ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)

Volume 13, Issue 02, February 2026

Music-Based Mood Regulation, Difficulties in Emotion Regulation, and Emotional Eating Among Indian Emerging Adults

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Abstract*— Emerging adulthood includes the distinct developmental period between ages 18 to 29 marked by identity exploration, instability, and emotional sensitivity. Emotional regulation processes begin maturing during this period, making it particularly relevant for establishing future well-being. Following a quantitative, cross-sectional design, the present study examined the relationships between music-based mood regulation strategies, difficulties in emotion regulation, and emotional eating in response to happiness, sadness, anger, and anxiety among Indian emerging adults. Data was collected from a sample of 135 participants (44.4% male, 55.6% female) aged 18–25 ($M = 21.01$, $SD = 1.55$) using a survey containing the B-MMR Scale, DERS-SF, and SEES. Pearson's correlation and multiple regression analyses were conducted using Jamovi (version 2.7.18). Results indicated that emotion regulation difficulties were significantly positively correlated with several music-based regulation strategies, particularly discharge ($r = .420$, $p < .001$), and with emotional eating across all affective states, with sadness ($r = .377$, $p < .001$) and anxiety ($r = .301$, $p < .001$) showing the strongest associations. Emotion regulation difficulties emerged as the strongest predictor of emotional eating, particularly for sadness-related eating ($R^2 = .252$). Among music-based strategies, Solace positively ($B = .489$, $p = .004$) and Diversion negatively ($B = -.292$, $p = .042$) predicted sadness-related emotional eating. Given the deep cultural embeddedness of music in the Indian context, these findings highlight the potential of music-based strategies as accessible between-session counselling interventions supporting adaptive coping and emotion regulation skill-building among emerging adults.

Index Terms: *Emerging adulthood, emotional eating, emotion regulation difficulties, music-based mood regulation.*

I. INTRODUCTION

A. Emotions, Mood, and Emerging Adulthood

Understanding human emotions and the regulatory mechanisms behind them has long been a subject of interest in psychological research. Over the years many psychologists have come to the understanding of emotions as complex psychological and physiological states of being that arise in response to specific internal or external situations or stimuli. These states are often intense, short lived, and involve physiological, cognitive, and behavioural components. They lie at the very centre of human experience and contribute greatly to the psychological functioning and well-being of an individual. Moods, on the other hand, are more prolonged, less intense, and generalized manifestations of these emotions. Both of these psychological phenomena greatly contribute to an individual's behaviour, their coping mechanisms, and their day-to-day functioning. As such, understanding the regulatory mechanisms behind these becomes essential to ensure one's overall well-being.

Emerging adulthood, a time period described by Arnett (2000) as typically ranging from ages 18 to 29, is one critical developmental period marked by identity exploration, instability, and uncertainty, contributing to heightened emotional instability and sensitivity. During this period, individuals attain increased autonomy and control over their life independent of their caregivers. It also features increased responsibility in terms of adapting to new social, academic, and professional environments. Growth during this time period requires understanding and attaining mastery and control over one's mood and emotional states. Therefore, understanding one's emotions and moods and the regulatory processes behind them becomes especially important as it is essential for adaptive functioning and coping with day-to-day stresses during this period.

B. Emotion Regulation

Regulation can be defined as the ability to recognise, identify, and control one's own emotions in response to various situations, such that one is able to behave in adaptive ways. It includes the various strategies or approaches that one may implement in order to effectively control their emotions and respond to stimuli. According to the Process Model of Emotional Regulation given by James Gross, emotions manifest over time through a sequence of steps. Each of these stages can be seen as strategies that an individual may implement in order to regulate their emotions, and individuals can intervene at any of the different stages in this process. These strategies can be categorised as antecedent focused (including situation selection, situation modification, attentional deployment, cognitive change) or response focused (such as response modulation). Regulation can occur before or after the emotion is manifested.

Among these strategies, cognitive reappraisal and expressive or emotional suppression are the most widely

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
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studied in research. Reappraisal is an antecedent-focused strategy (under cognitive appraisal) that involves changing how an event is interpreted in order to change its emotional impact or response. Emotional suppression, on the other hand, is a response-focused strategy that involves controlling or modifying the outward emotional expression of an emotion in response to a situation; however, this does not change the underlying emotion. Emotional regulation strategies can be adaptive or maladaptive in nature. These strategies are considered adaptive when they help individuals regulate emotions effectively, improve day-to-day functioning, reduce stress, and promote overall long-term well-being; and considered maladaptive when they interfere with healthy day-to-day functioning and impact long-term well-being negatively. Among these two, cognitive reappraisal is considered more adaptive, promoting well-being in the longer run, whereas suppression is seen as less adaptive and often associated with negative outcomes when it comes to long-term emotional well-being. The overall emotion regulation capacity of an individual differs based on the strategy adopted as well as individual differences.

C. Difficulties in Emotion Regulation

Emotional dysregulation occurs when one is unable to identify, control, or modify their emotions in response to their environment, leading to intense, disproportionate, or inappropriate responses. According to James Gross's Process Model of emotional regulation, challenges faced at any stage of the five-step process may lead to difficulties in emotional regulation. This dysregulation often manifests in the form of maladaptive behaviours leading to difficulties in social, occupational, and day-to-day functioning, greatly impacting an individual's overall well-being. The Difficulties in Emotional Regulation Scale is a well-validated and widely used self-report tool, used to assess difficulties in emotional regulation in adolescents and adults. The scale conceptualises difficulties in emotional regulation as deficits across six dimensions of emotional regulation. These include: nonacceptance of emotions (difficulties in accepting one's own negative emotions), goals (difficulty with goal-directed behaviour such as staying focused or completing tasks), impulse control (difficulties in managing/controlling behaviour in response to overwhelming emotions), awareness (not noticing or attending to one's own emotions), strategies (helplessness about regulating one's own emotions), and clarity (difficulties in understanding one's own emotions).

These difficulties in emotional regulation may render an individual unable to adapt and cope with the challenges faced in their everyday environment, leading to distress and feelings of overwhelm. Previous studies have shown that long-term difficulties in emotional regulation are significantly linked to the development and maintenance of psychopathology such as mood disorders, anxiety, and so on. According to the behavioural perspective, when individuals are facing difficulties with emotional regulation, they may adopt alternative means to alleviate their distress. However, these alternatives often manifest as maladaptive behaviours. One such behaviour is emotional eating.

D. Emotional Eating

Emotional eating can be understood as eating behaviour that occurs in response to various psychological states or emotions, rather than the physiological need of hunger. Although emotional eating is often studied in the context of negative emotions, recent research has suggested that positive emotions such as happiness may also influence eating behaviour. These changes in eating behaviour (increase or decrease) may vary based on individual differences. Emotional eating often occurs when one is unable to effectively manage their emotions and resorts to eating as a way to manage the underlying feelings.

The Affect Regulation Model of emotional eating, based on the work of Hawkins and Clement (1984) and Polivy and Herman (1993), posits that individuals resort to emotional eating as a way to cope with negative affect (such as anxiety, stress, or sadness) as a means of alleviating the distress caused. This eating behaviour targets the reward or pleasure centres of the brain, leading to a temporary relief. When this mechanism is used repeatedly over time, it reinforces the use of eating as a coping mechanism in place of healthy, adaptive coping strategies. However, this resolution is only for a brief period of time and does not resolve the underlying issues, which again leads to distress when the relief wears off, leading to a cycle of eating as a response to emotional distress. In the longer run, the individual fails to effectively manage their emotions or learn healthy coping mechanisms, leading to long-term issues, obesity, and even psychopathology in some cases.

E. Music-Based Mood Regulation

Another prevalent tool for emotional regulation used by emerging adults is music. According to the Uses and Gratification Theory by Katz et al., individuals consciously engage with and choose the media they consume in order to meet specific needs. In the context of emotional regulation, the theory states that individuals actively choose the media they consume (such as music) as a means of regulating their emotions. It is an intrinsically motivated and goal-directed process where the individual plays an active role. Individuals often rely on music not just as a source of entertainment but also as a tool that helps in identifying, expressing, and managing their emotions.

However, music-based mood regulation can be adaptive or maladaptive in nature. It can be used as a source of comfort or distraction from stressors, improving or stabilising one's mood, acting as a means to discharge one's negative emotions; or it can intensify or worsen negative emotions, or lead to distress or avoidance behaviour, leading to long-term

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
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difficulties in emotional regulation as one does not learn how to cope with their emotions in an adaptive manner. How music influences behaviour is based on individual differences in strategy adopted (such as entertainment, revival, strong sensation, diversion, discharge, mental work, and solace), the type of music one listens to, and the frequency of use. Thus, listening to music can have a significant effect on one's emotional regulation ability and how one effectively copes with the demands placed by the environment, which in turn also has the potential to influence one's eating behaviour in response to the emotions elicited.

F. Aim and Objectives

With the rapid increase in media consumption in the post-COVID era, more and more emerging adults increasingly rely on media, music, and so on to manage and express their emotions. Previous studies have expanded on the use of music as a means of regulating one's emotions. Studies have also examined the links between emotional eating and difficulties in emotional regulation. However, these variables have received limited empirical attention, and the predictive role of music with emotional regulation or dysregulation and its impact on emotional eating remains yet to be explored extensively. The present study attempts to fill this gap. The study also specifically targets the emerging adult population as it is during this period that young adults first encounter new challenges and instability; thus it becomes essential to learn adaptive and healthy strategies for emotional regulation and attain mastery over one's emotions in order to grow and adapt effectively to psychological, social, and professional challenges. The study aims to add to the current knowledge and explore non-clinical, day-to-day means of emotional regulation with the self as an active acting agency, by examining the relationships between music-based mood regulation strategies, emotional regulation difficulties, and emotional eating among emerging adults, and to assess their predictive role in emotional eating.

The study has the following objectives:

[1] To examine the relationship between music-based mood regulation strategies and emotional regulation difficulties.

[2] To examine the relationship between emotional regulation difficulties and emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety).

[3] To examine the relationship between music-based mood regulation strategies and emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety).

[4] To examine whether music-based mood regulation strategies and emotional regulation difficulties predict emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety) when examined together.

The following hypotheses are proposed:

H1: Music-based mood regulation strategies will be significantly associated with emotional regulation difficulties.

H2: Emotional regulation difficulties will be significantly associated with emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety).

H3: Music-based mood regulation strategies will be significantly associated with emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety).

H4: Music-based mood regulation strategies and emotional regulation difficulties will significantly predict emotional eating in response to various emotional states (happiness, sadness, anger, and anxiety) when examined together.

II. REVIEW OF LITERATURE

Emerging adulthood refers to the stage of development that occurs between adolescence and adulthood. It is a distinct period marked by identity exploration, instability, and emotional sensitivity (Arnett, 2000). This period features significant developmental changes in biological, psychological, and social functioning. Due to these changes, it is an especially sensitive period for the development and maturation of emotional processes. This development is underscored by neurodevelopmental changes in the mechanisms underlying emotional regulation. This is evidenced by neuroimaging studies that show significant changes in the underlying biological mechanisms of emotional regulation as one transitions from adolescence to adulthood. For example, a 2021 study by Pozzi et al. illustrated that during implicit regulations, emerging adults had shown increased levels of activation in the brain regions associated with higher order thought processes. These include the prefrontal cortex and the posterior superior temporal sulcus. On the other hand, adolescents showed activation in the amygdala, fusiform gyrus, and the thalamus. This implies a shift towards more intentional and cognitively driven (antecedent-focused) regulatory strategies. However, since these mechanisms are still evolving and relatively immature, emerging adults face unique challenges in emotional regulation as compared to other populations, representing a novel and valuable area for study.

Previous research has extensively explored emotional regulation and established its role in psychosocial adjustment and adaptive functioning. For example, studies have shown that adaptive emotional regulation strategies have been associated with better overall well-being and lower levels of psychological distress among Indian college students (Sanchez-Sanchez et al., 2025; Kraiss et al., 2020; Kumari & Sachdeva, 2023). Maladaptive regulation strategies such as avoidance and rumination show associations with lower levels of well-being (Kraiss et al., 2020). Other studies have shown that strategies such as cognitive appraisal are associated with better psychological well-being, whereas

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
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strategies like expressive suppression have been associated with greater psychological distress. Gender differences have also been reported in the use of these strategies and their impact on mental well-being, with females showing greater use of cognitive reappraisal as a regulation strategy and greater levels of psychological distress as compared to males (Kakollu et al., 2026).

The determinants of choice of emotional regulation strategy used have also been extensively studied, with Kozubal et al. (2023) demonstrating that emotional intensity plays an important role in strategy selection. Intensity of emotional experience was found to be a key factor determining the choice of regulation strategy used, regardless of the nature of the emotions experienced. The study showed that in case of high emotional intensity, individuals are more likely to use rumination as a regulation strategy as compared to cognitive reappraisal. The findings emphasised emotional regulation as a spontaneous and context-dependent process, that varies by intensity, highlighting the need to study it in various ecologically valid and everyday contexts (Kozubal et al., 2023). In another study, Mathews et al. (2021) reviewed 219 studies and identified 18 factors that determine the choice of emotion regulation strategy used. These determinants were grouped into affective, cognitive, motivational, individual, and sociocultural strategies. The findings illustrated that strategy selection is influenced by differences in the nature of the emotions experienced, individual variability, situational factors, and context. The study also illustrated emotional regulation as a goal-directed process that takes place across various stages, including identification, selection, implementation, and monitoring. These differences are also influenced by demographic variables. Studies have found that the type of strategy used was found to vary across gender, age groups, cities, and geographical zones (Kakollu et al., 2026).

Difficulties in emotional regulation have consistently been associated with maladaptive behaviours. Meyer and Segal (2023) highlighted difficulties in emotion regulation as a key factor underlying impaired impulse control contributing to behavioural problems. This is supported by a study by Avila (2021) with similar findings. The study established a relationship between maladaptive emotional regulation and maladaptive behaviours, highlighting factors such as lack of impulse control and clarity in understanding emotions as being associated with greater tendencies to engage in maladaptive acts. Additionally, associations were found between difficulties in emotional regulation and distress, impulsivity, aggression, irritability and emotional fluctuations, emotional blunting or avoidance, and negative emotional states. Studies have also established associations between emotional regulation difficulties and maladaptive eating patterns, with difficulties in regulating both positive and negative emotions being associated with binge eating behaviour (Howells et al., 2024).

Difficulties in emotional regulation are prevalent across various mental health disorders such as depression, anxiety, bipolar disorder, substance use disorder, posttraumatic stress disorder, and eating disorders. Emotional dysregulation has been described as a transdiagnostic factor across disorders such as bipolar disorder, attention deficit-hyperactivity disorder, autism spectrum disorder, and other personality disorders (Carmassi et al., 2022). There is also emerging evidence that strategies such as cognitive reappraisal and rumination function as transdiagnostic processes in such disorders. Additionally, deficits in the frequency of selecting adaptive strategies have been reported across various disorders (Cludius et al., 2020).

Researchers are also interested in exploring how specific emotional states are associated with changes in eating behaviour. This has led to the development and validation of various measures that assess eating behaviour in response to various emotions. The Salzburg Emotional Eating Scale (SEES) is one such measure that assesses changes in eating behaviour across four domains in response to various emotions, namely happiness, sadness, anger, and anxiety. A study by Putri et al. (2024) noted that positive emotions lead to an increase in eating behaviour among students, with eating behaviour acting as a way to enhance happiness and manage emotions. Feeling happy was also associated with healthier, more adaptive eating habits among university students (Alolabia et al., 2022). Additionally, a study by Ljubičić et al. (2023) found that positive affect was negatively associated with difficulties in emotional regulation and did not show associations with maladaptive eating behaviours. On the other hand, negative affect and emotions such as sadness and anger are consistently associated with maladaptive eating behaviour. Studies have shown that negative affect is directly associated with greater difficulties in emotional regulation and maladaptive eating behaviours (Ljubičić et al., 2023). It has also been found that emotions such as loneliness, boredom, feeling upset, or nervous were also linked with significant increases in eating behaviour (Alolabia et al., 2022). Anxiety as an affective state has also been linked to changes in eating behaviour. Hussenoeder et al. (2021) found that higher levels of anxiety were associated with greater hunger and increases in eating behaviour. The authors suggested that anxiety may function as an internal trigger for eating behaviour and may act as an emotion regulation mechanism.

Various theoretical frameworks have sought to explain maladaptive eating behaviours specifically in the context of emotion regulation. Within these frameworks, emotional eating is described as a result of failures or deficits in regulating emotions effectively rather than simply as an isolated behaviour. One such framework that can be used to explain deficits in emotional regulation is James Gross's Process Model of emotion regulation (1998). According to the model, emotional regulation can occur at any stage of the emotion generation process. The regulatory strategies

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
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adopted can be antecedent-focused (such as cognitive appraisal) or response-focused (such as expressive suppression). Response-focused strategies such as expressive suppression are used after an emotion has already taken place. Studies have shown that this may not always be effective in reducing emotional intensity or distress. For example, emotional suppression has been found to significantly predict higher levels of emotional eating (Samuel & Cohen, 2018). One explanation for this can be that when the strategies employed do not effectively reduce emotional arousal, individuals may engage in alternative behaviours, such as eating, in order to manage their emotions.

The Affect Regulation Model of emotional eating, based on the work of Hawkins and Clement (1984) and Polivy and Herman (1993), is another framework that directly conceptualises eating as a means of coping with distress. The model posits that individuals may use eating as a means to reduce or escape negative emotional states. According to the model, increases in negative emotions may act as triggers for binge eating episodes; eating functions as a mechanism to alleviate the negative affect caused by means of providing comfort or by serving as a distraction. This model has garnered significant empirical support across various studies. For example, Ansari et al. (2018) reported significant positive associations between emotional regulation difficulties and emotional eating, with difficulties in emotional regulation acting as a strong predictor for emotional eating. The Difficulties in Emotion Regulation Scale was utilised to assess emotional regulation difficulties. The findings indicated that problems related to emotional awareness, clarity, and impulse control were significantly associated with the use of emotional eating behaviours. Additionally, in a meta-analysis of 23 studies involving over 8,500 adolescents and young adults, a significant medium positive relationship was found between overall emotion regulation difficulties and emotional eating, especially among females (Zhou et al., 2025). Thus, within these frameworks, it can be established that emotional eating may function as a compensatory means of emotional regulation when strategies are ineffective.

Another strategy that has become increasingly relevant for emotional regulation is music-based regulation. As evidenced by bibliometric analysis conducted by Lu and Song (2025), in a review of over 1,800 studies, the use of music-based emotional regulation is a significant area of study in emotional regulation. Music-based regulation has shown significant implications for improving affective states and psychological well-being. As a non-pharmacological strategy, music-based regulation acts as a non-invasive, accessible, and cost-effective alternative, making it a suitable strategy to use in non-clinical populations; thus, making it essential to explore its role as a regulatory mechanism in the present study.

Building on Blumler and Katz's Uses and Gratifications Theory (1974), De la Rosa Herrera and Pugliese (2018) illustrated that emerging adults intentionally utilise music as a means to meet their personal needs. They describe the use of music as an active and purposeful self-regulatory strategy rather than merely a passive activity. This is supported by studies that demonstrate that engaging with music via listening, singing, playing, and group participation can facilitate emotional regulation, enhance well-being, and strengthen social relationships. However, the regulatory effects that music can have may vary based on the type of engagement and the individual's personal motivations, with the more active and socially shared experiences linked to stronger positive outcomes (Gustavson et al., 2021).

This perspective is further illustrated by various researches exploring the role of music in mood regulation. The Music in Mood Regulation Scale (B-MMR) is one tool that identifies the various music-based strategies that people adopt for the purpose of emotional regulation. These include entertainment, revival, strong sensation, diversion, discharge, mental work, and solace. Various studies have demonstrated that different music-based strategies are related to distinct emotional and mental health outcomes. Strategies such as entertainment and revival are associated with more adaptive forms of emotional regulation and better mental health outcomes, and strategies such as discharge and diversion are associated with maladaptive regulation patterns and greater levels of psychological distress. For example, the use of discharge as an emotional regulation strategy has been linked to higher levels of anxiety and depression. Other strategies such as mental work and strong sensation are considered to be more neutral or context dependent in terms of outcomes (Carlson et al., 2015; Morgan & Marroquín, 2024). Overall, this reflects that the effects of specific music-based regulation strategies are dependent on how they are used rather than the frequency of use.

Previous studies have extensively explored emotional regulation, music-based regulation strategies, and eating-based regulation strategies independently; however, the interaction between these three remains relatively less explored. One study by Czepczor-Bernat et al. (2021) found that one's emotional and mental health outcomes are based on how much individuals rely on each strategy. It was found that adults who relied more on food-based regulation strategies showed higher levels of maladaptive eating behaviours, depression, anxiety, and distress; and those who relied less on food-based regulation strategies and more on music-based regulation strategies showed lower levels of distress, suggesting that music-based regulation may act as a protective regulatory mechanism within broader coping systems.

Another significant study examining music-based emotion regulation, difficulties in emotional regulation, and changes in eating behaviour was conducted by van den Tol et al. (2022), who conducted three exploratory experimental studies. The study aimed at examining whether different ways of using music for emotional regulation influenced food

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
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intake after intentionally inducing negative affect in the participants. These experiments were designed building upon the work of Coulthard and Hanser (2018/2020), who had earlier demonstrated that emotional eating was positively associated with using music as a means of discharge for the purpose of emotional regulation. These findings were later supported by the work of Ward and Fong (2019), who further clarified the relationship by illustrating the role of emotion-oriented coping linking discharge-based music use and emotional eating. In the experiment conducted by van den Tol et al. (2022), the researchers intentionally induced negative mood in the participants, then asked the participants to engage with music in different regulatory ways and objectively measured subsequent snack intake. Overall, the results showed small and inconsistent effects on eating behaviour, with discharge showing no significant reduction in negative affect, suggesting that the impact of emotional regulation by means of music-based regulation on food intake is limited and context dependent.

Taken together, the current literature indicates important relationships between music-based regulation, difficulties in emotional regulation, and emotional eating. However, the ways that these processes interact with each other, specifically across different emotional states (such as happiness, sadness, anger, and anxiety) remains largely unexplored.

A. Gaps in Literature

Despite the extensive amount of literature on emotional regulation, emotional eating, and music-based regulation, several aspects remain relatively unexplored:

Interaction between strategies: Previous studies have explored emotional eating and music-based emotional regulation independent of each other. However, the combined influence of the use of these strategies for emotional regulation and their impact on eating behaviour is not well established, and existing findings are small, inconsistent, or largely context dependent.

Discrete emotional states: Although many studies have examined overall difficulties in emotional regulation and its outcomes on emotional eating, the role of specific emotions such as happiness, sadness, anger, and anxiety is still unclear, especially with the role of music-based regulation strategies.

Emerging adults: The time period between 18 to 25 years is a critical developmental period during which the emotional regulation mechanisms are still undergoing maturation alongside the new social and psychological challenges that arise during this transition from adolescence to adulthood. This period offers unique insight into understanding how emotion regulation processes stabilize into adulthood. However, it remains relatively unexplored.

Cultural sensitivity: Most of the existing research has been conducted on non-Indian populations, which limits the generalizability and applicability of their findings to the Indian context.

B. Relevance of the Present Study

The present study aims to explore the relationships between music-based regulation strategies, overall difficulties in emotional regulation, and emotional eating in response to specific emotional states of happiness, sadness, anger, and anxiety among emerging adults. It attempts to examine how these regulatory strategies interact with each other to shape emotional eating, an area that has been relatively unexplored in previous literature. It also addresses the gaps in literature regarding eating behaviour in response to specific emotional states by including them in the study. The study specifically targets the emerging adult population considering the unique developmental processes that they may be undergoing and its impact on the development of emotion regulation processes. It contributes to literature within the Indian context where research on these variables and their interactions is limited. By looking at these variables together across discrete emotional states, the study provides insight into how music-based regulation strategies and difficulties in emotional regulation relate to variations in emotional eating and overall psychological well-being.

III. METHODOLOGY

A. Research Design

In order to examine the predictive relationships between music-based mood regulation strategies, emotional regulation difficulties, and emotional eating among emerging adults, a quantitative correlational approach was adopted and the research was conducted based on a cross-sectional design.

B. Procedure

Data was collected using an online structured survey consisting of three self-report questionnaires, namely, the Brief Music in Mood Regulation Scale by Saarikallio (2012), the Difficulties in Emotional Regulation Scale Short Form by Kaufman et al. (2016), and the Salzburg Emotional Eating Scale by Meule et al. (2018). A Google form was created consisting of preliminary information regarding the study, details for informed consent, and links to appropriate mental health and support services in case the participants felt discomfort while filling the survey. The survey was circulated online via social media platforms such as WhatsApp and Instagram, and all participation was done on a voluntary basis. Informed consent was attained before proceeding with the survey. The participants were informed that the survey would take about 15 to 20 minutes to complete. It was ensured that the respondents understood that their participation was voluntary and that they could withdraw consent at any point during the process. Finally, the participants were debriefed after the form was completed.

C. Participants

The data was collected via convenience sampling with the final sample size of N = 135 (44.4% male, 55.6% female) emerging adults aged between 18 to 25 years (M = 21.01, SD

ISSN (Online) 2456 -1304
International Journal of Science, Engineering and Management (IJSEM)
Volume 13, Issue 02, February 2026

= 1.55). The inclusion criteria required the participants to be aged between 18 to 25 years of age, and informed consent was attained beforehand. Once the data collection was completed, the raw data was then processed and any incomplete responses and outliers were removed from the sample before further statistical analysis.

D. Measures

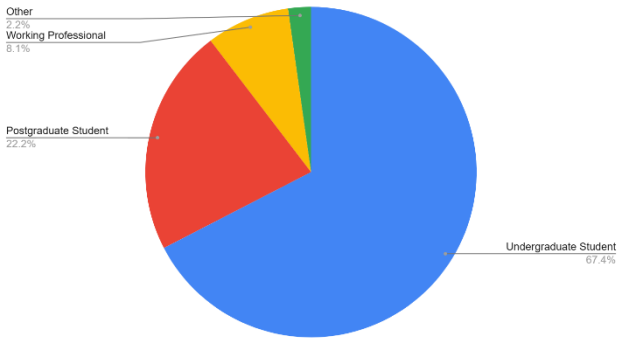
Brief Music in Mood Regulation Scale: The Brief Music in Mood Regulation Scale (B-MMR) developed by Saarikallio (2012) is a 21-item self-report scale consisting of seven subscales used to measure how frequently individuals use different music-based strategies to regulate their mood in everyday life. Each subscale measures a specific strategy that individuals use to regulate their mood. These strategies include entertainment, revival, strong sensation, diversion, discharge, mental work, and solace. The B-MMR is derived from the longer 40-item version of the Music in Mood Regulation Scale by Saarikallio. Each item is rated on a five-point Likert scale where 1 = strongly disagree and 5 = strongly agree, with higher scores on each subscale depicting more frequent use of that particular strategy. The Brief Music in Mood Regulation Scale has demonstrated good internal consistency in its original development studies (Cronbach's α = .93, and subscale reliability approximately α = .72 to .88) and has good cross-cultural applicability across diverse cultures in previous studies.

Difficulties in Emotion Regulation Scale–Short Form: The Difficulties in Emotional Regulation Scale–Short Form (DERS-SF) developed by Kaufman et al. (2016) is an 18-item self-report questionnaire used to measure overall difficulties in emotional regulation among adolescents and young adults across six domains, namely, non-acceptance, goals, impulse, awareness, strategies, and clarity. Responses are rated on a five-point Likert scale where 1 = almost never and 5 = almost always. Total scores are calculated by using the sum of all responses, with higher scores indicating higher levels of emotional regulation difficulties. It is a derivative of the original 36-item Difficulties in Emotional Regulation Scale developed by Gratz and Roemer (2004). The DERS-SF has demonstrated good reliability (α = .86) among Indian samples, allowing for its applicability in the present study.

Salzburg Emotional Eating Scale: The Salzburg Emotional Eating Scale (SEES) developed by Meule et al. (2018) is a 20-item self-report measure that assesses how various emotional states (happiness, sadness, anger, and anxiety) lead to directional changes in eating behaviour. The measure consists of four subscales or domains, namely, happiness, sadness, anger, and anxiety, studying how eating behaviour changes in response to each. Items are scored on a five-point Likert scale, where 1 = I eat much less than usual, 3 = no change in eating behaviour, and 5 = I eat much more than usual. There is no reverse scoring. Interpretation is based on calculation of mean scores of each domain, where higher mean scores (M > 3) depict a tendency to eat more in response to various emotional states, and lower mean scores (M < 3) depict a tendency to eat less in response to various emotional states. The SEES showed good reliability (α = .80 to .89) in its original validation study and has shown cross-cultural applicability across diverse cultures including Indian populations, allowing for its use in the present study.

E. Statistical Analysis

Statistical analysis was conducted using Jamovi statistical software (version 2.7.18). Descriptive statistics were calculated for all variables. Pearson's correlation was conducted to examine the relationships between music-based mood regulation strategies, emotional regulation difficulties, and emotional eating (happiness-based eating, sadness-based eating, anger-based eating, and anxiety-based eating). Additionally, multiple linear regression was conducted to examine whether music-based mood regulation strategies and emotional regulation difficulties significantly predicted emotional eating behaviour when examined together. The independent variables (predictors) were Emotion Regulation Difficulties (DERS total score) and Music-Based Mood Regulation Strategies (entertainment, revival, strong sensation, diversion, discharge, mental work, and solace). The dependent variable (outcome) was Emotional Eating (happiness-based eating, sadness-based eating, anger-based eating, and anxiety-based eating).



F. Ethical Considerations

Several ethical considerations were taken into account before conducting the research. Each response was kept strictly confidential, ensuring the privacy of the respondents. Participation was done on a voluntary basis after obtaining informed consent. Participants were informed that they had the right to withdraw consent at any stage of the research without any penalties. Each participant was debriefed after completing the survey, and additional mental health and support resources were provided in case of any psychological distress.

IV. RESULTS

A. Descriptive Analysis

A total of 135 participants were included in the final analysis, with a mean age of 21.01 years (SD = 1.55). The

ISSN (Online) 2456 -1304

International Journal of Science, Engineering and Management (IJSEM)

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sample consisted of 60 males (44.4%) and 75 females (55.6%). Undergraduate students made up the largest percentage of participants (67.4%), followed by postgraduate students (22.2%), working professionals (8.1%), and those classified as engaged in other occupations (2.2%).

Table 1: Frequencies of Gender

Gender	Counts	% of Total	Cumulative %
Male	60	44.4%	44.4%
Female	75	55.6%	100.0%

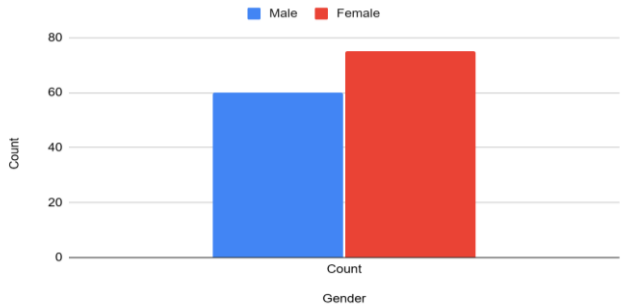


Figure 1. Distribution of Gender

Table 2: Frequencies of Occupation

Occupation	Counts	% of Total	Cumulative %
Undergraduate Student	91	67.4%	67.4%
Postgraduate Student	30	22.2%	89.6%
Working Professional	11	8.1%	97.8%
Other	3	2.2%	100.0%

Figure 2. Distribution of Occupation

Descriptive statistics for all study variables are presented in Table 3. Among the music-based mood regulation subscales, the highest mean score was observed for Strong Sensation (M = 4.12, SD = 0.84), followed closely by Entertainment (M = 4.11, SD = 0.88). The lowest mean was observed for Discharge (M = 3.31, SD = 1.12). The mean score for Difficulties in Emotion Regulation (DERS-SF) was 3.15 (SD = 0.59). For emotional eating, happiness-related eating showed the highest mean (M = 3.48, SD = 0.79), followed by sadness (M = 3.19, SD = 1.02), anger (M = 2.91, SD = 0.97), and anxiety (M = 2.90, SD = 1.08).

Table 3: Means and Standard Deviations for Study Variables

Variable	Subscale	M	SD
BMMR	Entertainment	4.11	0.88
	Revival	3.76	1.03
	Strong Sensation	4.12	0.84
	Diversion	3.80	0.98
	Discharge	3.31	1.12
	Mental Work	3.83	0.93
	Solace	3.86	0.98
DERS-SF	Total Mean	3.15	0.59
SEES	Happiness	3.48	0.79
	Sadness	3.19	1.02
	Anger	2.91	0.97
	Anxiety	2.90	1.08

Note. BMMR = Brief Music in Mood Regulation scale; DERS-SF = Difficulties in Emotion Regulation Scale–Short Form; SEES = Salzburg Emotional Eating Scale; M = Mean; SD = Standard Deviation.

B. Correlational Analyses

Pearson's correlation analyses were conducted to examine associations among music-based mood regulation strategies, difficulties in emotion regulation, and emotional eating in response to various emotions (happiness, sadness, anger, and anxiety).

Difficulties in emotion regulation (DERS-SF) was significantly positively correlated with Entertainment ($r = .215$, $p = .012$), Diversion ($r = .209$, $p = .015$), Discharge ($r = .420$, $p < .001$), Mental Work ($r = .260$, $p = .002$), and Solace ($r = .227$, $p = .008$). Correlations with Revival ($r = .166$, $p = .054$) and Strong Sensation ($r = .126$, $p = .146$) were not statistically significant. All music-based mood regulation subscales were significantly positively intercorrelated ($p < .001$). Results are presented in Table 4.

Table 4: Correlation Matrix: Music-Based Mood Regulation Strategies and DERS-SF

Variable	1	2	3	4	5	6	7	8
1.	—							
2.	.454***	—						
3.	.497***	.543***	—					
4.	.482***	.720***	.527***	—				
5.	.337***	.469***	.395***	.553***	—			
6.	.521***	.620***	.656***	.713***	.588***	—		

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Variable	1	2	3	4	5	6	7	8
7.	.495***	.639***	.626***	.756***	.576***	.847***	—	
8.	.215*	.166	.126	.209*	.420***	.260**	.227**	—

*Note: Note. 1 = Entertainment; 2 = Revival; 3 = Strong Sensation; 4 = Diversion; 5 = Discharge; 6 = Mental Work; 7 = Solace; 8 = DERS-SF. * p < .05. ** p < .01. *** p < .001.*

DERS-SF was significantly positively correlated with happiness-related eating (r = .262, p = .002), sadness-related eating (r = .377, p < .001), anger-related eating (r = .238, p = .005), and anxiety-related eating (r = .301, p < .001). Results are presented in Table 5.

Table 5: Correlation Matrix: DERS-SF and Emotional Eating

Variable	1	2	3	4	5
1. DERS-SF	—				
2. Happiness	.262**	—			
3. Sadness	.377***	.246**	—		
4. Anger	.238**	.320***	.615***	—	
5. Anxiety	.301***	.332***	.568***	.845***	—

*Note. ** p < .01. *** p < .001.*

Happiness-related eating was significantly positively correlated with all seven music-based mood regulation subscales: Entertainment (r = .220, p = .010), Revival (r = .269, p = .002), Strong Sensation (r = .216, p = .012), Diversion (r = .311, p < .001), Discharge (r = .216, p = .012), Mental Work (r = .329, p < .001), and Solace (r = .267, p = .002).

Sadness-related eating was also significantly positively correlated with all seven subscales: Entertainment (r = .217, p = .012), Revival (r = .241, p = .005), Strong Sensation (r = .202, p = .019), Diversion (r = .194, p = .024), Discharge (r = .321, p < .001), Mental Work (r = .286, p < .001), and Solace (r = .356, p < .001).

Anger-related eating showed significant positive correlations with Revival (r = .224, p = .009), Diversion (r = .225, p = .009), Discharge (r = .265, p = .002), and Solace (r = .186, p = .031). Correlations with Entertainment (r = .056, p = .519), Strong Sensation (r = .088, p = .308), and Mental Work (r = .156, p = .072) were not statistically significant.

Anxiety-related eating was significantly positively correlated only with Discharge (r = .248, p = .004). Correlations with Entertainment (r = .039, p = .655), Revival (r = .135, p = .117), Strong Sensation (r = .012, p = .891), Diversion (r = .163, p = .059), Mental Work (r = .092, p = .289), and Solace (r = .143, p = .098) were not statistically significant. Results are presented in Table 6.

Table 6: Correlations Between BMMR Strategies and Emotional Eating Subscales

	1	2	3	4	5	6	7	8	9	10	11
1.	—										
2.	.454***	—									
3.	.497***	.543***	—								
4.	.482***	.720***	.527***	—							
5.	.337***	.469***	.395***	.553***	—						
6.	.521***	.620***	.656***	.713***	.588***	—					
7.	.495***	.639***	.626***	.756***	.576***	.847***	—				
8.	.220*	.269**	.216*	.311***	.216*	.329***	.267**	—			
9.	.217*	.241**	.202*	.194*	.321***	.286***	.356***	.246**	—		
10.	.056	.224**	.088	.225**	.265**	.156	.186*	.320***	.615***	—	
11.	.039	.135	.012	.163	.248**	.092	.143	.332***	.568***	.845***	—

*Note: Note. 1 = Entertainment; 2 = Revival; 3 = Strong Sensation; 4 = Diversion; 5 = Discharge; 6 = Mental Work; 7 = Solace; 8 = Happiness; 9 = Sadness; 10 = Anger; 11 = Anxiety. * p < .05. ** p < .01. *** p < .001.*

C. Multiple Linear Regression Analyses

Separate multiple regression analyses were conducted for each emotional eating subscale.

Regression Predicting Happiness-Related Eating: The regression model predicting happiness-related eating was statistically significant, R = .403, R^2 = .162, Adjusted R^2 = .109. DERS-SF was a significant positive predictor (B = .277, SE = .123, t = 2.26, p = .025). None of the music-based mood regulation subscales were significant predictors. Model

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fit and coefficients are presented in Tables 7 and 8, respectively.

Table 7: Regression Predicting Happiness-Related Eating: Model Fit

Model	R	R^2	Adjusted R^2
1	.403	.162	.109

Note. N = 135.

Table 8: Regression Predicting Happiness-Related Eating: Model Coefficients

Predictor	B	SE	t	p	β	VIF
Intercept	1.583	.469	3.376	< .001	—	—
DERS-SF*	.277	.123	2.262	.025	.206	1.24
Entertainment	.020	.091	.220	.826	.022	1.53
Revival	.048	.095	.504	.615	.062	2.31
Strong Sensation	−.003	.108	−.028	.978	−.003	1.98
Diversion	.139	.116	1.191		.172	3.16
Discharge	−.055	.079	−.700		−.078	1.86
Mental Work	.230	.143	1.614		.272	4.27
Solace	−.117	.138	−.846		−.144	4.39

*Note. * p < .05.*

Regression Predicting Sadness-Related Eating: The regression model predicting sadness-related eating was statistically significant, R = .502, R^2 = .252, Adjusted R^2 = .205. Significant predictors included DERS-SF (B = .514, SE = .149, p < .001), Diversion (B = −.292, p = .042), and Solace (B = .489, p = .004). Model fit and coefficients are presented in Tables 9 and 10, respectively.

Table 9: Regression Predicting Sadness-Related Eating: Model Fit

Model	R	R^2	Adjusted R^2
1	.502	.252	.205

Note. N = 135.

Table 10: Regression Predicting Sadness-Related Eating: Model Coefficients

Predictor	B	SE	t	p	β	VIF
Intercept	.486	.571	.851	.397	—	—
DERS-SF***	.514	.149	3.448	< .001	.296	1.24
Entertainment	.055	.110	.501	.618	.048	1.53
Revival	.119	.116	1.031	.304	.121	2.31
Strong Sensation	−.029	.131	−.220	.826	−.024	1.98
Diversion*	−.292	.142	−2.058	.042	−.281	3.16
Discharge	.084	.096	.880	.380	.093	1.86
Mental Work	−.138	.174	−.795	.428	−.127	4.27
Solace**	.489	.168	2.912	.004	.470	4.39

*Note. * p < .05. ** p < .01. *** p < .001.*

Regression Predicting Anger-Related Eating: The regression model predicting anger-related eating yielded R = .326, R^2 = .106, Adjusted R^2 = .072. None of the predictors were statistically significant. Model fit and coefficients are presented in Tables 11 and 12, respectively.

Table 11: Regression Predicting Anger-Related Eating: Model Fit

Model	R	R^2	Adjusted R^2
1	.326	.106	.072

Note. N = 135.

Table 12: Regression Predicting Anger-Related Eating: Model Coefficients

Predictor	B	SE	t	p	β	VIF
Intercept	1.221	.517	2.362	.020	—	—
DERS-SF	.262	.152	1.731	.086	.159	1.22
Revival	.109	.115	.948	.345	.117	2.18
Diversion	.080	.144	.555	.580	.081	3.08
Discharge	.117	.097	1.205	.230	.135	1.82
Solace	−.063	.134	−.469	.640	−.063	2.63

Note. No predictors were statistically significant.

Regression Predicting Anxiety-Related Eating: The regression model predicting anxiety-related eating was statistically significant, R = .330, R^2 = .109, Adjusted R^2 = .095. DERS-SF was a significant positive predictor (B = .441, SE = .167, t = 2.64, p = .009). Discharge was not statistically significant. Model fit and coefficients are presented in Tables 13 and 14, respectively.

Table 13: Regression Predicting Anxiety-Related Eating: Model Fit

Model	R	R^2	Adjusted R^2
1	.330	.109	.095

Note. N = 135.

Table 14: Regression Predicting Anxiety-Related Eating: Model Coefficients

Predictor	B	SE	t	p	β	VIF
Intercept	1.819	.530	3.434	< .001	—	—
DERS-SF**	.441	.167	2.638	.009	.240	1.21
Discharge	.105	.103	1.021	.309	.114	1.73

*Note. ** p < .01.*

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V. DISCUSSION

The present study examined the relationship between music-based mood regulation strategies, difficulties in emotion regulation, and emotional eating in response to various emotional states among emerging adults. The findings are discussed below in relation to each hypothesis.

A. Hypothesis 1

Pearson's correlation analysis was conducted to examine the relationship between music-based mood regulation strategies and emotional regulation difficulties. The findings partially supported Hypothesis 1. It was found that emotion regulation difficulties were significantly associated with music-based regulation strategies; however, the relationship differed on the basis of the type of strategy employed. It was noted that the discharge strategy (the use of music to express or vent out emotions) showed the strongest positive correlation with difficulties in emotional regulation. This is supported by research conducted by Carlson et al. (2015), which illustrated that the use of discharge strategy was significantly correlated with higher levels of neuroticism and anxiety. One possible explanation for this association could be that individuals with limited internal emotional regulation capacities may rely on music in order to deeply engage with negative emotions, which in turn may be used to intensify or prolong distress. Neuroimaging findings further provide evidentiary support, highlighting that the frequent reliance on discharge strategies is associated with reduced activation in the medial prefrontal cortex involved in cognitive control and effective emotional regulation.

Strategies such as entertainment, diversion, mental work, and solace showed significantly weaker correlations with difficulties in emotional regulation. These findings are supported by research by Pridy et al. (2021), which indicated that these strategies are commonly employed by individuals with varied sociodemographic backgrounds irrespective of the psychological distress experienced. Therefore, the comparatively weaker correlations observed may reflect how these strategies function as low-threshold or habitual forms of engagement and not compensatory responses to difficulties in emotional regulation. For example, strategies of diversion and solace may serve as sources of temporary distraction or comfort when an individual's emotional regulation abilities are insufficient or immature. Moreover, although correlation analysis showed statistically significant relationships, these strategies do not appear to function as primary markers of dysregulation to the same extent as discharge.

No significant correlations were found between emotional regulation difficulties and strategies of Revival and Strong Sensation. This suggests that there is a distinction between relief-oriented and enhancement-oriented music use. This difference is better explained by a study conducted by Hennessy et al. (2021), which found that the use of music in order to achieve heightened arousal or to seek intense sensations is better attributed to personality traits such as openness to experience, as compared to difficulties in emotional regulation. Moreover, strategies aimed at stimulation or hedonic enhancement are relatively independent of difficulties in emotional regulation. These findings indicate that music is not uniformly used in response to difficulties in emotional regulation; instead, strategies like discharge, which involves expressing or releasing emotions, are the ones most clearly linked to difficulties in emotional regulation.

B. Hypothesis 2

Upon conducting Pearson's correlation, the findings supported Hypothesis 2, demonstrating that difficulties in emotional regulation were positively associated with emotional eating across all affective states examined (happiness, sadness, anger, and anxiety). This suggests that individuals who experience greater difficulties in identifying, understanding, and managing their emotions are more likely to engage in emotional eating in response to various emotions.

Sadness-related emotional eating elicited the strongest correlation with difficulties in emotional regulation, suggesting that difficulties in regulating low-valence or negative emotions may have a significant impact on eating behaviours. The Affect Regulation Model of emotional eating proposes that this form of eating behaviour may function as an externally mediated strategy for emotional regulation when internal regulatory mechanisms are insufficient. When individuals experience persistent low-valence emotions and lack effective cognitive regulatory strategies such as reappraisal, food may function as a compensatory external mechanism for emotional regulation that temporarily alters the affective experience. This is supported by empirical evidence from studies by Dakanalis et al. (2023) and Van Strien et al. (2016), which indicate that higher depressive symptoms and psychological distress are associated with increased levels of emotional eating.

Additionally, a relatively strong association was found with anxiety-related emotional eating. The affective state of anxiety is characterised by heightened physiological arousal and sustained emotional tension. Difficulties in emotional regulation, which involve difficulties in understanding, accepting, or modulating these internal experiences, may cause individuals to seek alternative means to manage this distress, leading to changes in eating behaviours. This is supported by studies showing that individuals with increased anxiety levels also show increased emotional eating tendencies (Fonseca et al., 2023).

Anger-related emotional eating also showed significant correlations with difficulties in emotional regulation; however, the strength of this relationship was comparatively weaker. One possible explanation for this could be understood through the clarity and awareness dimensions of difficulties in emotional regulation. Individuals who struggle

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to identify, label, and differentiate their emotions may experience anger as diffuse or overwhelming. This may be comparable to alexithymia, which involves difficulties in identifying and describing emotions. Studies have established that alexithymia has shown significant associations with both anger dysregulation and maladaptive behaviours (Eom et al., 2016). In case of deficits in emotional clarity, when anger cannot be cognitively processed, it may lead to external responses such as eating as a means of externally regulating one's emotions. The comparatively weaker association of emotional eating and difficulties in emotional regulation suggests that while anger may lead to emotional eating, it may not represent the primary emotional trigger within this sample.

One interesting finding was that emotional regulation difficulties were also associated with happiness-related emotional eating. This shows that emotional eating is not restricted to only low-valence, negative emotions, but may reflect a broader tendency towards emotion-driven behaviour. Evidence has shown that positive emotional states can also lead to emotional eating, such as in the context of celebration or as a way of sustaining or amplifying pleasurable experiences (Putri et al., 2024). One possible explanation for this can be that for individuals with difficulties in emotional regulation, even the heightened arousal caused by positive emotions may exceed their internal regulation capacity, leading to eating as a compensatory means of managing emotions. However, the comparatively stronger associations with sadness and anxiety indicate that dysregulation is more closely linked to eating in response to negative emotional states.

C. Hypothesis 3

Pearson's correlation analysis was conducted to examine the relationships between music-based mood regulation strategies and emotional eating in response to various states. The findings partially supported Hypothesis 3. Depending on the emotional state under investigation, music-based mood regulation strategies were associated with emotional eating in different ways and magnitudes. It was found that music's role in mood regulation differed depending on the affective context, as seen by the non-uniform pattern of correlations among emotions.

For happiness-related eating, all music-based mood regulation strategies showed significant correlations. This indicates that individuals who use music for entertainment, revival, strong sensation, diversion, discharge, mental work, or solace are also more likely to eat when they feel happy (Devonport et al., 2019). This may reflect an overall tendency towards emotion-driven behaviour, where individuals utilise music and food as parallel strategies for enhancing or sustaining the positive emotional experience.

Results indicated a similar pattern with sadness-related eating; all music-based regulation strategies were significantly correlated with sadness-related emotional eating. Among them, Discharge and Solace displayed relatively stronger associations. This suggests that music use for emotional release or comfort may co-occur with eating behaviours in response to sadness. These findings were supported by van den Tol et al. (2022), in which experiments showed that the use of discharge as a regulation strategy led to reduced food intake after sadness was induced in the participants. This may suggest that when individuals rely on music to process or immerse themselves in negative affect, eating may operate concurrently as a compensatory behavioural strategy.

Anger-related eating showed a different pattern of findings in which only Revival, Diversion, Discharge, and Solace were significantly associated with anger-related emotional eating. The strategies of entertainment, strong sensation, and mental work did not show any correlations. This suggests that anger-related eating may be more closely linked to strategies aimed at altering or redirecting emotional states rather than those focused purely on stimulation or cognitive engagement (van den Tol et al., 2022). Moreover, within the affect regulation framework, the associations between anger-related eating and discharge suggest that strategies involving external emotional expression for venting through music may overlap with behavioural responses such as eating in order to regulate emotional experience.

The most restricted pattern was observed for anxiety-related eating, where only Discharge demonstrated a significant association. This suggests that eating in reaction to anxiety may be especially linked to the use of music as a means of expressing or releasing negative emotions and distress. This interpretation is further supported by Testa et al. (2020), who found that music-based regulation strategies reduced anxiety and increased food consumption in individuals with eating disorders. Other strategies like entertainment, revival, or diversion were not linked to anxiety-related eating, suggesting that eating in response to anxiety is more connected to intense or cathartic music use rather than general mood enhancement or distraction.

D. Hypothesis 4

The findings partially supported Hypothesis 4. Together, the regression models showed that emotional eating associated with happiness, sadness, and anxiety was significantly predicted, whereas eating related to anger was not. When emotional regulation difficulties were taken into consideration, the majority of music-based mood regulation strategies did not show independent predictive effects; instead, emotional regulation difficulties were the most reliable and consistent predictor across models.

The pattern of findings points to a more generalised regulatory mechanism rather than emotion-specific distress processes. At the bivariate level, a number of the music-based strategies were positively correlated with happiness-related eating; however, the multivariate model showed that the effects were weaker when compared to general issues with

ISSN (Online) 2456 -1304
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emotion regulation. From a conceptual standpoint, eating in response to positive affect might not be an attempt to reduce distress but rather a reflection of difficulties in controlling emotional intensity. People who have greater levels of global dysregulation may find it difficult to control their heightened positive arousal as well as their negative emotions, which might cause them to eat in an attempt to maintain, intensify, or stabilize pleasurable states. This perspective is consistent with Selby et al. (2024), who emphasised that maladaptive behaviours, such as binge-type eating and overeating, are exacerbated by positive emotion dysregulation.

The strongest predictive model in the study was found for sadness-related eating. In line with a study conducted by Medrano and Trógolo (2016), emotional clarity is a crucial dimension in emotional regulation where difficulties significantly predicted higher sadness-related eating, indicating that people with higher DERS-SF scores may lack effective cognitive reappraisal or emotional clarity. Additionally, the study revealed distinct outcomes of music-based strategies: Solace positively predicted eating in response to sadness, while Diversion negatively predicted it. While these findings are theoretically significant, evidence from van den Tol et al. (2022) paints a more complex picture, indicating that solace may lessen sadness-related emotional eating and that diversion's effects vary by context. Overall, these findings show that context-dependent effects of external coping strategies like music, and an individual's overall ability to regulate emotions, both influence sadness-related eating.

The predictive model showed that the only significant predictor of anxiety-related eating was difficulties in emotional regulation. The bivariate relationship between music-based release and anxiety-related eating did not remain significant when analysed in conjunction with DERS-SF, indicating that it primarily reflects shared variation with more generalised issues with emotion regulation. Theoretically, anxiety leads to physiological arousal and emotional tension, and eating may act as a compensatory behaviour to ease this internal discomfort in the absence of efficient regulation strategies. These results are in line with research showing that the primary cause of emotional eating is global emotion dysregulation rather than particular music-based coping mechanisms (Fonseca, 2022).

The regression model for anger-related eating was relatively weak and did not produce any significant individual predictors, in contrast to eating related to sadness and anxiety. The multivariate model did not support the bivariate relationships that anger presented with a number of music methods and emotion management issues. This pattern implies that environmental, interpersonal, or personality-based factors not included in the current model may have a greater influence on anger-related eating than emotion control deficiencies. This is consistent with studies on aggression, which show that situational factors frequently have a greater impact on behaviour than trait-based tendencies (Hasan & Eldous, 2020).

VI. CONCLUSION AND SUGGESTIONS

Overall, the findings show that emotional eating is largely and consistently predicted by problems with emotion regulation across a variety of emotional states, such as happiness, sadness, anger, and anxiety. At the bivariate level, music-based mood regulation strategies are linked to emotional eating; however, when overall emotion regulation difficulties are taken into account, their predictive power decreases, indicating that the dependence on particular music strategies may not be the main cause but rather a reflection of larger regulatory difficulties. The observed patterns also show that emotional eating is not only limited to negative emotions, but can also occur in reaction to positive affect, emphasising the importance of emotional intensity in driving behaviour beyond valence. These findings imply that although the use of music can act as an additional coping mechanism, internal regulatory processes continue to be the primary determinants of emotion-driven eating behaviour, underscoring the significance of focusing on general emotion regulation capacities in interventions aimed at reducing emotional eating.

A. Limitations

The present study has several methodological limitations that must be considered while interpreting the findings. Firstly, although both correlational and multiple regression analyses were employed to examine the predictive relationships among the variables, the cross-sectional design prevents drawing any conclusions regarding causality or temporal directions. While regression analysis tells us the relative contribution of the predictors when examined together, it does not specify how difficulties in emotional regulation or music-based regulation strategies lead to emotional eating, or whether repeated emotional eating behaviour leads to reliance on any particular strategies via reinforcement mechanisms. Secondly, data was collected via convenience sampling, yielding a relatively homogeneous sample of emerging adults, a majority of which were undergraduate students. This restricts the generalizability of the findings as they may not be applicable to more diverse populations. Additionally, the use of self-report measures such as DERS-SF, B-MMR, and SEES makes the data vulnerable to response bias, including social desirability bias as well as inaccurate self-evaluations. Lastly, the study did not account for contextual variables such as situational triggers, type of music, or other environmental influences which may play a role in influencing the outcome of the study.

B. Future Recommendations

Future research could employ a longitudinal or experimental design in order to establish the temporal and causal mechanisms underlying the relationships identified in

the present study and track the stability of these mechanisms over time. This would be especially valuable since emerging adulthood is a developmental period marked by significant development of various underlying emotional and cognitive regulatory mechanisms, and longitudinal studies would provide insight into how these mechanisms develop and evolve over time. Expanding the demographic and cultural scope of the research is also essential for enhancing the generalizability of the findings across various populations. The present study contributes valuable data to the existing Indian literature. However, future work should include non-student populations and individuals from various socioeconomic and occupational backgrounds to determine how these factors influence the relationships between the variables under study. Lastly, incorporating objective, physiological, and neurological brain activation studies could provide a better understanding of the biological mechanisms underlying these regulatory processes. Finally, the study aims to contribute towards the development of targeted clinical interventions and promote better mental health outcomes and overall well-being.

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