Journal of Human Psychology

Analyzing Relationships Between Adolescents' Cultural Identity and Narrativization in East Asian Music

Hannah K. Shin[1,*]

[1]Bergen County Academies, Hackensack, New Jersey

Research Article

Open Access &

Peer-Reviewed Article

DOI: 10.14302/issn.2644-1101.jhp-24-5387

Running Title:

Cultural Influence on Music Narrativization

Corresponding author:

Hannah K. Shin, Bergen County Academies, Hackensack, New Jersey

Keywords:

Asian American adolescents, East Asian music, Music perception, Narrativization, Narrative engagement

Received: December 23, 2024

Accepted: February 20, 2025

Published: March 08, 2025

Citation:

Hannah K. Shin (2025) Analyzing Relationships Between Adolescents' Cultural Identity and Narrativization in East Asian Music. Journal of Human Psychology - 2 (2):20-29. https://doi.org/10.14302/issn.2644-1101.jhp-24-5387

Abstract

The formation of narratives while listening to music is seen across cultures, but narrative perception in Asian Americans who have bicultural identities is not well understood. This study analyzed the potential effect of cultural identity on adolescents' ability to form narratives with East Asian music. Two groups of adolescents (n=42), Asian American (n=28) and Non-Asian American (n=14), listened to three music excerpts with varying degrees of Asian and Western influences. The most Asian-influenced excerpt was a Gugak Korean traditional piece titled T'ungae sanjo, performed on traditional Korean folk instruments and creating a distinctly East Asian sound. The Mixed excerpt, containing both Western and Asian influences, was from Tan Dun's *Eight Memories in Watercolor*. It contained a Chinese folk melody while being performed on a Western instrument. Finally, the most Western-influenced excerpt was from Toru Takemitsu's *Rain Tree Sketch*. The piece contained octatonicism, a musical technique prominent in modern Western composers' works. Participants completed a survey containing a free response question where they described their imagined narratives and a survey containing 4 questions measuring narrative engagement. Chi-square tests, t-tests, and reflexive thematic analysis were used to yield the results from the data collected. Results demonstrated that the extent of narrativization was dependent on enculturation. Asian Americans, with their bicultural identities, demonstrated consistent narrativization across all excerpts. In contrast, non-Asian Americans narrativized significantly less for the traditional Asian excerpt. Within the free responses, both cohorts identified similar themes with the Western-influenced music, as they have had overlapping exposure to Western culture leading to shared thought patterns. However, there was substantial thematic variability between cohorts with the Asian-influenced music, as the two cohorts had different levels of exposure to Asian culture. This study thus reinforces the notion that enculturation has a profound effect on narrativization in music, demonstrated through Asian American adolescents' abilities to narrativize to music containing both Asian and Western roots.

Introduction

During the typical music listening experience, humans readily possess the ability to imagine a narrative, or tell a story (1, 2, 3, 4, 5). The ability to narrativize is an essential facet of musical engagement. Musical engagement has been found to

contain five robust factors, one of which is a narrative: stories and symbolism evoked by music (6). The human ability to form both imagery and narratives in response to music is evident at all ages. One study (7) revealed that children as young as preschoolers possessed the ability to relate musical excerpts to extra-musical concepts, where they successfully matched the music excerpt to its corresponding animal from Prokofiev's *Peter and the Wolf* and Saint-Saëns' *The Carnival of the Animals.* Music, despite its differing rhythms, textures, melodies, and thematic material, has the ability to evoke narratives in one's mind (1, 8, 9, 10, 11). Humans thus inadvertently possess narrativization skills in navigating music.

Yet studies exploring the root causes behind narrativization are minimal. Besides the finding that humans *can* imagine narratives, one study has hypothesized that enculturation – the different cultural backgrounds to which individuals are exposed to and adapt to over time – affects one's ability to narrativize to music (12). The authors examined narrative responses in people from the United States (Arkansas and Michigan) and compared their responses with people from Dimen, China, a rural village in the Guizhou province where a dialect, Dong, is spoken. In this study, participants generally narrativized in response to music from both cultures, but were significantly more likely to narrativize with music from their own cultural background. The specific narratives generated were dependent on the enculturation of the individual. Within the culture groups' narratives formed, there was a consistency of themes between their narrative content as well. For instance, in an atonal excerpt by Anton Webern, Arkansas listeners described horror, paranoia, and murder, while Chinese listeners imagined playful and happy times with friends. The authors concluded that Western listeners are more accustomed to Western tonal framework, whereas Chinese listeners do not attempt to impose a tonal frame in their listening, thus leading to dramatically differing narrative themes. Therefore, enculturation seems to play a significant role in one's narrativization to the same piece of music.

Enculturation has further been found to play a significant role in general aspects of music perception, including the perception of pitch, rhythm, and complex musical structures (13). Multiple studies (13) have suggested that enculturation can influence one's sensitivity to perceiving differences in pitch and rhythm and developing expectations of melodic and rhythmic structures in music. People listening to music from their own culture were found to be more attuned to recognizing subtle differences in its timbre in comparison with culturally unfamiliar music (14). Regarding rhythmic structure, Haumann et al. found that listeners growing up in Western culture neurologically reacted more strongly with a faster magnetic mismatch negativity response to unpredictable rhythms, whereas bicultural listeners had less of a rhythmic bias and processed rhythm more flexibly, suggesting their enculturation to different cultural music structures (15).

Although prior work has explored the relationships between enculturation and general music perception, it is unknown whether narrativization is affected by enculturation in those who possess dual cultural backgrounds, such as Asian Americans in the United States who are both American and of Asian heritage. Furthermore, the effects of musical narrativization on adolescents have not yet been explored. The effects of enculturation on music perception have been found to be malleable within children and less so in adults (16, 17), yet are understudied in adolescents. This study aims to examine how music is narratively perceived by adolescents in the United States who possess dual cultural backgrounds. Specifically, this study focuses on narrativization in Asian American and Non-Asian American adolescents in response to various degrees of Asian and Western influences in music with the hypothesis that one's enculturation will affect one's ability to narrativize to music.

Methods

Participants

After obtaining Bergen County Academies Institutional Review Board approval (IRB No. 3), participants were recruited from a magnet high school in Northern New Jersey and a music conservatory pre-college program in New York through an email invitation sent out to the respective institutions requesting voluntary participation in the study. Consent and assent were obtained digitally through Google Forms. Participants under age 18 years obtained digital consent through their parent/ guardian uploading a digital signature and provided assent digitally.

Participants (n=42) were students aged 12-20 years. The Asian-American (AA) cohort consisted of 28 participants with East Asian ethnicity. The Non-Asian American (Non-AA) cohort consisted of 14 participants.

Music Excerpts

Excerpts from Asian composers were chosen to include one highly traditional piece with clear East Asian roots (Asian), one piece containing both East Asian and Western influences and performed on a Western instrument (Mixed), and one highly Western-influenced piece (Western). The excerpts were selected based on the recommendations of an East Asian music expert. The Asian-influenced piece was an excerpt of Gugak Korean ceremonial music titled T'ungae sanjo, performed with traditional Korean instruments and creating a traditional Korean folk sound reminiscent of ancient ceremonial East Asian music. The Mixed excerpt was selected as the dual-influenced piece: Tan Dun's *Eight Memories in Watercolor*…, III. *Staccato Beans. Staccato Beans* contains a folk melody titled *My New Sister-in-Law* from Tan Dun's hometown Hunan, China (18). It is in the D Yu Pentatonic mode, a tonal token of East Asian music, and played on the modern piano, a Western instrument (18). The Western excerpt was Toru Takemitsu's *Rain Tree Sketch,* a piano work containing octatonicism, a common feature of modern Western-style music, as well as influences of Western composers including Olivier Messiaen, Claude Debussy, and Arnold Schönberg (19). This was selected to represent the most Western -influenced excerpt of the three pieces.

The first 60 seconds of each excerpt were taken from YouTube and converted to MP3 files with an anonymous label to prevent participants from knowing the piece's name. Excerpts were randomized and included into the questionnaire. Participants had unlimited time to listen to the excerpts and fill out the questionnaire.

Procedure

Participants were provided a link to a Google Form containing a questionnaire and instructions upon providing consent. They were directed, "You'll be asked to report aspects of your experience listening to musical excerpts, including whether or not you imagined a story while listening. Please do NOT specifically ATTEMPT to imagine a story. Simply listen to the music as you ordinarily would. If you imagine a story, that's fine, and if you don't imagine a story, that's fine too" (12). The participants then accessed an MP3 audio file link to the first music excerpt. After listening to the excerpt, they were asked to write a free response to the Story Response Question (SRQ) prompt, in which they indicated whether or not they heard a story and what the story was about. Following the SRQ, the participants were asked to assess 4 narrative engagement (NE) statements. This process was repeated until questions for all three music excerpts were completed.

Story Response Question

One SRQ was used for qualitative analysis of narrativization. This prompt was adapted from Margulis

(1) and asked: “Sometimes, when people listen to music, they imagine a story or elements of a story. Did you imagine a story while listening to this music? If so, please describe the story you imagined in as much detail as possible, but do not spend more than about a minute on your response. If not, why do you think this music didn't trigger an imagined story for you? What were you thinking about/ experiencing while listening? Answer these questions in as much detail as possible, but do not spend more than about a minute on your response.”

Narrative Engagement Scale

To quantitate narrative engagement, the NE scale, previously validated by Margulis et al. (12) was utilized. The NE Scale was comprised of four statements: ‘I imagined a story with clear setting, characters, and events’; ‘I imagined a story while the music was playing, but not afterwards’; ‘I imagined a vivid story’; ‘It was easy to imagine a story when listening to the music’. Participants used a visual analog scale in response to each statement, rating each from 1 to 6, with 1 being ‘Strongly disagree’ and 6 being ‘Strongly agree.’ The NE scale demonstrated good internal consistency when formulated and tested with Cronbach alpha by Margulis et al. (12). Criterion validity for the NE scale was also previously determined when Margulis et al. found that the NE scores had a strong association with the characteristics of preliminary story descriptions to music excerpts, such as number of characters and number of words in the stories.

Statistical Analysis

Responses were categorized by the author into narratives or non-narratives using Abbott’s definition of narrative: “the representation of events, consisting of *story* and *narrative discourse*; story is an *event* or sequence of events (*action*); and narrative discourse is those events represented” (20). Narrativization Frequency (NF) was then calculated for each cohort and statistically compared using Chi-square analysis. Responses from the NE Scale were averaged to create a mean NE Score (NES) and statistically analyzed using t-tests.

Qualitative Analysis

Reflexive thematic analysis (21) was utilized for qualitative analysis of the SRQ responses. An inductive approach was taken where the coder (author) analyzed the data and organically developed themes as outputs. The coder then coded the data into the thematic outputs.

Table 1. Narrativization frequency, separated by music influence, comparing AA vs. Non-AA cohort

	Narrativization Frequency (%)	
Music Influence	AA (n=28)	Non-AA (n=14)
Asian	19 (67.86)	7 (50.00)
Mixed	24 (85.71)^	12 (85.71)*
Western	19 (67.86)^^	10 (71.43)^^^

Note. AA: Asian Americans; Non-AA: Non-Asian Americans
*p = 0.043 Asian vs. Mixed Music Influence in non-AA
^p = 0.11 Asian vs. Mixed Music Influence in AA
^^p = 1.0 Asian vs. Western Influence in AA
^^^p = 0.25 Asian vs. Western Influence in non-AA

Results

Narrativization Frequency

Table 1 displays the NF for each music excerpt, divided into the AA group and Non-AA group. The AA group had similarly high rates of NF with all three music excerpts, ranging from 67.86% to 85.71%. In contrast, the Non-AA group was significantly less likely to imagine a story in response to the Asian-influenced music excerpt, compared with the Mixed-influenced excerpt (NF 50.00% vs 85.71%, p=0.043).

Narrative Engagement

Table 2 outlines the degree of narrative engagement based on the mean NES for each music excerpt for both cohorts. The AA group demonstrated similar narrative engagement across all music types, with mean NES of 3.38-3.80 (scale 1-6). Consistent with the NF findings, the Non-AA group showed the same pattern of significantly lower narrative engagement with the Asian-influenced music compared with the Mixed excerpt (mean NES 3.34 vs 4.20, p=0.047).

Within each music type, both AA and Non-AA groups had no significant differences in either narrative frequency or narrative engagement, suggesting that the music itself had less influence on narrativization than the enculturation of each group.

Narrative Content

Figure 1 displays the most common themes described in the free response narrative content for each music excerpt. Notably, the most commonly identified subject themes were the same across both AA and Non-AA groups for the Western and Mixed-influenced music excerpts, whereas it differed widely for the Asian-influenced excerpt.

In response to the Western-influenced excerpt, 47.37% of AA participants and 60.00% of Non-AA participants described the theme "Mystery, Confusion" using at least one of the following words or phrases: 'uneasy,' 'blindly stumbling,' 'mysterious dreams,' 'detective,' 'suspicious,' 'masked,' 'secret,' 'lost,' 'spiral,' 'out there,' 'suspense.' With the Mixed-influenced excerpt, 60.87% of AA participants and 58.33% of Non-AA participants described the theme "Movement, Chase, Traveling" using at least one of the following words or phrases: 'going on a journey,' 'motion,' 'running,' 'chasing,' 'mice running from a cat,' 'cars,' 'car ride,' 'walking,' 'train,' 'twists and turns,' 'prancing,'

Table 2. Mean Narrative Engagement Score (NES) separated by music influence, comparing AA vs. Non-AA cohort

Music Influence	Mean NES: AA	Mean NES: Non-AA
Asian	3.47	3.34
Mixed	3.80^	4.20*
Western	3.38^^	4.12^^^

Note. AA: Asian Americans; Non-AA: Non-Asian Americans
*p = 0.047 Asian vs. Mixed Music Influence in non-AA
^p = 0.17 Asian vs. Mixed Music Influence in AA
^^p = 0.41 Asian vs. Western Influence in AA
^^^p = 0.08 Asian vs. Western Influence in non-AA

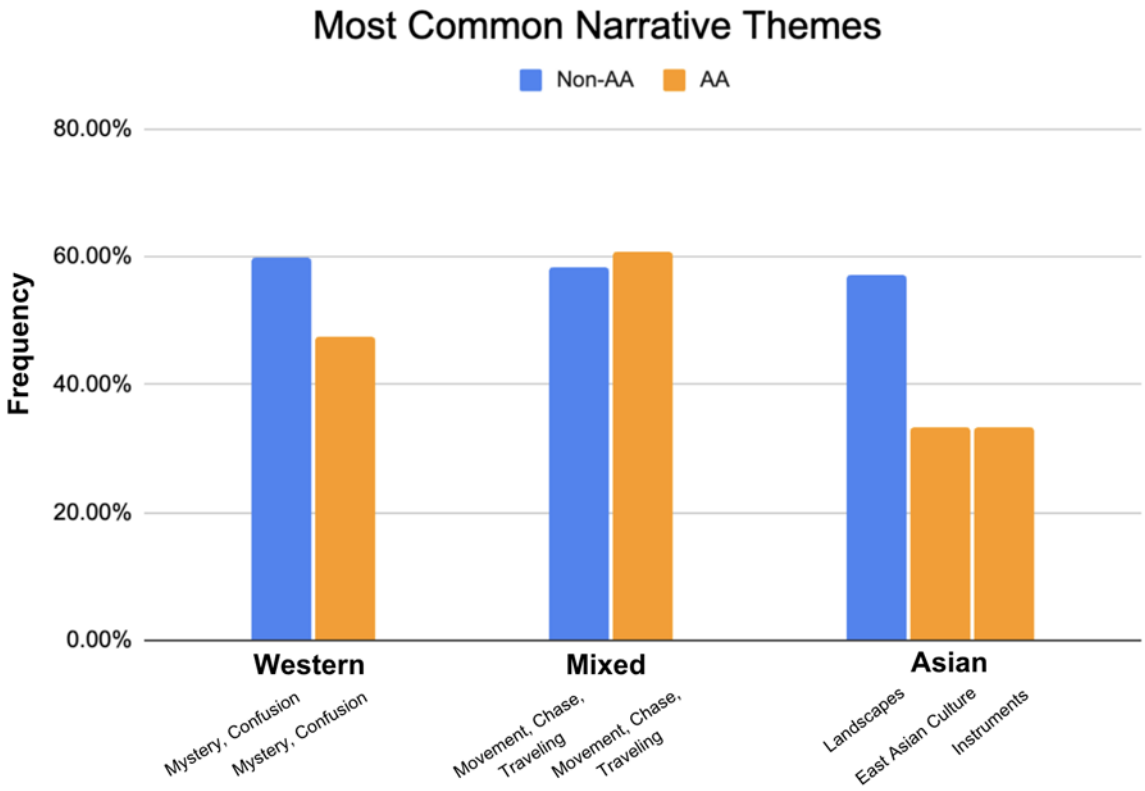

Figure 1. Most Common Narrative Themes described in the Story Response Question, separated by music influence (Western, Mixed, Asian), comparing AA vs. Non-AA cohort

'on the move,' 'galloping.'

With the Asian-influenced excerpt, there was a divergence of themes between the AA and Non-AA groups. In 33.33% of AA participants, the theme "Instruments" emerged, using at least one of the following words or phrases: 'beats of the drum,' 'playing music,' 'small wooden flute,' 'kazoo,' and 33.33% also described the theme "East Asian culture" using at least one of the following words or phrases: 'traditional Asian war cry,' 'traditional martial arts,' 'Chinese traditional dancers,' 'East Asian traditional clothing,' 'traditional Korean music,' 'in Japan.' In contrast, 57.14% of Non-AA participants described the entirely different theme "Landscapes" using at least one of the following words or phrases: 'sand,' 'valley between two small cliffs,' 'desert,' 'edge of a lake.' There was no overlap of thematic content between AA and Non-AA participants with the Asian-influenced music.

Discussion

The results of this study support previous work showing that narrative listening and forming visual imagery within music is prevalent within music perception (1, 22, 23) and is a phenomenon that occurs across cultures (12). In this study, both AA and Non-AA participants had high NF of ≥50.00% regardless of the cultural influence of music excerpt. Within the cohorts of Non-AA and AA, the finding that AA participants narrativize to all music types, but that Non-AA participants narrativize less to the Asian-influenced excerpt also supports the conclusion that enculturation affects narrativization. Asian Americans have been found to form a bicultural identity, causing their enculturation to contain both Western and Asian influences (24, 25). Asian Americans have also been found to be much more

likely to describe themselves as being culturally integrated – that is, accepting both their Asian and American identities as opposed to being assimilated or rejecting Asian culture and espousing American culture (25). Thus, it is suggested that Asian American adolescents' identities can be described as a bicultural fusion of both American and Asian identities. Due to their bicultural exposure, Asian Americans hold experiences in both Asian and American culture, causing them to possess the ability to narrativize similarly (consistent NF and NES) across all three excerpts containing varying levels of Asian and Western influence.

Non-AA participants had significantly lower narrative frequency and narrative engagement with the Asian-influenced excerpt. This further suggests that enculturation affects narrativization, where in the absence of Western influence in the music, Non-AA participants narrativized to a lesser extent, with an NF of 50.00% compared with 85.71% (Asian vs. Mixed influence, p=0.043). Furthermore, the Non-AA group had the lowest NE Score (3.34 compared with 4.20 for Asian vs. Mixed influence, p=0.047) in response to the Asian-influenced excerpt, revealing that narrative engagement was lowest with music that was culturally unfamiliar to the Non-AA cohort. Without elements of Western music techniques and sounds, the Korean Gugak music presented a foreign sound with its uniquely Korean instruments and rhythms. These results suggest that it was necessary for elements of one's enculturation to be present in order to narrativize more deeply. With elements of Western influence present, Non-AA participants were able to narrativize similarly in both Western and Mixed-influenced excerpts; however, narrativization frequency and engagement dropped significantly in the absence of Western influence in the music. Thus, it can be concluded that the reduced narrativization among the Non-AA cohort with music lacking Western influence is reflective of enculturation affecting narrativization, as Non-AA participants required elements of their own experiences in Western culture to be present in the music to narrativize more readily.

In the narrative free responses to the Story Response Question, the most common content themes that emerged were remarkably consistent between both cohorts with Western and Mixed-influenced music (Figure 1). Both AA and Non-AA groups had high concordance in identifying the thematic categories of "Mystery, Confusion" for the Western-influenced excerpt and "Movement, Chase, Traveling" for the Mixed excerpt. This strong degree of overlap may be due to shared cultural exposures within the same geographic region from which the participants were recruited, affecting participants' narrative thought processes. With both cohorts growing up in America, both groups were more likely to be exposed to Western culture and sounds over time, thus creating a consensus in patterns of thought regarding music containing Western influences. In contrast, with the absence of Western influence, there was substantial variability in the narrative themes identified between the AA and Non-AA cohorts with the Asian-influenced music. The most common themes in the AA cohort were "East Asian Culture" (33.33%) and "Instruments" (33.33%), while the most common theme in the Non-AA cohort was "Landscapes" (57.14%), with no overlap between the cohorts. While Asian Americans grow up with both Western and Asian culture exposure, Non-Asian Americans generally do not grow up with consistent exposure to Asian culture. This is reflected in the distinct variability in the themes between the two cohorts that was observed within music containing solely Asian influences. Thus narrativization – its frequency, engagement, and variability, is affected by one's cultural exposure and experiences.

This study extends previous findings of the impact of enculturation on the development of narratives within music perception. While prior studies exploring music narrativization were conducted on adults (1, 12, 22), this is the first study to examine music narrativization among adolescents. The results of

this study are indicative of the universal nature of music as a form of communication across cultures and ages. Bicultural minorities growing up in America who possess ethnic ties to both American culture and another culture can connect to music from both cultures. Furthermore, this study demonstrates the influence of enculturation on the imaginative and creative cognition of adolescents during a critical time in the development of their sociocultural identity. Music can thus transcend spoken language and forge auditory connections to one's collective cultures.

Limitations & Future Directions

The degree to which Asian American participants associated with their cultural identity at the institutions could not be controlled for due to the limitations inherent in the collection of only demographic data where participants were asked to identify themselves as Asian American or not. Questions regarding how participants felt about their ethnic identity were not able to be asked as per institutional policy. Consequently, further analysis regarding the influence of cultural identity could not be examined with respect to narrativization frequency and engagement. A related study could employ a bicultural identity scale to collect data on what participants believe their ethnic identity outcome to be – the extent of relating to their ethnic groups (25), rather than how they feel about their ethnic identity. In addition, the participants were instructed not to spend more than a minute on their answers to the SRQ to elicit their initial reactions to the music excerpts. Because time spent answering the SRQ was not asked, this may have led to discrepancies in quantity and quality of responses as some participants may have spent more time reflecting on their answers. Additional analyses quantifying time spent on responses could be investigated to determine if this affects narrativization frequency and engagement. Finally, the statistical power is limited due to the small sample size in this study. Though each response contained in-depth narratives sufficient for qualitative analysis, future studies should be conducted with larger sample sizes examining narrativization with a wider range of music excerpts, as well as within other ethnic groups and communities to further confirm and extend the current findings. Future studies can also focus on the potential connection between narrativization in music and the enculturation at other developmental stages, such as in children.

Conclusion

Narrativization is a universal element of music perception regardless of the cultural influence of the music. Results of this study reveal that enculturation affects one's narrativization, as demonstrated by Narrativization Frequency and Narrative Engagement Scores. Asian American adolescents, possessing bicultural identities, narrativized similarly across all three music excerpts containing varying levels of Western and Asian influences. Non-Asian American adolescents were found to narrativize significantly less with the traditional Asian music, which was devoid of Western influences. Narrative content revealed that in the absence of Western influence in the music, there was more variability in the identified narrative themes between Asian American and Non-Asian American adolescents, demonstrating that the absence of one's native culture in music causes one to narrativize less readily to the music.

This study contributes towards the field of music psychology by examining narrativization in a bicultural cohort of Asian American adolescents that has not yet been studied. The use of music with varying degrees of Asian and Western influences allowed for the assessment of the specific effect of dual cultural influence upon music perception at this developmental stage. Extending the observation that one tends to narrativize more deeply with music from one's own culture, people possessing dual

cultures appear to narrativize equally to music from both. Among Asian American adolescents exploring cultural identity, music appears to be an indicator of their connection to dual cultures.

Acknowledgements

The author gratefully acknowledges and thanks Dr. Lisa Yui for her expertise in East Asian music and her guidance in choosing the musical excerpts for this study. The author also gratefully acknowledges and thanks Mr. Jonathan Lancaster for his direction in experimental design.

References

1. Margulis, E. H. (2017). An exploratory study of narrative experiences of music. Music Perception, 35(2), 235–248. https://doi.org/10.1525/mp.2017.35.2.235
2. Taruffi, L., Ayyildiz, C., & Herff, S. A. (2023). Thematic contents of mental imagery are shaped by concurrent task-irrelevant music. Imagination, Cognition and Personality, 43(2), 169–192. https://doi.org/10.1177/02762366231193145
3. Herff, S. A., Cecchetti, G., Taruffi, L., & Déguernel, K. (2021). Music influences vividness and content of imagined journeys in a directed visual imagery task. Scientific Reports, 11(1), 15990. https://doi.org/10.1038/s41598-021-95260-8
4. Herff, S. A., McConnell, S., Ji, J. L., & Prince, J. B. (2022). Eye closure interacts with music to influence vividness and content of directed imagery. Music & Science,
5. https://doi.org/10.1177/20592043221142711 5. Margulis, E. H., & McAuley, J. D. (2023). Mechanisms and individual differences in music-evoked imaginings. Trends in Cognitive Sciences, 27(2), 116–117. https://doi.org/10.1016/j.tics.2022.11.014
6. Greenburg, D. M., & Rentfrow, P. J. (2015). Rules of engagement: The structure of musical engagement and its personality underpinnings. In Proceedings of the Ninth Triennial Conference of the European Society for the Cognitive Sciences of Music. Manchester, United Kingdom.
7. Trainor, L. J., & Trehub, S. E. (1992). The development of referential meaning in music. Music Perception, 9(4), 455–470. https://doi.org/10.2307/40285565
8. Dahl, S., Stella, A., & Bjørner, T. (2023). Tell me what you see: An exploratory investigation of visual mental imagery evoked by music. Musicae Scientiae, 27(3), 717-740. https://doi.org/10.1177/10298649221124862
9. Margulis, E. H., Williams, J., Simchy-Gross, R., & McAuley, J. D. (2022). When did that happen? The dynamic unfolding of perceived musical narrative. Cognition, 226, 105180. https://doi.org/10.1016/j.cognition.2022.105180
10. Jakubowski, K., Margulis, E. H., & Taruffi, L. (2024). Music-evoked thoughts: Genre and emotional expression of music impact concurrent imaginings. Music Perception, 42(1), 3–18. https://doi.org/10.1525/mp.2024.42.1.3
11. Ayyildiz, C., Milne, A. J., Irish, M., & Herff, S. A. (2024). The effects of musical micro-expressions on concurrent mental imagery. In A. Schiavio, H. Daffern, S. Glasser, M. Osborne, I. C. Martinez, M. Marchiano, J. B. Pérez, A. Kempf, N. Norton, H. J. Gibbs, C. Owen, C. G. Kirts, K. O'Neill, & R. Jackson (Eds.), ESCOM12 (York, La Plata & Melbourne) - The 12th Triennial Conference of the European Society for the Cognitive Sciences of Music: Book of

Abstracts (pp. 403–404). https://doi.org/10.25364/602.2024.3

12. Margulis, E. H., Wong, P. C. M., Simchy-Gross, R., & McAuley, J. D. (2019). What the music said: Narrative listening across cultures. Palgrave Communications, 5, 146. https://doi.org/10.1057/s41599-019-0363-1
13. Morrison, S. J., & Demorest, S. M. (2009). Cultural constraints on music perception and cognition. Progress in Brain Research, 178, 67–77. https://doi.org/10.1016/S0079-6123(09)17805-6
14. Alluri, V., & Toiviainen, P. (2011). Effect of enculturation on the semantic and acoustic correlates of polyphonic timbre. Music Perception: An Interdisciplinary Journal, 29(3), 297–310. https://doi.org/10.1525/mp.2012.29.3.297
15. Haumann, N. T., Vuust, P., Bertelsen, F., & Garza-Villarreal, E. A. (2018). Influence of musical enculturation on brain responses to metric deviants. Frontiers in Neuroscience, 12, 218. https://doi.org/10.3389/fnins.2018.00218
16. Hannon, E. E., & Trehub, S. E. (2005). Tuning in to musical rhythms: infants learn more readily than adults. Proceedings of the National Academy of Sciences of the United States of America, 102(35), 12639–12643. https://doi.org/10.1073/pnas.0504254102
17. Morrison, S. J., Demorest, S. M., & Stambaugh, L. A. (2008). Enculturation effects in music cognition: The role of age and music complexity. Journal of Research in Music Education, 56(2), 118–129. https://doi.org/10.1177/0022429408322854
18. Tian, L. (2014). The world of Tan Dun: The central importance of Eight Memories in Watercolor, Op. 1 (Doctoral dissertation, Louisiana State University). https://repository.lsu.edu/gradschool_dissertations/1819
19. Koozin, T. (1991). Octatonicism in recent solo piano works of Tōru Takemitsu. Perspectives of New Music, 29(1), 124–140. https://doi.org/10.2307/833071
20. Abbott, H. P. (2008). The Cambridge introduction to narrative. Cambridge University Press.
21. Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. Qualitative Psychology, 9(1), 3–26. https://doi.org/10.1037/qup0000196
22. Hashim, S., Stewart, L., Küssner, M. B., & Omigie, D. (2023). Music listening evokes story-like visual imagery with both idiosyncratic and shared content. PLOS ONE, 18(10), e0293412. https://doi.org/10.1371/journal.pone.0293412
23. Antović, M., Küssner, M. B., Kempf, A., Omigie, D., Hashim, S., & Schiavio, A. (2023). "A huge man is bursting out of a rock": Bodies, motion, and creativity in verbal reports of musical connotation. Journal of New Music Research, 52(1), 73–86. https://doi.org/10.1080/09298215.2024.2306406
24. Kiang, L., Witkow, M. R., & Champagne, M. C. (2013). Normative changes in ethnic and American identities and links with adjustment among Asian American adolescents. Developmental Psychology, 49(9), 1713–1722. https://doi.org/10.1037/a0030840
25. Ying, Y. W., & Lee, P. A. (1999). The development of ethnic identity in Asian-American adolescents: Status and outcome. American Journal of Orthopsychiatry, 69(2), 194–208. https://doi.org/10.1037/h0080421