more prone to help. This finding aligns with previous studies on ASMR research in which the spoken-only ASMR videos made participants feel more socially connected (Poerio et al., 2018) and in studies noting the importance of social interactions (McErlean & Banissy, 2017). Lochte et al. (2018) suggested that the attention-receiving contents of many ASMR videos were similar to being cared for by someone, and this aligns with the current study. Also, some soft-spoken ASMR videos showing kindness seem to enhance participants' compassion towards themselves, allowing them to change their negative thoughts and accept others' love. Davis et al. (2011) noted that self-compassion mediates the relationship between empathy and mindfulness; hence, the results of this study suggest that spokenonly ASMR videos improve self-acceptance and interpersonal relationships.

When it comes to meaning, the participants spoke of finding meaning and a sense of purpose through the ASMR video community as a platform with which to connect with others, and they linked this personal growth perspective with better wellbeing. The meaningfulness experience was also associated with the development of character, such as a curiosity about others and the ability to focus on the present moment. Participants also

expressed moving towards the acceptance of self and reframing situations to find meaning and promote positive emotions. These findings align with previous research suggesting that mindful awareness allows for finding the purpose in life and enhances mental health (Crego et al., 2020).

The fifth PERMA element is accomplishments and having a sense of achievement (Seligman, 2012). Participants seemed to gain a sense of accomplishment through watching ASMR, as the videos helped them utilize mindful awareness, put them in the headspace for self-identity, helped them recall memories, and broaden their connections with others. Confidence in their abilities empowered a sense of meaning and purpose in the participants' lives. Grégoire et al. (2012) suggested that individuals who are more attentive and aware tend to be autonomously motivated and foster their own wellbeing (Grégoire et al., 2012). Moreover, listening to positive content in an ASMR video can enhance short-term memory (Kim et al., 2019). Therefore, the present study's findings agree with the description of ASMR videos as fostering meaning, skills, and goal setting through enhancing an awareness of self and the retrieval of memories.

Limitations

Some limitations should be considered when evaluating the findings of this study. First, as ASMR is still a relatively new research subject, it was necessary to do an extensive literature review to see how ASMR is viewed from the perspective of well-being in earlier research; doing so allowed us to find support for the use of IPA (Yardley, 2000). In addition, numerous verbatim extracts and quotations were presented to allow the reader to confirm the interpretations (Smith et al., 2009). This study was also limited by the low number of participants. The purposive sampling of university students with significant ASMR experiences resulted in only three participants whose experiences were obtained with an in-depth interview method in two phases. However, the aim was not to obtain generalizable data but to understand and describe the connection between ASMR videos and various elements of well-being in the lives of ASMR experiencers. From this perspective, the data is relevant and provides unique information about ASMR experiences in the light of well-being.

Conclusion

This study has opened a discussion about how ASMR experiences can be studied using the PERMA framework. The analysis showed that the participants were able to identify various elements of well-being in their ASMR experiences, resulting in remarkable new findings. The findings suggest that the mindfulness practice experienced from ASMR videos can result in the elevation of positive emotions and other facets of wellbeing. As such, the findings provide support for the connection between ASMR and well-being through mindfulness. As noted by Fredborg et al. (2018) and Del Campo and Kehle (2016), ASMR

experiences linked to mindfulness can be used to improve issues of psychological well-being, similar to the effect of mindfulness-based treatment programs.

In conclusion, this study suggests that university students' engagement with ASMR may contribute to enhanced well-being by increasing feelings of happiness, elevating concentration, improving sleep quality, preventing rumination, increasing self-confidence, and motivating altruistic behavior. This has societal implications for the pursuit of achieving well-being goals at-university or at-home. Although more research is needed to show the connection between ASMR experiences and well-being, this study contributes some promising findings on the positive nature of ASMR experiences.

References

- Baer, R. A., & Krietemeyer, J. (2006). Overview of mindfulness-and acceptance-based treatment approaches. In R. A. Baer (Ed.), *Mindfulness-based treatment approaches: Clinician's guide to evidence base and applications* (pp. 3–27). Elsevier. https://doi.org/10.1016/B978-012088519-0/50002-2
- Bagwell, C. L., Bender, S. E., Andreassi, C. L., Kinoshita, T. L., Montarello, S. A., & Muller, J. G. (2005). Friendship quality and perceived relationship changes predict psychosocial adjustment in early adulthood. *Journal of Social and Personal Relationships*, 22(2), 235—254. https://doi.org/10.1177/0265407505050945
- Barratt, E. L., & Davis, N. J. (2015). Autonomous Sensory Meridian Response (ASMR): a flow-like mental state. *PeerJ*, *3*, e851. https://doi.org/10.7717/peerj.851
- Barratt, E. L., Spence, C., & Davis, N. J. (2017). Sensory determinants of the autonomous sensory meridian response (ASMR): understanding the triggers. *PeerJ*, *5*, e3846. https://doi.org/10.7717/peerj.3846
- Beck, C. T. (2005). Benefits of participating in Internet interviews: Women helping women. *Qualitative Health Research*, *15*(3), 411—422. https://doi.org/10.1177/1049732304270837
- Cash, D. K., Heisick, L. L., & Papesh, M. H. (2018). Expectancy effects in the autonomous sensory meridian response. *PeerJ*, 6, e5229. https://doi.org/10.7717/peerj.5229
- Crego, A., Yela, J. R., Gómez-Martínez, M. Á., & Karim, A. A. (2020). The contribution of meaningfulness and mindfulness to psychological well-being and mental health: A structural equation model. *Journal of Happiness Studies*, *21*(8), 2827-2850. https://doi.org/10.1007/s10902-019-00201-y
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. Harper Perennial.

- University students' Autonomous Sensory Meridian Response (ASMR) experiences in the light of a well-being theory
- Davis, D. M., & Hayes, J. A. (2011). What are the benefits of mindfulness? A practice review of psychotherapy-related research. *Psychotherapy*, *48*(2), 198-208. https://doi.org/10.1037/a0022062
- Del Campo, M. A., & Kehle, T. J. (2016). Autonomous sensory meridian response (ASMR) and frisson: Mindfully induced sensory phenomena that promote happiness. *International Journal of School & Educational Psychology*, *4*(2), 1–8. https://doi.org/10.1080/21683603.2016.1130582
- Diener, E., & Seligman, M. (2002). Very happy people. *Psychological Science*, *13*(1), 81–84. https://doi.org/10.1111/1467-9280.00415
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. https://doi.org/10.1037/0033-2909.125.2.276
- Fishbach, A., & Labroo, A. (2007). Be better or be merry? How mood influence self-control. *Journal of Personality and Social Psychology*, *93*(2), 158–173. https://doi.org/10.1037/0022-3514.93.2.158
- Forgeard, M. J., Jayawickreme, E., Kern, M. L., & Seligman, M. E. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1(1), 79–106. https://doi.org/10.5502/ijw.v1i1.15
- Fredborg, B. K., Clark, J. M., & Smith, S. D. (2017). An examination of personality traits associated with autonomous sensory meridian response (ASMR). *Frontiers in Psychology*, 8, art. 247. https://doi.org/10.3389/fpsyg.2017.00247
- Fredborg, B. K., Clark, J. M., & Smith, S. D. (2018). Mindfulness and autonomous sensory meridian response (ASMR). *PeerJ*, 6, e5414. https://doi.org/10.7717/peerj.5414
- Glisky, M. L., Tataryn, D. J., Tobias, B. A., Kihlstrom, J. F., & McConkey, K. M. (1991). Absorption, openness to experience, and hypnotizability. *Journal of Personality and Social Psychology*, 60(2), 263. https://doi.org/10.1037/0022-3514.60.2.263
- Grégoire, S., Bouffard, T., & Vezeau, C. (2012). Personal goal setting as a mediator of the relationship between mindfulness and wellbeing. *International Journal of Wellbeing*, 2(3), 236-250. https://doi.org/10.5502/ijw.v2.i3.5
- Gyllensten, A. L., Skär, L., Miller, M., & Gard, G. (2010). Embodied identity A deeper understanding of body awareness. *Physiotherapy Theory and Practice*, *26*(7), 439–446. https://doi.org/10.3109/09593980903422956
- Hidayat, R., Habibi, A., Saad, M., Rashid, M., Mukminin, A., & Idris, W. (2018). Exploratory and confirmatory factor analysis of PERMA for Indonesian students in mathematics education programmes. *Pedagogika*, *132*(4),147–165. https://doi.org/10.15823/p.2018.132.9

- University students' Autonomous Sensory Meridian Response (ASMR) experiences in the light of a well-being theory
- Huta, V., & Waterman, A. S. (2014). Eudaimonia and its distinction from hedonia: Developing a classification and terminology for understanding conceptual and operational definitions. *Journal of Happiness Studies*, *15*(6), 1425-1456. https://doi.org/10.1007/s10902-013-9485-0
- Jackson S. A., & Marsh, H. W. (1996). Development and validation of scale to measure optimal experience: flow state scale. *Journal of Sport and Exercise Psychology*, *18*(1), 17–35. https://doi.org/10.1123/jsep.18.1.17
- Jamieson, G. A. (2005). The modified Tellegen absorption scale: A clearer window on the structure and meaning of absorption. *Australian Journal of Clinical and Experimental Hypnosis*, *33*(2), 119-139.
- Jones, C., Scholes, L., Johnson, D., Katsikitis, M., & Carras, M. C. (2014). Gaming well: links between videogames and flourishing mental health. *Frontiers in Psychology*, *5*, art. 260. https://doi.org/10.3389/fpsyg.2014.00260
- Kim, D., Kim, T., Seo, G., Shin, M. H., Lee, Y. J. & Hwang, W. (2019). Sensory channel effects of autonomous sensory meridian response on short-term memory. *ICIC Express Letters*, 13(3), 225–230. https://doi.org/10.24507/icicel.13.03.225
- Klausen, H. B. (2019). 'Safe and sound.' Sound effects. *An Interdisciplinary Journal of Sound and Sound Experience*, 8(1), 87–103.
- Kohonen, I., Kuula-Luumi, A., & Spoof, S. K. (2019). The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish National Board on Research Integrity TENK.
- Kok, B., Catalino, L., & Fredrickson, B. L. (2008). The broadening, building, buffering effects of positive emotions. In S. J. Lopez (Ed.), *Positive psychology: Exploring the best of people* (pp. 1–19). Greenwood.
- Kovacevich, A., & Huron, D. (2019). Two studies of Autonomous Sensory Meridian Response (ASMR): The relationship between ASMR and music-induced frisson. *Empirical Musicology Review*, *13*(1-2), 39–63. https://doi.org/10.18061/emr.v13i1-2.6012
- Kunttu, K, Pesonen, T., & Saari, J. (2017). *Korkeakouluopiskelijoiden terveystutkimus* 2016 [Higher education students' health survey 2016]. Finnish Student Health Service. Retrieved from: http://www.yths.fi/filebank/4300 KOTT uusin 2016.pdf
- Langdridge, D. (2007). *Phenomenological psychology: Theory, research and method.*Pearson Education.
- Lochte, B. C., Guillory, S. A., Richard, C. A., & Kelley, W. M. (2018). An fMRI investigation of the neural correlates underlying the autonomous sensory meridian response (ASMR). *BioImpacts: BI*, 8(4), 295-304. https://doi.org/10.15171/bi.2018.32

- University students' Autonomous Sensory Meridian Response (ASMR) experiences in the light of a well-being theory
- McErlean, A. B. J., & Banissy, M. J. (2017). Assessing individual variation in personality and empathy traits in self-reported autonomous sensory meridian response. *Multisensory Research*, 30(6), 601–613. https://doi.org/10.1163/22134808-00002571
- McErlean, A. B. J., & Banissy, M. J. (2018). Increased misophonia in self-reported autonomous sensory meridian response. *PeerJ*, 6, e5351. https://doi.org/10.7717/peerj.5351
- McErlean, A. B. J., & Osborne-Ford, E. J. (2020). Increased absorption in autonomous sensory meridian response. *PeerJ*, 8, e8588. https://doi.org/10.7717/peerj.8588
- Mirehie, M., & Gibson, H. J. (2020). Women's participation in snow-sports and sense of well-being: a positive psychology approach. *Journal of Leisure Research*, *51*(4), 397-415. https://doi.org/10.1080/00222216.2019.1702485
- Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In M. Csikszentmihalyi (Ed.), Flow and the foundations of positive psychology. The collected works of Mihaly Csikszentmihalyi (pp. 239-263). Springer Netherlands. https://doi.org/10.1007/978-94-017-9088-8
- Noble, T., & McGrath, H. (2015). PROSPER: A new framework for positive education. *Psychology of Wellbeing*, *5*(1), 1–17. https://doi.org/10.1186/s13612-015-0030-2
- Oliver, M. B., & Bartsch, A. (2011). Appreciation of entertainment: The importance of meaningfulness via virtue and wisdom. *Journal of Media Psychology*, *23*(1), 29–33. https://doi.org/10.1027/1864-1105/a000029
- Poerio, G. L., Blakey, E., Hostler, T. J., & Veltri, T. (2018). More than a feeling:
 Autonomous sensory meridian response (ASMR) is characterized by reliable changes in affect and physiology. *PloS one*, *13*(6), 1–18.

 https://doi.org/10.1371/journal.pone.0196645
- Rouw, R., & Erfanian, M. (2018). A large-scale study of misophonia. *Journal of Clinical Psychology*, 74(3), 453–479. https://doi.org/10.1002/jclp.22500
- Seligman, M. (2012). Flourish: A visionary new understanding of happiness and well-being. Simon and Schuster.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research.* Sage.
- Smith, S. D., Fredborg, B. K., & Kornelsen, J. (2019). Atypical functional connectivity associated with autonomous sensory meridian response: an examination of five resting-state networks. *Brain Connectivity*, *9*(6), 508-518. https://doi.org/10.1089/brain.2018.0618

- University students' Autonomous Sensory Meridian Response (ASMR) experiences in the light of a well-being theory
- Stefanov, M., Potroz, M., Kim, J., Lim, J., Cha, R., & Nam, M. H. (2013). The primo vascular system as a new anatomical system. *Journal of Acupuncture and Meridian Studies*, 6(6), 331–338. https://doi.org/10.1016/j.jams.2013.10.001
- Tansey, T. N., Smedema, S., Umucu, E., Iwanaga, K., Wu, J. R., Cardoso, E. D. S., & Strauser, D. (2018). Assessing college life adjustment of students with disabilities: application of the PERMA framework. *Rehabilitation Counselling Bulletin*, *61*(3), 131–142. https://doi.org/10.1177/0034355217702136
- Tellegen, A. (1981). Practicing the two disciplines for relaxation and enlightenment: Comment on "Role of the feedback signal in electromyograph biofeedback: The relevance of attention" by Qualls and Sheehan. *Journal of Experimental Psychology: General*, 110(2), 217–226. https://doi.org/10.1037/0096-3445.110.2.217
- Tice, D. M., Baumeister, R. F., Shmueli, D., & Muraven, M. (2007). Restoring the self: Positive affect helps improve self-regulation following ego depletion. *Journal of Experimental Social Psychology*, *43*(3), 379-384. https://doi.org/10.1016/j.jesp.2006.05.007
- Tihanyi, B. T., Ferentzi, E., Beissner, F., & Köteles, F. (2018). The neuropsychophysiology of tingling. *Consciousness and Cognition*, *58*, 97–110. https://doi.org/10.1016/j.concog.2017.10.015
- Umucu, E., Wu, J. R., Sanchez, J., Brooks, J. M., Chiu, C. Y., Tu, W. M., & Chan, F. (2020). Psychometric validation of the PERMA-profiler as a well-being measure for student veterans. *Journal of American College Health*, 68(3), 271-277. https://doi.org/10.1080/07448481.2018.1546182
- Valtakari, N. V., Hooge, I. T., Benjamins, J. S., & Keizer, A. (2019). An eye-tracking approach to Autonomous sensory meridian response (ASMR): The physiology and nature of tingles in relation to the pupil. *PloS one*, *14*(12), 1–13. https://doi.org/10.1371/journal.pone.0226692
- Weibel, D., Wissmath, B., & Mast, F. W. (2010). Immersion in mediated environments: the role of personality traits. *Cyberpsychology, Behavior, and Social Networking, 13*(3), 251–256. https://doi.org/10.1089/cpb.2009.0171
- Yardley, L. (2000). Dilemmas in qualitative health research. *Psychology and Health*, *15*(2), 215-228. https://doi.org/10.1080/08870440008400302
- Yerbury, R. M., & Boyd, W. E. (2019). Dolphins and human flourishing: a novel application of the PERMA model. *Ecopsychology*, *11*(4), 201–212. https://doi.org/10.1089/eco.2019.0016
- Zillmann, D. (1988). Mood management through communication choices. *American Behavioral Scientist*, *31*(3), 327-340. https://doi.org/10.1177/000276488031003005

Appendix

Table A1

Accessible table representation of the PERMA model in figure 1 - Flow process of the emergent subthemes and subsequent application to the themes of the PERMA model, identified through IPA. Adapted and modified from Yerbury and Boyd (2019)

Topic Areas	Emotional Reaction	Immersion of ASMR experience	Description of Relationship Experience	Personal Meaning of ASMR experience
Interview Questions	Describe your emotional response to what happened 1. What and how do you feel contended, joyful, and positive? 2. What and how do you feel excited and interested in things (e.g., schoolwork and tasks)?	3. How do you lose track of time while doing something you enjoy and become absorbed in what you are doing?	 4. What and how you feel to get help and support from others when you need it? 5. How fulfilled and satisfied are you with your relationships (Prompt: Parent, Peer, and Teacher-student)? 6. Have you been feeling loved? 	 7. How do you feel leading a purposeful and meaningful school life (e.g., learning task)? 8. What and how do you feel you have a sense of direction in your school life? 9. Can you tell me about any times, if any, you feel that ASMR experiences has influenced or been a part of your schoolwork or activities in any way? Prompts: within the university, working with peers. 10. How do you feel you are making progress towards accomplishing your goals in the university?

Topic Areas	Emotional Reaction	Immersion of ASMR experience	Description of Relationship Experience	Personal Meaning of ASMR experience
Themes and Emergent Subthemes	Positive Emotion: Relaxation Calmness Excited Joy	Engagement:	Relationship: Self-in-relationship Prosocial behaviour Digital intimacy	 Meaning: Being a part of something bigger. A sense of curiosity Accomplishments: Self-identity Memory & Decision-Making Self-confidence