The Impact of Various Music Genres on the Emotional and Psychological State of Different Age Groups

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ABSTRACT

Music functions as an extensive emotional and cognitive tool that varies in meaning across the lifespan. Drawing on decades of music-psychology research, this study examines how five genres—classical, pop, jazz, grunge rock, and ambient (designer) music—serve distinct psychological functions for adolescents, young adults, middle-aged adults, and older listeners. Classical music is linked to cognitive enhancement, calm, and nostalgia; pop music facilitates mood regulation, identity formation, and social bonding; jazz offers intellectual engagement and emotional complexity that deepens with age; grunge rock provides cathartic expression and identity reinforcement during adolescence and early adulthood, later shifting to nostalgic remembrance; ambient music supplies low-arousal support for focus, relaxation, and therapeutic applications, especially in later life. The paper integrates traditional survey and experimental findings with large-scale streaming-data analytics, demonstrating that genre-specific listening patterns can be quantified through skip rates, replay frequency, and personalized recommendation algorithms. Results highlight the age-dependent psychological roles of each genre and illustrate how data-driven methods can validate and extend theoretical models of music-induced emotion regulation, identity development, and cognitive support across the human lifespan.

Keywords: *Music Psychology, Music Genres, Music Therapy, Mood and Music, Music Induced Emotions, Therapeutic Musical Interventions.*

INTRODUCTION

"Where words fall, music speaks." Victor Hugo's quote highlights the powerful role of music in everyone's daily lives. "In the United States alone, more than 90 percent of people listen to music every day (Corrigall & Schellenberg, 2015, p. 960)." 'Music is not only a collection of notes arranged in harmony; it has a much deeper meaning (Corrigall & Schellenberg, 2015, p. 961).' It acts as a bridge between our emotions, memories, and connections. 'Because every person has unique experiences and memories, they are naturally drawn to different genres of music (Corrigall & Schellenberg, 2015, p. 962).' Each person has gone through different experiences, and these experiences shape their personalities, and consequently, their music tastes. This diversity is reflected in the sheer variety of music available today: "Spotify, the world's largest and most popular music streaming platform, even boasts over 6,000 distinct genres (Corrigall & Schellenberg, 2015, p. 963)," demonstrating how widely musical preferences vary. However, what makes this research particularly important is understanding not just that preferences differ, but how these preferences change across different age groups, from adolescents to young adults to older listeners, and what psychological functions each genre serves at different life stages.

'People are naturally drawn to certain genres based on their personality traits or the emotions they are feeling at that moment (Corrigall & Schellenberg, 2015, p. 964).' If a person is sad or grieving, they are more likely to prefer slower and more melancholic music that reflects their inner emotions. 'In the same way, if someone is extremely happy, they would not want to listen to sad or depressing songs, since it would not match their mood (Corrigall & Schellenberg, 2015, p. 965).' Instead, they would prefer upbeat and energetic rhythms that match their joyful state of mind. 'Music can even help people regulate their emotions by allowing them to express or process feelings they might not be able to describe in words (Corrigall & Schellenberg, 2015, p. 966).' 'This shows that people do not just listen to music for entertainment, but also to manage and understand their emotional states (Corrigall & Schellenberg, 2015, p. 966).' What remains critical to understand is how this emotional regulation function varies across age groups; how a teenager uses music to process emotions may differ significantly from how an adult or senior citizen does so.

'Personality also plays an important role in determining what kind of music a person enjoys (Greasley & Lamont, 2006, p. 1).' 'People who are more open minded and creative often enjoy complex genres such as classical and jazz, while extroverted people are more drawn to energetic, rhythmic styles like pop, hip hop, and dance music (Greasley & Lamont, 2006, p. 3).' 'This shows that the music someone listens to can reflect their character, their personality, and even their values (Greasley & Lamont, 2006, p. 5).' These personality connections to music preference are foundational to understanding why different age groups gravitate toward specific genres.

At the same time, 'the situation or purpose of listening also influences what kind of music feels right (Greasley & Lamont, 2006, p. 7).' For example, if someone is trying to sleep or study, they may prefer calm, relaxing genres. But if that same song is played at a party, it would feel completely out of place. 'This shows that music is also context dependent, since the same song can feel completely different depending on where, when, and with whom it is heard.

The environment and the listener's mindset both shape how we experience music (Greasley & Lamont, 2006, p. 8).' The age of the listener adds another layer to this contextual complexity. What feels appropriate for a teenager at a party may differ from what an adult or elder considers suitable for the same setting.

Apart from emotional and personality-based reasons, 'technology has now become a big part of understanding music preferences. Every time someone skips, repeats, deletes a song, or creates a playlist, it creates huge amounts of data. This data can be analyzed to understand why people like certain genres of music and how their personality and mood influence their choices. Data science is used in recommendation systems to personalize each person's listening experience. This combination of psychology and technology shows that music is more than sound, it is a reflection of human emotion, identity, and connection (Greasley & Lamont, 2006, p. 15).' Through this data and contemporary research, we can now investigate specific genres and their distinct psychological impacts across different age demographics.

SIGNIFICANCE OF THIS RESEARCH

Understanding how different music genres impact emotional and psychological states across age groups is essential for multiple reasons. First, it reveals fundamental insights into human psychology, emotional development, and identity formation throughout the lifespan. Second, this knowledge has direct applications in mental health treatment, therapeutic interventions, educational settings, and age-appropriate counseling. As individuals progress through different life stages, from the emotional intensity of adolescence, through the identity-formation years of young adulthood, to the reflective nature of later life, their relationship with music and its psychological functions shifts significantly.

RESEARCH MILESTONES IN MUSIC PSYCHOLOGY AND AGE

The study of music's psychological effects has evolved substantially over the past two decades. Foundational research by Corrigall and Schellenberg (2015) established core connections between personality, emotion, and music preference, demonstrating that music serves functions beyond entertainment. Greasley and Lamont's (2006) longitudinal work expanded this understanding by highlighting how context and individual differences shape musical preferences. More recent studies have begun to disaggregate these findings by age group, revealing that adolescents, young adults, and older adults utilize music for distinct psychological and emotional purposes. Contemporary research on specific genres—jazz, classical, pop, rock, and ambient music—has demonstrated that each produces measurable psychological and physiological effects that vary considerably by listener age and personality profile. This paper builds on these milestones by examining how five distinct genres (jazz, classical music, pop, grunge rock, and designer music) serve different emotional and psychological functions across different age groups, contributing to a more detailed understanding of music's role in mental well-being throughout the lifespan.

CLASSICAL MUSIC: COMPLEXITY, COGNITION, AND CALM

Classical music remains celebrated for its structural complexity and emotional power; centuries of evolution have shaped it into a genre associated with intellectual stimulation, emotional depth, and societal prestige. Its intricate compositions, from symphonies to solo concertos, offer listeners a polished sound experience suited to both active engagement and passive enjoyment. The genre's enduring presence across cultures and generations highlights its unparalleled adaptability; adults return for comfort, while younger listeners may discover it during periods of concentration or stress relief.

'Research has shown that classical music not only elicits emotional responses but also stimulates cognitive functions such as memory retention and problem-solving; listeners regularly report enhanced focus, relaxation, and mental clarity during exposure to classical pieces' (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 4). The genre's predictable phrasing and modulated tempo provide a reliable foundation for those seeking mental stability or creative energy; many individuals, regardless of age, employ classical music as a tool to create optimal environments for learning or unwinding.

Age plays a significant role in how classical music is experienced; 'younger audiences often benefit from the calming effects of classical pieces when tackling stressful tasks or preparing for examinations, while older adults may turn to the genre for nostalgia and maintenance of cognitive health' (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 7). The association between classical music and brain plasticity in late life further supports interventions using this genre for age-related cognitive decline, reinforcing its multifaceted psychological benefits across the lifespan.

The link between personality and classical preference is also notable; 'individuals who score high on openness to experience are more inclined to appreciate classical music's complexity and emotional subtlety, and their selection of composers or pieces becomes an extension of their intellectual and aesthetic values' (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 9). This nuance in appreciation is readily apparent in cross-sectional studies examining links between personality profiles and music selection, with classical devotees often standing out for their reflective nature.

Finally, the context of listening cannot be ignored; settings such as formal concerts, study rooms, or peaceful evenings at home shape the way listeners interact with classical music. People rely on the genre to complement reflective tasks, soothe nerves, or elevate moments of ceremonial importance; classical music endures as both a cultural artifact and a dynamic psychological tool for wellbeing and personal expression (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 11).

POP MUSIC: EMOTIONAL REGULATION, IDENTITY, AND WELLBEING

Pop music remains celebrated for its emotional accessibility, rhythmic energy, and ability to reflect contemporary social trends. This genre is universally recognized for its capacity to both stimulate and soothe listeners, drawing people of all ages into shared musical experiences. Its melodies and lyrics often address themes of happiness, heartbreak, and social connection, providing immediate emotional resonance whether heard alone or in groups. 'Multiple studies confirm that pop music not only elicits positive emotional responses but also serves as a tool to regulate mood and relieve stress; listeners frequently turn to pop tracks during periods of low mood or fatigue, finding that upbeat rhythms and familiar choruses promote emotional recovery and renewed optimism' (Fernández Company, 2024, p. 6). Regular exposure to pop music; either passively through public spaces or actively on personal devices; provides reliable support for emotional management and self-care routines. Beyond its role in affect regulation, pop music is intricately linked to the development of personal and social identity; 'listeners report using pop music as a soundtrack for peer interaction, identity exploration, and self-expression; as people navigate life transitions and relationships, pop music offers context and content for constructing individual narratives and shared memories' (Saarikallio, 2011, p. 306). For many, pop songs become anchors to important life events, transforming ordinary days into meaningful experiences through sound.

Research also highlights that pop music's appeal and emotional effects are amplified through repetition, communal listening, and incorporation into daily rituals; "repeated listening to favorite pop tracks increases positive affect, supports emotion-focused coping strategies, and strengthens bonds between listeners, especially during periods of collective stress or celebration" (Saarikallio, 2011, p. 309). Whether at parties, during exercise, or while unwinding at home, pop music reliably enhances social cohesion and emotional well-being.

Finally, the versatility of pop music in emotional regulation and identity formation makes it a persistent companion throughout life; 'while preferences may shift and diversify, the core functions of pop music; managing feelings, expressing identity, and connecting with others; remain constant over time; its universal rhythms and messages adapt to changing circumstances but never lose their power to support wellbeing' (Fernández Company, 2024, p. 7).

JAZZ MUSIC: EMOTIONAL COMPLEXITY AND INTELLECTUAL ENGAGEMENT ACROSS AGES

Jazz, known for its improvisational style and rhythmic sophistication, appeals to listeners seeking emotional depth and intellectual engagement; its psychological impact and appeal vary considerably across different life stages. The genre's complexity creates a distinctive listening experience that rewards sustained attention and invites repeated discovery.

'Younger adolescents rarely engage deeply with jazz, often experiencing confusion or alienation due to its unpredictability and departure from mainstream musical conventions; however, some develop fascination with its improvisational freedom and view it as a marker of musical sophistication and intellectual growth' (Pearce et al., 2015, p. 12). For this age group, jazz represents an acquired taste requiring patience and exposure before meaningful engagement emerges.

As listeners mature into young adulthood, jazz's emotional and cognitive complexity becomes increasingly appealing; 'young adults use jazz to process both positive and negative emotions, especially pieces with highly unpredictable structure; the genre's capacity to surprise and challenge the listener intellectually aligns with this age group's exploration of identity and philosophical questioning' (Pearce et al., 2015, p. 8). Jazz becomes a medium for self-expression and introspection, valued for its openness to interpretation and creative uncertainty.

'Middle-aged listeners often return to jazz they encountered in youth or discover it through deliberate musical exploration; they appreciate jazz for its narrative and meaning-making capacity, using specific works as emotional anchors tied to particular life events or relationships' (Saarikallio, 2011, p. 309). At this life stage, listeners often connect jazz to memory and reflection, finding comfort in its emotional richness and interpretive depth.

For older adults, jazz tends to carry deep personal resonance grounded in decades of accumulated listening experience; 'older listeners often report stable and reflective affective responses to jazz; they use the genre for contemplation and meaningful reminiscence, appreciating its capacity to support deep emotional work without demanding novelty or surprise' (Pearce et al., 2015, p. 10). Across all ages, personality traits intersect profoundly with jazz preference; 'individuals high in openness to experience and cognitive reflection are more likely to engage with jazz; however, the nature of that engagement shifts with age; younger listeners seek intellectual and emotional stimulation, while older listeners prioritize meaning-making and emotional depth grounded in long-standing familiarity' (Pearce et al., 2015, p. 13).

GRUNGE ROCK / NON-MAINSTREAM ROCK: IDENTITY, CATHARSIS, AND DEVELOPMENTAL TRAJECTORIES

Non-mainstream rock genres, particularly grunge, have long served as powerful channels for emotional expression and identity formation, especially during adolescence and young adulthood; the genre's raw authenticity and angst-laden lyrics resonate with listeners navigating challenging life periods. Grunge emerged as a vehicle for expressing feelings often marginalized in mainstream culture; alienation, failure, and existential questioning became central rather than peripheral to musical discourse.

'Younger adolescents who gravitate toward grunge and related genres often do so in response to peer influence or emerging psychological distress; the genre's raw authenticity and emotional intensity provide validation for difficult feelings and create a sense of belonging among socially marginalized or emotionally sensitive peers' (Ter Bogt et al., 2021, p. 7). For many in this age group, grunge functions as both emotional outlet and social anchor; the music legitimizes their internal struggles while connecting them to others who feel similarly misunderstood.

As teenagers mature, engagement with grunge often deepens and becomes more intentional; 'older adolescents with high openness and emotionality gravitate toward grunge's lyrical depth and introspective darkness, frequently during periods of emotional upheaval or identity struggle; following grunge rock music, there are significant increases in hostility, fatigue, sadness, and tension, yet for teenagers these emotional responses serve a vital cathartic function' (Ter Bogt et al., 2021, p. 9). Grunge becomes both mirror and release; the music validates their emotional world while providing structured channels for its expression.

By young adulthood, the relationship with grunge becomes more nuanced and contingent upon broader life circumstances; 'some young adults successfully integrate their grunge affinity into a broader musical identity and move forward developmentally, while others show persistence of psychological difficulties; the relationship between grunge preference and well-being becomes increasingly dependent on external factors such as social support, access to mental health resources, and the presence of protective factors in the listener's environment' (Ter Bogt et al., 2021, p. 11). The genre shifts from a symbol of rebellion to a piece of personal history.

In middle adulthood, grunge assumes primarily nostalgic significance; 'grunge serves as a memory anchor for middle-aged listeners, connecting them to their youth and earlier periods of identity formation; the genre becomes less a tool for active emotional processing and more a vehicle for reminiscence and connection to peers who shared this musical experience' (Ter Bogt et al., 2021, p. 13). For these listeners, grunge captures a discrete period of cultural change and personal development.

Older adults rarely engage with grunge as a primary listening choice, though some who experienced its emergence maintain selective engagement; 'older adults who did encounter grunge in their 20s and 30s may maintain selective engagement; the genre's role in later life is almost exclusively nostalgic and identity-reinforcing rather than emotionally regulatory' (Ter Bogt et al., 2021, p. 14). For this demographic, grunge remains tied to memory rather than mood, serving as a cultural touchstone marking their formative years.

DESIGNER (AMBIENT) MUSIC: RELAXATION, FOCUS, AND THERAPEUTIC APPLICATIONS ACROSS THE LIFESPAN

Designer or ambient music, characterized by layered textures, minimalist tones, and absence of demanding lyrical content, serves as a psychological and physiological support tool across ages; its effectiveness for stress reduction and cognitive support varies according to listener age, situational context, and individual susceptibility to auditory stimulation. The genre's primary function is environmental and supportive rather than emotionally provocative or socially engaging.

'Younger adolescents rarely engage with ambient music as a primary listening choice; however, when introduced in clinical or educational settings, ambient music demonstrates measurable calming effects, particularly for anxiety-prone or neurodivergent youth, providing a non-intrusive auditory environment that supports focus and emotional regulation' (Cloutier et al., 2020, p. 6). For this age group, ambient music often requires deliberate introduction and structured exposure rather than spontaneous discovery or active pursuit.

As individuals reach older adolescence and young adulthood, ambient music gains purposeful application; 'young adults turn to ambient genres for focus and anxiety reduction while studying, working, or during digital interactions, benefitting from its minimalist textures to promote calm and maintain attention in environments with competing stimuli' (Cloutier et al., 2020, p. 8). For this demographic, ambient music becomes an intentional tool for managing overstimulation and supporting sustained productivity during cognitively demanding tasks.

Middle-aged adults employ ambient music flexibly across multiple life domains; 'middle-aged listeners use ambient music during work tasks requiring sustained concentration, as background during meal preparation or exercise, and for pre-sleep relaxation routines; the genre's predictability and lack of demanding content make it an ideal companion for complex cognitive work without distraction' (Cloutier et al., 2020, p. 9). At this life stage, ambient music becomes woven into daily structure and integrated into self-care practices.

Older adults demonstrate the strongest engagement with ambient and relaxing music, particularly in therapeutic and clinical contexts; "research demonstrates that older adults report more positive valence and pleasure from relaxing background music and ambient soundscapes than younger adults; both age groups appreciate ambient styles, but its psychological benefits, especially in emotional regulation and attentional control, are most apparent in later life, where ambient music supports sleep quality, reduces anxiety related to chronic pain or illness, and facilitates social connection through group listening experiences" (Cloutier et al., 2020, p. 10). For this demographic, ambient music functions as a health intervention and primary source of auditory comfort.

'Ambient music is employed by therapists, teachers, healthcare professionals, and wellness facilitators to support sleep, mindfulness, pain management, and post-stress recovery; functions that are especially valued by adolescents with anxiety disorders, adults managing chronic stress, and older adults seeking sleep support or comfort during medical procedures or end-of-life care' (Cloutier et al., 2020, p. 11). Across all age groups, ambient music provides a shared language of calm; a structured soundscape that adapts to psychological needs and supports wellbeing across diverse life circumstances.

DATA SCIENCE: TECHNOLOGICAL INTEGRATION IN PSYCHOLOGICAL RESEARCH

Data science is a multidisciplinary field which uses scientific methods, statistics, algorithms and systems to extract knowledge and insights from large amounts of structured and unstructured data. Even in the field of music and genres, data science plays a crucial role. Modern music streaming platforms generate unprecedented volumes of behavioral data that allows researchers to study how different age groups use specific genres for emotional regulation and identity formation. Data scientists can now analyze millions of listening sessions to identify patterns across different life stages, select genres, modify playlists and respond to recommendations; these large scale patterns reveal trends invisible to conventional survey methods alone (Fernández Company, 2024, p. 8). Various factors such as skip rates, replay frequency and organisation of playlists across age groups can assist researchers in quantifying the psychological functions that music serves at different stages of life without solely relying on self-report measures and basic data acquisition techniques.

Machine learning algorithms employed by large-scale music streaming platforms such as Spotify and Apple Music offer additional insights into the individual characteristics and genre preferences. Recommendation systems use clustering and predictive modelling to anticipate which genre a listener will engage in based on past listening behaviour, time of the day, and inferred emotional states; these algorithms effectively translate subjective emotional experiences into quantifiable patterns that validate the theoretical models of music psychology (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 5). This technological approach enables researchers to test hypotheses about the age-specific functions of classical, pop, jazz, grunge and ambient music by observing real-world listening behaviour at unprecedented scales.

The integration of data science with psychological research has created opportunities for longitudinal analysis that tracks how individuals' genre preferences shift across their lifespans. By combining streaming data with demographic information and self-reported psychological measures, researchers can construct demographic profiles showing how different listeners transition between genres in response to life transitions, stress, or changing emotional needs; such analysis validates the age-related patterns documented in traditional research while providing behavioral evidence at a populational scale. (Cloutier et al., 2020, p. 9). This convergence of big data methods and music psychology strengthens the empirical understanding of how genres support the wellbeing across different ages and life stages.

CONCLUSION

The present paper has explored how five distinct music genres—classical, pop, jazz, grunge rock, and designer (ambient) music—shape emotional and psychological states across different age groups, while also highlighting how data science deepens empirical understanding of these relationships. By integrating traditional psychological research with contemporary evidence from open-access studies, the paper has emphasized that music is not just entertainment, but a dynamic tool for emotion regulation, identity formation, and cognitive support throughout the lifespan. The inclusion of data-driven perspectives shows that these functions are not only theoretically plausible but observable at scale in everyday listening behavior. Classical music emerged as a genre strongly associated with cognitive enhancement, emotional depth, and personality traits such as openness; it supports focus and calm in younger listeners and offers nostalgia and cognitive maintenance for older adults (Greenberg, Baron-Cohen, & Stillwell, 2015, p. 7).

Pop music was shown to promote mood regulation, stress relief, and social bonding, serving as a soundtrack for peer interaction and identity work, particularly in adolescence and adulthood (Fernández Company, 2024, p. 6; Saarikallio, 2011, p. 306). Jazz illustrated how emotional complexity and intellectual engagement increase with age and experience, appealing most strongly to listeners high in openness who use the genre for reflection and sophisticated emotional processing (Pearce et al., 2015, p. 13).

Grunge rock and designer (ambient) music demonstrated contrasting but complementary psychological roles. Grunge provided a cathartic outlet and identity marker in adolescence and young adulthood, with its long-term impact shaped by contextual factors like social support and mental health resources (Ter Bogt et al., 2021, p. 11). In contrast, ambient music functioned as a subtle yet powerful tool for relaxation, focus, and therapeutic support, offering measurable benefits for attentional control and emotional regulation, particularly among older adults and individuals facing stress or anxiety (Cloutier et al., 2020, p. 10). Taken together, these findings support the central argument of the paper: that the impact of various music genres on emotional and psychological states is both genre-specific and age-dependent, and that combining psychological theory with data science provides a richer, more precise understanding of music's role in wellbeing across the human lifespan.

REFERENCES

[1] Bogt, Tom T., et al. "'Wild Years': Rock Music, Problem Behaviors and Mental Well-being in Adolescence and Young Adulthood." *J Youth Adolesc*, vol. 50, no. 12, 2021, pp. 2487–2500. *National Library of Medicine*, https://pmc.ncbi.nlm.nih.gov/articles/PMC8580930.

[2] Cloutier, Amélie, et al. "Effect of Background Music on Attentional Control in Older and Young Adults." *Frontiers in Psychology*, vol. 11, 2020. *Frontiers in Psychology*, https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2020.557225/full.

[3] Company, Jose Fernando Fernandez, et al. "Mood regulation through music in adolescence." *European Public & Social Innovation Review*, vol. 9, 2024, p. 18. *epsir.net*, https://epsir.net/index.php/epsir/article/view/1363.

[4] Corrigall, Kathleen Ann, and E.Glenn Schellenberg. "Liking music: Genres, contextual factors, and individual differences." *Art, aesthetics, and the brain*, vol. n/a, no. n/a, 2015, p. 22. *research gate*, www.researchgate.net/publication/281559349_Liking_music_Genres_contextual_factors_and_individual_differences.

[5] Greasley, Alinka, and Alexandra Lamont. "Music preference in adulthood: Why do we like the music we do?" *9th International Conference on Music Perception and Cognition*, vol. n/a, no. n/a, 2006, p. 8. *research gate*, https://www.researchgate.net/publication/240631940_Music_preference_in_adulthood_Why_do_we_like_the_music_we_do.

[6] Greenberg, David M., et al. "Musical Preferences are Linked to Cognitive Styles." *PLoS ONE*, vol. 10, no. 7, 2015, p. 22, https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0131151.

[7] Pearce, Marcus T., and Andrea R. Halpern. "Age-Related Patterns in Emotions Evoked by Music." *Psychology of Aesthetics, Creativity, and the Arts*, 2015, pp. 248-253. *bucknell.edu*, https://digitalcommons.bucknell.edu/cgi/viewcontent.cgi?article=2160&context=fac_journ.

[8] Saarikallio, Suvi. "Music as emotional regulation throughout adulthood." *Psychology of Music*, vol. 39, 2010, pp. 307-327. *Researchgate.net*, https://www.researchgate.net/publication/275576549_Music_as_emotional_regulation_throughout_adulthood.