

Perceived Role of Music in Emotional Well-Being and Learning among Malaysian University Students

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ABSTRACT

Music is widely used in everyday life for relaxation, emotional regulation and concentration, yet its perceived role in students' emotional well-being and learning remains insufficiently understood in non-clinical higher education settings. This study examines how Malaysian university students perceive the role of music in their academic routines and emotional experiences. The article presents a secondary analysis of previously unreported variables from a 2021 questionnaire survey involving 79 students from five Malaysian higher education institutions. The earlier publication from the same survey reported only online-learning constraints and their perceived effects on mental and emotional health; the music-related variables analysed here were not included in that publication. A conceptual framework links the music-listening practices measured in the questionnaire with two groups of self-reported outcomes: perceived emotional well-being and perceived learning-related outcomes. Descriptive statistics were generated using frequencies, percentages, means and standard deviations, with mean scores interpreted using a three-level agreement classification. Students generally reported positive perceptions of music. They agreed that they liked listening to music while studying ($M = 4.0380$), listened to favourite music when feeling distressed ($M = 4.0000$), and allowed music to play while completing academic tasks ($M = 3.9114$). The highest perceived outcome was the influence of music on mood and motivation to learn ($M = 4.1266$), followed by perceived stress reduction during online learning ($M = 4.1013$). The study relies entirely on self-reported, non-validated questionnaire items and does not measure concentration, memory, academic performance or potential confounders. The findings therefore indicate perceived supportive roles and associations in students' experiences rather than therapeutic efficacy, objective learning benefits or causal effects. Further research should test the framework using validated measures, broader music-exposure variables and appropriate controls for potential confounders.

Keywords: emotional well-being; learning; Malaysian university students; music; perceived role

INTRODUCTION

Student well-being has become an increasingly important concern in higher education because academic performance is shaped not only by cognitive ability but also by students' capacity to manage stress, sustain motivation and regulate emotion. University students routinely negotiate assessment demands, deadlines, changing learning environments and expectations concerning academic achievement. Formal counselling and psychological services remain essential when students experience significant mental health difficulties, but much

of everyday emotional regulation occurs outside clinical settings through ordinary behaviours and personally selected coping resources. Music is particularly relevant in this respect because it is highly accessible, inexpensive and already embedded in students' daily routines. It can accompany studying, assignment completion, travel and leisure, while also being deliberately selected when individuals feel distressed or seek to alter their mood. Understanding how students themselves perceive these functions is therefore important for situating music within the broader landscape of student well-being rather than treating it simply as entertainment.

The relationship between music and well-being has been examined most extensively in therapeutic and clinical contexts. Professional music therapy and therapeutic music services use musical experiences in structured ways to address health and well-being needs (AMTA & NSBTM, 2017). Empirical studies have reported associations between music-based interventions and reduced anxiety, improved comfort, pain management and relaxation in clinical populations (Ciftei & Oztunc, 2015; Fallek et al., 2019; Lee, 2016; Mofredj et al., 2016). Receptive music therapy has also been investigated as a means of reducing stress and supporting well-being among clinical staff working under demanding conditions (Giordano et al., 2020). Collectively, this literature establishes that music can have meaningful psychological and physiological functions. However, evidence from formal interventions cannot automatically be extended to ordinary listening practices among university students. A conceptual distinction is therefore required between professional music therapy, structured music-based well-being activities and self-directed everyday music listening.

This distinction is particularly important because students may use music for purposes that overlap emotional regulation and learning without identifying the activity as therapy. Listening to preferred music when distressed, playing music while completing an assignment or using music to sustain motivation during study represents a different phenomenon from participation in a clinical music therapy programme. Yet these everyday practices are potentially significant because they reveal how students mobilise readily available resources to manage their own emotional and academic experience. The relevant research question is consequently not whether ordinary music listening can be assumed to produce clinical therapeutic outcomes, but whether students perceive music as useful in managing stress, influencing mood, supporting emotional stability and shaping their engagement with learning. Examining these perceptions provides a necessary empirical step before stronger claims about effectiveness or intervention design can be considered.

A possible basis for such perceptions can be found in research on the psychobiological and neuropsychological processing of music. Chanda and Levitin (2013) discuss neurochemical processes associated with musical engagement, including pathways related to stress, reward and motivation. Research on auditory processing further demonstrates that responses to music involve differentiated and complex cognitive mechanisms. Albouy et al. (2020) identify distinct sensitivity in the processing of speech and melody, while Chabin et al. (2022) show that vocal melody and musical background can be processed simultaneously in musical prediction. These studies do not establish that everyday listening improves university students' mental health or academic performance. They do, however, provide a theoretical basis for investigating why students may associate music with changes in mood, motivation and emotional state, and why music may become integrated into both coping practices and study routines.

The Malaysian context also permits the issue to be considered from a broader intellectual perspective. Within Islamic intellectual and medical traditions, discussions of music have historically been connected with the relationship between physical, emotional, spiritual and intellectual well-being. Roziah et al. (2021) demonstrate that Muslim scholarly perspectives on music therapy were embedded in a holistic conception of the human person in which emotional and spiritual balance could not be entirely separated from bodily and intellectual states. This historical perspective should not be treated as empirical evidence for the effectiveness of contemporary music listening. Its relevance lies instead in showing that the relationship between music and well-being can be conceptualised beyond a narrowly biomedical framework. In a Malaysian higher education setting, this creates an additional basis for examining whether students themselves associate music with emotional balance and learning experience.

Despite the wider literature on music therapy and the psychological processing of music, a gap remains between evidence derived from structured or clinical interventions and students' everyday engagement with music in non-clinical higher education settings. The present study addresses this gap by focusing specifically on students'

own patterns of music use and their perceived emotional and learning-related effects. The data were collected from Malaysian higher education students in 2021 as part of a broader questionnaire. A previous publication from the same survey reported online-learning constraints and their perceived effects on students' mental and emotional health (Roziyah et al., 2022). Importantly, that publication did not report the separate questionnaire domains concerning students' interest in music or their perceptions of music in relation to stress, mood, learning enjoyment and emotional stability. The present article analyses only these previously unreported variables and therefore addresses a distinct research question rather than reproducing the findings of the earlier publication.

Accordingly, this study has two objectives: first, to examine students' patterns of interest in and use of music in academic and everyday contexts; and second, to analyse students' perceptions of the role of music in reducing stress, influencing mood and motivation, increasing enjoyment of learning, and supporting emotional stability. The study contributes to the literature in two ways. Empirically, it provides evidence from Malaysian higher education students on dimensions of music use that sit between everyday listening, emotional self-regulation and academic experience. Conceptually, it argues for a careful distinction between perceived supportive functions of music and the clinical efficacy of professional music therapy. By maintaining this distinction, the study positions music as a potential self-directed well-being resource whose perceived value can be investigated without overstating what descriptive survey data can demonstrate.

LITERATURE REVIEW

Music, emotional regulation and well-being

Music has long been associated with emotional expression and regulation. In therapeutic settings, music-based approaches have been used to promote relaxation, reduce anxiety and improve comfort. Ciftci and Oztunc (2015), for example, reported effects of music on comfort, anxiety and pain among intensive care patients, while Fallek et al. (2019) examined the feasibility of bedside music therapy for critically ill patients. Giordano et al. (2020) similarly investigated receptive music therapy among clinical staff involved in the COVID-19 response and reported its potential for stress reduction and improved well-being. Although these populations differ from university students, the studies establish a broader empirical basis for considering music in relation to emotional states.

Meta-analytic and review evidence further suggests that music can be associated with measurable psychological and physiological outcomes. Lee (2016), in a meta-analysis of 97 studies, found that music interventions were associated with reductions in pain and emotional distress as well as changes in several physiological indicators. Mofredj et al. (2016) reviewed the therapeutic potential of music for critically ill patients, while Tan et al. (2020) examined music therapy treatments in an inpatient setting. These findings strengthen the rationale for studying perceived emotional effects of music, but the distinction between clinical intervention and ordinary music listening remains essential. The present study therefore treats students' responses as perceptions of supportive effects rather than evidence of therapeutic efficacy.

Music, stress and psychobiological response

One explanation for the perceived calming effects of music concerns its relationship with stress-response systems. Chanda and Levitin (2013) review evidence concerning the neurochemistry of music and discuss pathways through which musical engagement may be associated with stress, reward, motivation and social affiliation. Such mechanisms are relevant to students because academic activities often involve fluctuating levels of arousal, concentration and emotional pressure. A student who chooses music while studying or when feeling distressed may therefore be using music as a form of self-regulation, even when the activity is not formally conceptualised as therapy.

Neuroscientific research also demonstrates that musical information is processed through complex auditory and cognitive mechanisms. Albouy et al. (2020) identify different sensitivities in the processing of speech and melody, and Chabin et al. (2022) show the simultaneous processing of vocal melody and musical background in generating musical predictions. These studies do not directly establish improvements in student well-being, but they support the proposition that music engages cognitive and affective processes capable of shaping subjective

experience. For higher education research, the relevant question is therefore not only whether music produces clinical outcomes but also how students perceive its role in everyday emotional and learning contexts.

Music, learning and the student context

Students may engage with music for purposes that overlap emotional and academic domains. Listening while studying, playing music during assignment completion or selecting favourite music when feeling distressed are behaviours that combine preference, habit, mood regulation and learning environment. The value of examining these practices lies in recognising that student well-being is not confined to formal counselling or treatment settings. Everyday resources may form part of the broader repertoire through which students manage academic demands and maintain motivation.

From a holistic perspective, Roziah et al. (2021) argue that historical Muslim scholarship on music therapy connected bodily, emotional, spiritual and intellectual dimensions of human experience. While the present study does not test this philosophical framework, it provides a useful contextual lens for interpreting students' positive perceptions of music as more than entertainment. The empirical issue remains whether respondents themselves associate music with stress reduction, improved mood, learning enjoyment and emotional stability. These dimensions form the analytical focus of the present study.

Conceptual Framework for Music Listening, Emotional Well-Being and Learning

The present study conceptualises students' music use as a set of self-directed listening practices that may be perceived as relevant to emotional well-being and learning-related experience. Within the available questionnaire, music-listening practices are represented by listening while studying, listening while completing academic assignments, listening during daily activities, listening to favourite music when distressed, and listening in relation to examination stress and anxiety. These practices provide the exposure and behavioural context for the two groups of perceived outcomes examined in the study.

The first outcome domain concerns perceived emotional well-being. It comprises perceived stress reduction during online learning, feeling better, and emotional stability, while mood is represented within the questionnaire item linking mood and motivation to learn. The second domain concerns perceived learning-related outcomes, specifically motivation to learn and enjoyment and interest in learning. The framework therefore proposes an interpretive pathway from music-listening practices and self-regulatory use of music to perceived emotional and learning-related outcomes. It does not posit a causal mechanism because the cross-sectional descriptive data do not establish temporal order or statistical relationships between exposure and outcome variables.

The framework is deliberately restricted to variables available in the original dataset. The survey did not measure duration of listening, detailed listening frequency, music genre or musical characteristics, leisure listening as a distinct comparison condition, perceived concentration or attention, memory or information retention, or objectively measured academic performance. Emotional well-being and learning-related constructs were also not assessed using validated psychometric instruments. These variables are therefore not incorporated as observed variables in the present analysis. Similarly, academic workload, sleep, socioeconomic circumstances, study environment and existing mental-health status were not measured and cannot be controlled as potential confounders. Accordingly, the framework organises the interpretation of the available self-reported data rather than functioning as a validated explanatory model.

METHODOLOGY

This article presents a secondary analysis of previously unreported variables from a questionnaire survey conducted in 2021 among students enrolled in Malaysian higher education institutions. The questionnaire was developed specifically for the broader study and was distributed openly to students. A total of 79 respondents from five higher education institutions participated. The dataset has previously been used in an article examining online-learning constraints and their perceived effects on mental and emotional health (Roziah et al., 2022). The present analysis excludes those previously published outcome variables and focuses exclusively on the questionnaire domains concerning students' interest in music and their perceptions of music's effects.

The music-related section contained six statements concerning students' engagement with music: listening to music while studying, listening to favourite music when feeling distressed, listening to music during daily activities, using music in relation to examination stress and anxiety, playing music while completing academic assignments, and perceiving music as potentially useful in relation to mental health concerns. A second domain contained five statements concerning perceived effects: reducing stress during online learning, influencing mood and motivation to learn, improving feelings, increasing enjoyment and interest in learning, and supporting emotional stability.

For the purposes of the conceptual framework, the first domain was treated as descriptive evidence of music-listening practices and beliefs, while the second domain represented perceived emotional well-being and learning-related outcomes. The item concerning the possible use of music as therapy for mental health problems was retained as a belief item and was not treated as evidence of therapeutic exposure or clinical outcome. No validated emotional well-being, stress, motivation, engagement, concentration, memory or academic-performance scale was included in the original questionnaire. Consequently, no composite psychometric scores or objective academic outcomes were constructed for this secondary analysis.

Responses were recorded on a five-point Likert scale ranging from Strongly Disagree to Strongly Agree. Descriptive analysis was conducted using the Statistical Package for the Social Sciences (SPSS), with frequencies, percentages, means and standard deviations used to summarise responses. Following the classification used in the original study, mean scores from 1.00 to 2.40 were interpreted as Disagree, 2.41 to 3.80 as Moderately Agree, and 3.81 to 5.00 as Agree (Wiersma, 1995). Because the analysis is descriptive, the findings indicate the direction and strength of respondents' perceptions and should not be interpreted as causal evidence that music produces the reported psychological effects.

At the time this study was conducted in 2021, formal ethical approval procedures for minimal-risk social science research had not yet been fully institutionalised within the university. Nevertheless, participation in the study was voluntary, and informed consent was obtained from all participants prior to their participation.

RESULTS

Music in Students' Academic and Everyday Practices

The first domain examined how respondents incorporated music into studying, daily activities and emotionally demanding situations. These practices provide the behavioural context for interpreting the perceived role of music in students' emotional well-being and learning. Overall, the results indicate a favourable orientation towards music. Four of the six items recorded mean scores within the Agree range, while two were classified as Moderately Agree. The strongest pattern was observed for listening to music while studying, followed closely by the perception that music could be useful in relation to mental health concerns and the tendency to listen to favourite music when feeling distressed.

Item	Strongly disagree (%)	Disagree (%)	Not sure (%)	Agree (%)	Strongly agree (%)	Mean	Interpretation
I like listening to music while studying	2.5	10.1	17.7	20.3	49.4	4.0380	Agree
When I feel distressed, I listen to my favourite music	2.5	11.4	13.9	27.8	44.3	4.0000	Agree
I listen to music every day while	3.8	12.7	24.1	22.8	36.7	3.7595	Moderately Agree

carrying out daily activities							
I often listen to music to reduce stress and anxiety when facing examinations	6.3	13.9	15.2	25.3	39.2	3.7722	Moderately Agree
I allow music to play while completing academic assignments	5.1	10.1	16.5	25.3	43.0	3.9114	Agree
Music can be used as therapy for mental health problems	3.8	10.1	8.9	35.4	41.8	4.0127	Agree

Table 1: Music in students' academic and everyday practices (n = 79)

Nearly seven in ten respondents either agreed or strongly agreed that they liked listening to music while studying (69.7%), and 72.1% reported listening to favourite music when feeling distressed. The corresponding mean scores of 4.0380 and 4.0000 indicate that respondents reported favourable perceptions of music in both academic activity and emotional coping contexts. A similarly high proportion, 68.3%, agreed or strongly agreed that they allowed music to play while completing academic assignments, suggesting that music was not restricted to leisure but was incorporated into the study environment.

The two items classified as Moderately Agree concerned listening to music every day during routine activities (M = 3.7595) and listening to music to reduce stress and anxiety when facing examinations (M = 3.7722). Even for these items, the combined Agree and Strongly Agree responses were 59.5% and 64.5%, respectively. The findings therefore indicate variation in the regularity and purpose of music use rather than rejection of music. Most notably, 77.2% agreed or strongly agreed with the statement that music could be used as therapy for mental health problems (M = 4.0127). This item should be interpreted as a measure of students' belief or acceptance, not as evidence that respondents had received clinical music therapy.

Perceived Role of Music in Emotional Well-Being and Learning

The second domain examined the role that respondents attributed to music in specific emotional and learning-related outcomes. All five items recorded mean scores above 3.90 and were classified as Agree. This consistency indicates that students generally perceived music as supportive of stress management, mood and motivation, learning enjoyment and emotional stability.

Item	Strongly disagree (%)	Disagree (%)	Not sure (%)	Agree (%)	Strongly agree (%)	Mean	Interpretation
Relaxing music can reduce stress during online learning	2.5	6.3	15.2	30.4	45.6	4.1013	Agree

Music influences my mood and motivation to learn	2.5	5.1	12.7	36.7	43.0	4.1266	Agree
Music can make me feel better	1.3	10.1	17.7	31.6	39.2	3.9747	Agree
Music can create enjoyment and interest in learning	1.3	13.9	13.9	31.6	39.2	3.9367	Agree
Music can stabilise my emotions	5.1	7.6	16.5	30.4	40.5	3.9367	Agree

Table 2: Perceived role of music in emotional well-being and learning (n = 79)

The highest mean score was recorded for the statement that music influences mood and motivation to learn ($M = 4.1266$), with 79.7% of respondents selecting Agree or Strongly Agree. The statement that relaxing music can reduce stress during online learning followed closely ($M = 4.1013$), with 76.0% agreeing or strongly agreeing. These two items show that respondents perceived music positively in relation to both affective regulation and the motivational dimension of learning.

Positive perceptions were also evident for the remaining outcomes. A combined 70.8% agreed or strongly agreed that music could make them feel better ($M = 3.9747$), while 70.8% perceived that music could create enjoyment and interest in learning ($M = 3.9367$). For emotional stability, 70.9% selected Agree or Strongly Agree ($M = 3.9367$). Taken together, the results show a coherent pattern in which music was perceived as relevant to stress, mood, learning enjoyment and emotional balance. Because these measures capture self-reported agreement, they demonstrate perceived usefulness rather than objectively measured psychological change.

DISCUSSION

The findings reveal a coherent pattern in the roles students perceived for music across academic routines and emotional experiences. Students reported listening to music while studying and completing assignments, turning to favourite music when feeling distressed, and perceiving music positively in relation to stress, mood, learning enjoyment and emotional stability. These results should be interpreted within the conceptual framework as parallel patterns of self-reported listening practices and perceived outcomes. The descriptive design does not test whether particular listening practices predict particular outcomes and does not demonstrate that music produced objectively measured psychological or learning changes. Music therefore appears in the data not merely as a leisure preference but as a self-selected resource that respondents perceived as relevant to their emotional and learning experiences.

The strongest perceived effect concerned the influence of music on mood and motivation to learn ($M = 4.1266$), followed by the perception that relaxing music could reduce stress during online learning ($M = 4.1013$). These findings suggest that the perceived value of music was not confined to relaxation. Respondents connected music simultaneously with affective state and academic engagement, indicating that emotional regulation and learning motivation may be experienced as interrelated rather than separate dimensions. This interpretation is consistent with Chanda and Levitin's (2013) discussion of neurochemical pathways associated with reward, stress and

motivation, as well as research demonstrating the complex cognitive processing involved in musical experience (Albouy et al., 2020; Chabin et al., 2022). The present study does not measure these mechanisms, and causal inference would therefore be inappropriate. Nevertheless, the convergence between students' perceptions and the broader psychobiological literature provides a plausible conceptual basis for further investigation of music as part of students' self-regulatory repertoire.

The stress-related findings can also be interpreted in relation to evidence from music-based interventions in other populations. Giordano et al. (2020) identified the potential of receptive music therapy to reduce stress and improve well-being among clinical staff, while Ciftci and Oztunc (2015) reported effects of music on comfort, anxiety and pain in intensive care settings. Fallek et al. (2019) similarly examined the feasibility of bedside music therapy for critically ill patients, and Lee's (2016) meta-analysis demonstrated reductions in emotional distress alongside pain-related outcomes across a substantial body of studies. These studies involve different populations, intervention conditions and outcome measures from those used here. They should therefore be treated as contextual evidence rather than direct confirmation of the present results. What the current study adds is evidence that a non-clinical student population independently associates music with comparable emotional domains, particularly stress, mood and emotional balance, even when music is encountered through ordinary everyday listening rather than a professionally delivered intervention.

A second important pattern concerns the integration of music into learning itself. Nearly seven in ten respondents agreed or strongly agreed that they liked listening to music while studying, and a similar proportion reported allowing music to play while completing academic assignments. In addition, 79.7% agreed or strongly agreed that music influenced their mood and motivation to learn, while 70.8% associated music with greater enjoyment and interest in learning. These results indicate that, for many respondents, music formed part of the learning environment rather than operating only as a response to distress. This distinction matters because the potential educational relevance of music may arise through perceived motivation, enjoyment and emotional readiness rather than through direct improvement in cognitive performance. The study did not measure concentration, memory, grades or task performance, and it would therefore be inappropriate to claim that music improves academic achievement. Instead, the findings identify a student-perceived pathway through which music may shape the affective conditions surrounding learning.

The high level of agreement with the statement that music could be used as therapy for mental health problems is particularly noteworthy. More than three quarters of respondents agreed or strongly agreed with this proposition. However, this result requires careful conceptual interpretation. The questionnaire item measures acceptance of the idea that music can have therapeutic value; it does not demonstrate that respondents understood the professional definition of music therapy, had received treatment from a qualified music therapist or experienced clinically verified improvement. The distinction between everyday listening and professional music therapy is therefore not a minor terminological issue but a central interpretive boundary for the study. The findings support the proposition that students are receptive to the perceived therapeutic potential of music, while the evidence remains insufficient to conclude that self-directed listening constitutes treatment. Maintaining this boundary strengthens rather than weakens the contribution of the study because it locates the findings precisely within what descriptive perception data can establish.

The Malaysian setting adds a further interpretive layer to this distinction. Roziah et al. (2021) show that historical Muslim scholarship approached music therapy through an understanding of human well-being that connected physical, emotional, spiritual and intellectual dimensions. The current findings cannot validate that historical framework, but they demonstrate an interesting contemporary parallel: respondents associated music with feeling better, emotional stability, motivation and enjoyment of learning rather than with a single isolated outcome. This multidimensional pattern suggests that students' perceptions of music may be better understood within a broad conception of well-being than within a purely symptom-oriented model. Future research could examine whether cultural, religious or philosophical understandings of music influence such perceptions and whether the meaning attributed to music differs across student groups and institutional contexts.

From a higher education perspective, the findings point towards a differentiated model of support. Professional counselling and mental health services are indispensable for students requiring assessment or treatment, and music-based activities should not be positioned as substitutes for those services. At the same time, universities

increasingly operate within a wider well-being ecosystem that includes preventive, developmental, social and creative forms of support. The strong student receptiveness observed in this study suggests that appropriately designed non-clinical music activities, such as guided relaxation sessions, creative music engagement or student-led musical programmes, could be explored as complementary components of campus well-being initiatives. Their value would lie in accessibility and engagement rather than in claims of clinical treatment. Any implementation should therefore use clear terminology, appropriate referral boundaries and evaluation mechanisms capable of distinguishing perceived enjoyment from measurable well-being outcomes.

Taken together, the study contributes a more nuanced account of the perceived role of music at the intersection of student emotional well-being and learning. Existing clinical literature demonstrates that structured music-based interventions can influence psychological and physiological outcomes in particular settings, whereas the present study shows that students themselves perceive supportive functions in ordinary music use across stress, mood, emotion and learning. The contribution is therefore located at the interface between therapeutic knowledge and everyday self-regulation. This interface warrants greater attention because low-intensity practices may influence how students experience academic life even when they do not constitute formal interventions. The next empirical step is to move beyond descriptive perception data by testing whether different patterns of music use are associated with validated measures of stress, anxiety, emotional regulation, motivation and academic engagement, and by determining which effects, if any, persist under experimental or longitudinal conditions.

The conceptual framework also highlights variables that cannot be evaluated with the present dataset. Students' responses may vary according to factors unrelated to music itself, including academic workload, sleep, socioeconomic circumstances, study environment and pre-existing mental-health status. Because these potential confounders were not measured, the present analysis cannot determine whether they account for part of the reported perceptions. The same caution applies to characteristics of music exposure. Differences in genre, duration, frequency, listening context and individual preference may plausibly shape students' experiences, but the questionnaire does not provide sufficiently detailed measures to test these possibilities.

Limitations And Future Research

This study has several limitations. First, the sample comprised only 79 respondents from five Malaysian higher education institutions and was obtained through an openly distributed questionnaire. The findings therefore cannot be generalised to all university students in Malaysia. Second, the analysis is descriptive and relies entirely on self-reported perceptions and practices. The questionnaire did not use validated instruments for emotional well-being, stress, learning motivation, engagement or other learning-related constructs, and it did not objectively measure academic performance. The findings should therefore be interpreted as perceived benefits or perceived roles rather than therapeutic, causal or objectively demonstrated educational effects. Third, the available music-exposure measures do not capture listening duration, detailed frequency, genre and musical characteristics, or a clear distinction between study and leisure listening. The study also did not measure perceived concentration and attention, memory or information retention. Fourth, potential confounders including academic workload, sleep, socioeconomic circumstances, study environment and existing mental-health status were not included in the original dataset and could not be controlled. Finally, the questionnaire measured ordinary self-directed music use rather than exposure to a standardised music intervention.

Future research should employ larger and more diverse samples and use validated psychological and educational instruments to examine emotional well-being, stress, motivation, engagement, concentration and related constructs. Music exposure should be characterised more precisely through frequency, duration, genre or musical characteristics, listening context, and the purpose of listening, including mood or stress regulation. Where learning effects are investigated, perceived concentration and memory should be distinguished from objectively measured academic or task performance. Multivariable designs should also account for relevant confounders such as academic workload, sleep, socioeconomic circumstances, study environment and existing mental-health status. Longitudinal, experimental or quasi-experimental designs would then be required before causal claims could be considered. Research should also continue to distinguish ordinary music listening, structured music-based well-being activities and professional music therapy.

CONCLUSION

This study examined the perceived role of music in emotional well-being and learning using previously unreported music-related variables from a survey of Malaysian university students. The findings show that respondents generally held positive attitudes towards music and commonly integrated it into studying, assignment completion and emotional coping. They also perceived music as relevant to reducing stress, influencing mood and learning motivation, increasing enjoyment and interest in learning, and supporting emotional stability.

The results indicate that students perceive music as an accessible self-directed resource with a supportive role in their emotional and learning experiences. The contribution of the study is therefore evidence of student perceptions and reported listening practices, not evidence of clinical efficacy, objective cognitive improvement or causal effects. Because the questionnaire used self-reported, non-validated items and did not measure concentration, memory or academic performance, perceived benefit from everyday listening should not be conflated with professionally delivered music therapy or objectively demonstrated learning outcomes.

For higher education institutions, the findings provide a basis for further investigation of music as a complementary, non-clinical element of student well-being and learning environments. Stronger evidence will require larger samples, validated measures, more detailed assessment of music-listening exposure and context, and control for relevant confounding factors. Objective academic outcomes should be included where claims concerning academic performance are intended.

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Declarations

Ethical Statement: At the time this study was conducted in 2021, formal ethical approval procedures for minimal-risk social science research had not yet been fully institutionalised within the university. Nevertheless, participation in the study was voluntary, and informed consent was obtained from all participants prior to their participation.

Conflict of Interest: The authors declare no conflict of interest.

Data Availability: The data analysed in this article form part of a 2021 survey dataset. The present article reports only music-related variables that were not included in the earlier publication based on the same survey.

Prior Publication Disclosure: An earlier article based on the same survey dataset reported online-learning constraints and their perceived effects on mental and emotional health. The present article excludes those previously published outcomes and analyses separate, previously unreported music-related questionnaire domains.

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