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Exploring the importance of the works of Johann Sebastian Bach: Pedagogical perspectives and the emotional response of listeners

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Music education in the United Kingdom has long been centred on the study of historic European classical music. Many studies within the field of Music Psychology have investigated the various ways in which people respond to Western Art Music, and how those responses may differ in accordance with the listening context, but very few have examined the effect of music by specific composers. Bach's music is still performed regularly around the world—arguably more so than any other composer—and continues to be regarded as essential repertoire by instrumental teachers across many disciplines. This study sought to investigate the potential reasons for this from the perspective of pedagogic value and listener response. A mixed-methods approach was adopted, incorporating semi-structured interviews with music educators alongside a listening experiment in which participants rated their emotional responses to a selection of pieces by Bach, Beethoven and Mozart. A reflexive thematic analysis was used to present an apologia for the continued propagation of Bach's music in mainstream education, and listeners' emotional responses were measured using a standardised scale. Additional ratings for valence, arousal, familiarity and overall enjoyment were also gathered from each participant. Results indicate a statistically significant relationship between the music of specific composers and some emotion categories. These findings could lend support to the continued hagiolatry of J. S. Bach in music education, in spite of the welcome drive towards the diversification of the curriculum.

KEYWORDS

Bach, Mozart, Beethoven, music education, music listening, emotional responses

1. Introduction and background

Western Art Music is a remarkably broad and varied genre. Several centuries of tradition and custom, alongside the ideas and innovation of some key individuals at certain points in history, have created an expansive musical landscape that is the subject of much research and international acclaim (Mehl, 2013). Jorgensen (2003) suggests that it is precisely this fact that makes it worthy of study—that Western Art Music represents a monumental human achievement, and that no further justification ought to be needed for its prevalence within music education. Further, the claim has been made that it is objectively superior to popular music (Young, 2016). Perhaps, it is this line of thought that prompted the Department for Education in the United Kingdom to insist that, at GCSE level, “at least one area of study must be drawn from music composed in the Western Classical Tradition, with all or the majority being composed between 1650 and 1910” (Department for Education, 2015, p. 7), regardless of pupils' individual interests or skillset. This requirement has been called into question in recent years (Green, 2006; Allsup, 2011), based largely on the fact that such

music is less popular from a consumer perspective (Kunst, 2022)¹ and that this may mean it is less relevant to learners. However, the suggestion that education must only focus on what is popular is flawed. After all, popularity does not necessarily equate to universal enjoyment, and nor does it imply objective quality (Hayes et al., 2021).

Previous research has considered the ways in which listeners respond to Western Art Music (Labbé et al., 2007; Castillo-Pérez et al., 2010; Imbir and Gołąb, 2016), but there is often a lack of specificity regarding the music being investigated. Whilst they may state which pieces of music were used in the research, the focus is often quite narrow, emphasising the effect of musical parameters or emotive qualities. It has been shown that musical parameters could hold more sway than genre over listener responses (Sloboda, 1991; Kellaris and Kent, 1994; Solberg and Dibben, 2019), and it can therefore be difficult to draw any generalisable conclusions from such research. For example, Ramirez et al. (2018) found significant differences in heart rate among people who had listened to Rachmaninoff when compared to those who had listened to Julián Carrillo. The dissonant, microtonal music of the latter was shown to have caused an elevated heart rate in participants, whereas the former was apparently able to evoke a more relaxed state. Both composers might rightly be regarded as Western Art Music, and so the markedly different responses in heart rate being caused by Rachmaninoff when compared to Carrillo means it would be misleading to attribute a causal effect to the genre as a whole. It follows, then, that some differentiation between composers within each genre is necessary and worthy of investigation.

Although it is likely to be the musical parameters which caused the effect in the above case, it is fair to say that some composers employ particular musical devices more readily than others (Dor and Reich, 2011; Georges, 2017; Wong et al., 2020). Much of this type of content may be reflective of the various conventions and expectations of the time (Lester, 1996; Webster, 2004), but it can reasonably be suggested that Beethoven seemed to favour an intense, dramatic sound over the mellifluous, flowing melodies one might encounter in Schubert's work (Istel, 1928; Simonton, 1987), even despite their being almost exact contemporaries of each other. Whilst a good deal of scholarly enquiry continues to take place into the styles of individual composers from a musicological perspective, there is a lack of empirical research into the question of whether one composer might elicit certain responses more effectively than another.

Since it is well established that music can and does elicit emotional responses from listeners, it is helpful to understand precisely how and why this happens. Some research has shown that a range of faculties are involved with emotional responses (Juslin et al., 2013), and that these can be targeted with specific musical examples. Logically, then, one can assume that listeners can and do experience a range of emotions during an entire work, since it would be unusual for musical content to simply be repeated for the duration of the piece. The question therefore becomes whether some composers utilise certain types of musical parameter to a greater or lesser degree than others, and whether such usage causes the specific mechanisms described by Juslin et al. (2013) to react more powerfully or more often as a result.

That some composers incorporate particular musical elements more explicitly than others is not in doubt (Van Kranenburg and Backer, 2005;

Mearns et al., 2010; Kaliakatsos-Papakotsas et al., 2011), and this may cause music educators to use their work more regularly as exemplars. There is some evidence to suggest that J. S. Bach's approach to harmony has been more influential than that of any other composer (Wu et al., 2015), and, as such, his work is often heralded as the gold standard from a pedagogical perspective (Sanchez-Behar, 2018). Whilst this may provide a basis for the continued study of his music in mainstream educational circles, it does not automatically follow that it will provoke a stronger response in listeners when compared to music by other composers. One of the principle aims of this present study is therefore to investigate listener response to selected works of specific composers, in order to determine whether there are any observable or measurable differences.

When one chooses to learn a musical instrument, there is more often than not a selection of set works and repertoire to draw from in the form of graded examination syllabi. This framework for learning could be said to be rooted in the classical tradition, pioneered as it was by one of the leading establishments in the education of Western Art Music, Trinity College, in 1877 (Anon, 2022b).² Other prestigious examining bodies such as The Associated Board of the Royal Schools of Music (ABRSM) followed shortly after (Wright, 2015).³ Little has changed about the format since then. Where a jazz or contemporary syllabus is offered to candidates, it is not currently available on all instruments. In fact, a jazz syllabus was not introduced by ABRSM until 1999—some time after the genre had experienced its zenith. The systemic tendency of instrumental education to focus on Western Art Music is drawn into question: perhaps it is overly reactionary, leaving it too late to offer a viable alternative for those musicians who are less interested in the formal nature of the classical tradition (Green, 2006). If, however, it is possible to demonstrate that some Western Art Music has an especially broad appeal that transcends demographics such as age, gender, and nationality, it may provide a basis for the continued inclusion of such music within the field of music education. Conversely, if such a discovery is not forthcoming, then this would add credence to the growing efforts to increase the diversification of what is often viewed as an elitist art form, given that it appears to focus predominantly on white men from European history (Whale, 2008). Investigating the required repertoire for graded examinations across a range of instruments may also provide answers to the question of whether some composers are being preferred over others.

A recent poll, conducted by YouGov and published online in 2022, revealed that Mozart, Beethoven and J. S. Bach are the three most popular and well-known composers in the United Kingdom (Anon, 2022a).⁴ This is further attested to by an article on the Classic FM website, which states that these three composers enjoyed the most streams on Spotify in 2021 (Hall, 2022).⁵ These data can be seen in Table 1. Despite Bach being the least popular and the least well-known, his music has still been streamed more than the others. Although the difference is not substantial, this could be indicative of a greater level of liking for his music among those who enjoy it, despite that group of listeners being slightly smaller than for other composers; perhaps, the

1 <https://www.statista.com/forecasts/997919/digital-music-preferences-by-genre-in-the-uk>

2 <https://www.trinitycollege.com/about-us/timeline>

3 [https://abrs.org/en/about-us/news/libretto-magazine/archive/?abrs\[newsId\]=70276](https://abrs.org/en/about-us/news/libretto-magazine/archive/?abrs[newsId]=70276)

4 <https://yougov.co.uk/ratings/arts/popularity/classical-composers/all>

5 <https://www.classicfm.com/music-news/classical-composers-have-earned-on-spotify/>

TABLE 1 The most popular composers of Western art music in the United Kingdom.

Composer	Fame	Popularity	Streams (millions)
Wolfgang Amadeus Mozart	83%	59%	6.0
Ludwig van Beethoven	83%	56%	6.5
Johann Sebastian Bach	78%	53%	6.7

Fame refers to the percentage of people polled who have heard of a composer. Popularity refers to the percentage who hold a positive opinion of that composer's music. Streaming data refers to the number of streams on Spotify throughout 2021.

enjoyment is more deeply felt but not as widely experienced throughout the population. Being a baroque composer, it is possible that the comparative lack of available instruments for which to compose, and the overall timbre that characterises his music, is perceived as being lower in complexity and therefore more immediately accessible to non-musicians (Madison and Schiöde, 2017).

In response to the existing literature, and in an attempt to critically evaluate some of the working practices within mainstream music education, this exploratory research sought to answer the following research questions:

1. Is the music of J. S. Bach favoured over other composers in the formal music examination system?
2. Do teachers and practitioners reinforce or undermine any such preferences?
3. Does Bach's music cause any measurable variation in the emotional response of listeners, compared to Mozart and Beethoven's music?
4. Do listeners experience any measurable difference in overall valence and arousal levels when listening to music by Bach, Mozart or Beethoven?
5. Do listeners report any measurable difference in overall enjoyment levels when listening to Bach, Mozart or Beethoven?
6. Do demographics such as age, gender, and musical training have a moderating effect on any such relationships?

The possible implications of the findings of this research are potentially noteworthy for music educators and students alike, since they may shed light on some widely held attitudes among performers and teachers. Since many instrumental teachers focus on a formal graded syllabus and teach the required repertoire accordingly, it is worth investigating their reasons for doing so. Indeed, the very question of whether such reasons exist is quite pertinent. There is the possibility that teachers teach what they were taught, without paying due attention to the objective value of the material. Likewise, music students may seek to understand the rationale behind the in-depth study of music which may appear irrelevant to some. The conclusions of this study may also prove interesting for casual music listeners and those persons with an interest in Western Art Music.

2. Methodology

This study comprised two concurrent elements. Firstly, semi-structured interviews were conducted with high-level music

practitioners in order to gather qualitative data relating to their experiences of teaching and learning on their chosen instrument or instruments, as well as some more general opinions relating to music education and musical practice and performance. High-level practitioners herein include any individual who has achieved an advanced level of proficiency on one or more instruments, but was not limited to professional performers; also included were composers, teachers (both instrumental and classroom-based) and portfolio musicians. Participants for this portion of the study were recruited by approaching various conservatoires, colleges and universities, as well as some well-respected individuals within the field. Some were also personal contacts known to the researcher in a professional capacity, or people who were suggested as or presumed to be interested parties further details of which can be found in section 6 below.

2.1. Ethics statement

Full ethical approval for this research was granted by the Arts and Humanities Ethics Committee at the University of York. There were no perceived risks that were not adequately mitigated against, and full anonymity was granted to all participants.

2.2. Interviews

Interview questions were grouped into three broad categories: *Experience of Learning*, *Experience of Teaching* and *General Experience of Music Education*. A copy of these questions is included as Appendix A. The interviews were conducted online via the Zoom software. This had the dual purpose of broadening the scope of possible interview candidates without the need for extensive travel, and also enabled interviewees to choose their preferred location. Although no potentially sensitive questions were being asked, and there was certainly no intention for any such topics to arise, this was still believed to be an important consideration. Each participant was invited to consent to being quoted in this report where relevant or appropriate, but was under no obligation to do so. They were also provided with the additional option of being quoted but not named. All interviews were recorded and subsequently transcribed manually, after which a reflexive thematic analysis was conducted (Braun and Clarke, 2021). This process involved meticulously studying the transcripts of each interview, making notes of any key points and topics mentioned by participants and categorising them into prevalent themes. A largely inductive approach was taken to this analysis (Byrne, 2022), although not exclusively so. Some deductive analysis was deemed necessary and appropriate in order to adequately address the research questions and to maintain a degree of conciseness.

2.3. Listening study

The second element was a listening-based survey which took place online. Participants for this survey were recruited in various ways, but primarily by way of a social media drive and word of mouth. Interview participants were also invited to take part in this element of the study, but were not obliged to. This survey required participants to provide some basic demographic information about themselves, such as age, gender, nationality and whether they consider themselves a musician. They were also asked to state the extent to which they usually enjoy

classical music, using a Likert scale. Participants then listened to three pieces of music and answered a series of questions relating to the pieces.

Music selection was made in accordance with the recent YouGov poll, which stated that the three most popular classical composers are Beethoven, Mozart, and Johann Sebastian Bach (Anon, 2022a; see Table 1). In order to minimise the risk of participants simply comparing one piece of historic European classical music with another, it was necessary to select three works by each of these composers; this included one solo piano piece, one orchestral work and one composition for voice and orchestra. The final pieces used were thought to be representative of each composer by virtue of their prevalence, popularity and musical parameters, and are included in Table 2. As some of these musical works are rather long, it would have been unrealistic to expect any participants to listen to all nine pieces as part of the study. Therefore, once participants had completed the demographics portion of the survey, they were given a random combination of three pieces to listen to from the nine pieces selected for use in this study. This was done using a randomising feature of the Qualtrics software on which the survey was created. To further strengthen the internal validity of the survey, the randomiser was set up in such a way that it chose one piece from the solo piano group of pieces, one piece from the orchestral group and one from the group of vocal pieces. In this way, it was possible to mitigate the possibility of a between-observer bias. Participants were required to listen to each piece of music in its entirety and were unable to move on to the next page before having done so. This was a defining feature of the study because it circumvented the risk of examining the effects of particular musical characteristics in isolation. It was crucial to examine the ways in which listeners respond to these musical elements in “real time,” as they occur within complete pieces of music, since this appears to be how the majority of people enjoy music in their everyday lives (North et al., 2004; Krause et al., 2014).

After listening to each piece, they would answer some questions relating to their experience of doing so. These questions covered their emotional responses to the music, as well as familiarity, valence, arousal and overall enjoyment.

TABLE 2 Music selection for the three composers investigated in the listening study.

Composer	Piece 1	Piece 2	Piece 3
J. S. Bach	<i>Prelude in C Major</i> , from “The Well-Tempered Clavier” (Bk. 1)	<i>Brandenburg Concert No. 3 in G major</i> , I. Allegro	<i>Jesu, Joy of Man's Desiring</i>
W. A. Mozart	<i>Piano Sonata No. 16 in C Major</i> , I. Allegro	<i>Symphony No. 40 in G Minor</i> , I. Molto allegro	<i>Requiem in D Minor</i> , III. Lacrimosa
L. van Beethoven	<i>Piano Sonata No. 14 in C# Minor</i> , I. Adagio sostenuto	<i>Symphony No. 5 in C Minor</i> , I. Allegro con brio	<i>Symphony No. 9 in D Minor</i> , IV. Finale

Piece 1 is a category for solo piano pieces only. Piece 2 is an orchestral category, whilst Piece 3 indicates music that was written for orchestra and choir.

2.4. Measures

In order to measure participants' emotional responses to the music, the Geneva Music-Induced Affect Checklist was used (GEMIAC; Coutinho and Scherer, 2017). This scale consists of 14 word pairs or short phrases to summarise an emotion category. Although the GEMIAC is very similar in content to the Geneva Emotional Music Scale (GEMS; Zentner et al., 2008), it was preferred here largely owing to the fact that it includes some emotion classes that are seemingly negative in nature, such as boredom and indifference. This was seen as important due to the sampling method used, in that not all participants necessarily enjoyed Western Art Music in everyday life and these individuals would perhaps have had difficulty providing accurate responses without such options. After listening to each piece of music, participants were required to complete all questions of the GEMIAC measure twice; once relating to the intensity of each perceived emotion category, and once relating to frequency, in accordance with the intended use of the scale.

A slightly adapted version of the Affect Grid (Russell et al., 1989) was used to measure participants' valence and arousal levels in relation to each piece of music. In its original form, the Affect Grid requires participants to indicate how they are feeling at a given point in time by marking an area on a grid with *pleasure-displeasure* on the *x*-axis and *arousal-sleepiness* on the *y*-axis. In order to generate precise and meaningful data through the medium of an online survey, this was amended to two separate Likert scales ranging from -5 to 5 , one for valence and another for arousal. Participants were asked to provide an overall rating for both valence and arousal in relation to each of the pieces they listened to.

Familiarity was measured using a five-point Likert scale ($1 = I$ have never heard it before, $5 = I$ know it very well), where participants indicated how much they recognised the piece. This was done in response to the theory that individuals tend to report greater liking for music that is familiar to them (Hargreaves et al., 1980; Madison and Schiöde, 2017). If familiarity was having a moderating effect on participants' overall enjoyment of the music then it was important to take this into account so that the research questions could be investigated as thoroughly and reliably as possible.

Finally, participants were asked to rate their overall enjoyment of each piece. The question took the form of a five-point sliding scale, ranging from “I did not enjoy it at all” to “I enjoyed it very much.” These data were gathered with the intention of comparing it to each participant's stated usual enjoyment of classical music; even if a person does not usually enjoy a particular genre, it is possible that they might still enjoy specific examples of it.

Data from this listening study was gathered using Qualtrics and subsequent analysis was conducted using SPSS software. Because the study design incorporated a repeated measures aspect, it was necessary to restructure the dataset from the wide form into the long form. The index variable created during this process became the individual pieces of music, which were then subsequently grouped by composer in order to facilitate the appropriate methods of analysis.

2.5. Participants

Six semi-structured interviews were conducted. Prior to commencement of the interviews, each candidate was sent a link to complete a consent form and answer some demographic questions.

Details regarding the instruments and disciplines they teach were sought. All six were music educators; two participants teach music at a mainstream secondary school and one also does so at further education level. One interviewee teaches composition at a leading conservatoire whilst two are specialist instrumental teachers. The latter stated that they have also taught music at secondary school level, and all others mentioned that they have additional experience of instrumental teaching.

Interview participants were also asked to state their main instrument. There were three pianists, one violinist, one bass player and one drummer. Some multiple entries were received, with cello, viola and guitar all being mentioned. Moreover, all participants indicated that they possess at least a moderate level of ability on the piano. There was an even gender distribution with three male and three female interviewees. No data was gathered in relation to age or nationality.

A total of 31 people contributed to the listening study. Of these, 13 identified as male (41.9%) and 17 as female (54.8%). One participant declined to provide this information. A broad age range was indicated, with the youngest participant being 24 years old and the oldest 74 years old ($M=40.2$, $SD=17.5$), although four participants did not state their age. There was a majority of British participants ($n=23$, 74.2%), with the next largest group coming from China ($n=4$, 12.9%). One participant was Irish, another Northern Irish and another Australian, with one participant not disclosing their nationality. There were 21 musicians (67.7%), nine non-musicians (29%) and one participant whose musical training is unknown.

2.6. Procedure

At the outset of this study, an appraisal of the current examination syllabus requirements for three musical instruments was carried out. The piano, violin, and guitar syllabi for both ABRSM and Trinity examinations were scoured, and the number of pieces written by each of the three composers outlined above was noted in relation to instrument and exam board. These are the two largest, most well-known examining bodies in the world for music, and the instruments investigated are the three most widely taught tuned instruments in secondary schools.

Participants for the two main elements of this research were recruited using a combination of social media campaign, word of mouth and personal invitation. Interviewees were asked a set of questions relating to their learning journey, their teaching practices and their opinions about music education in general. Interviews were generally around half an hour in length, although this varied somewhat and was largely dependent on how much depth and detail was provided in responses.

The listening study took a similar length of time, but this was contingent on the pieces of music presented to each participant. The shortest piece was Bach's solo piano piece (2 min and 19 s), whilst the longest was the third of Beethoven's compositions (18 min and 14 s). Participants completed a consent form and answered some questions in order to gather some demographic information—this section of the survey took approximately 5 min. Thereafter, one piece of music from each of the three categories was presented to each participant, in a randomised fashion. This portion of the survey was set up in such a way that it randomised the music selection but that it presented each piece as equally as possible. After listening to each piece, respondents completed the GEMCIAC checklist (Coutinho and Scherer, 2017) and provided ratings for valence and arousal, familiarity and overall

enjoyment as outlined above. An identical process was repeated for the next two pieces of music.

3. Results (interviews and listening study)

3.1. Required repertoire

The total number of pieces across Grade 1 to 8 for each of the three composers being investigated is provided in Table 3. In the ABRSM piano syllabus, Bach's music was featured more regularly ($n=8$) than both Mozart ($n=5$) and Beethoven ($n=6$). Likewise in the Trinity syllabus, Bach's music was more widely featured ($n=7$) than Mozart ($n=2$) and Beethoven ($n=3$).

The ABRSM violin syllabus features Bach and Beethoven equally ($n=6$), but Mozart less regularly ($n=5$). The Trinity syllabus for violin features Bach most frequently ($n=11$), followed by Beethoven ($n=6$) and Mozart ($n=2$).

Bach's music is featured most regularly in the ABRSM guitar syllabus ($n=7$), with Beethoven featured less ($n=1$). There are no pieces by Mozart in the ABRSM syllabus for guitar. The Trinity syllabus for guitar also features Bach most frequently ($n=6$), but does not feature Mozart or Beethoven at all.

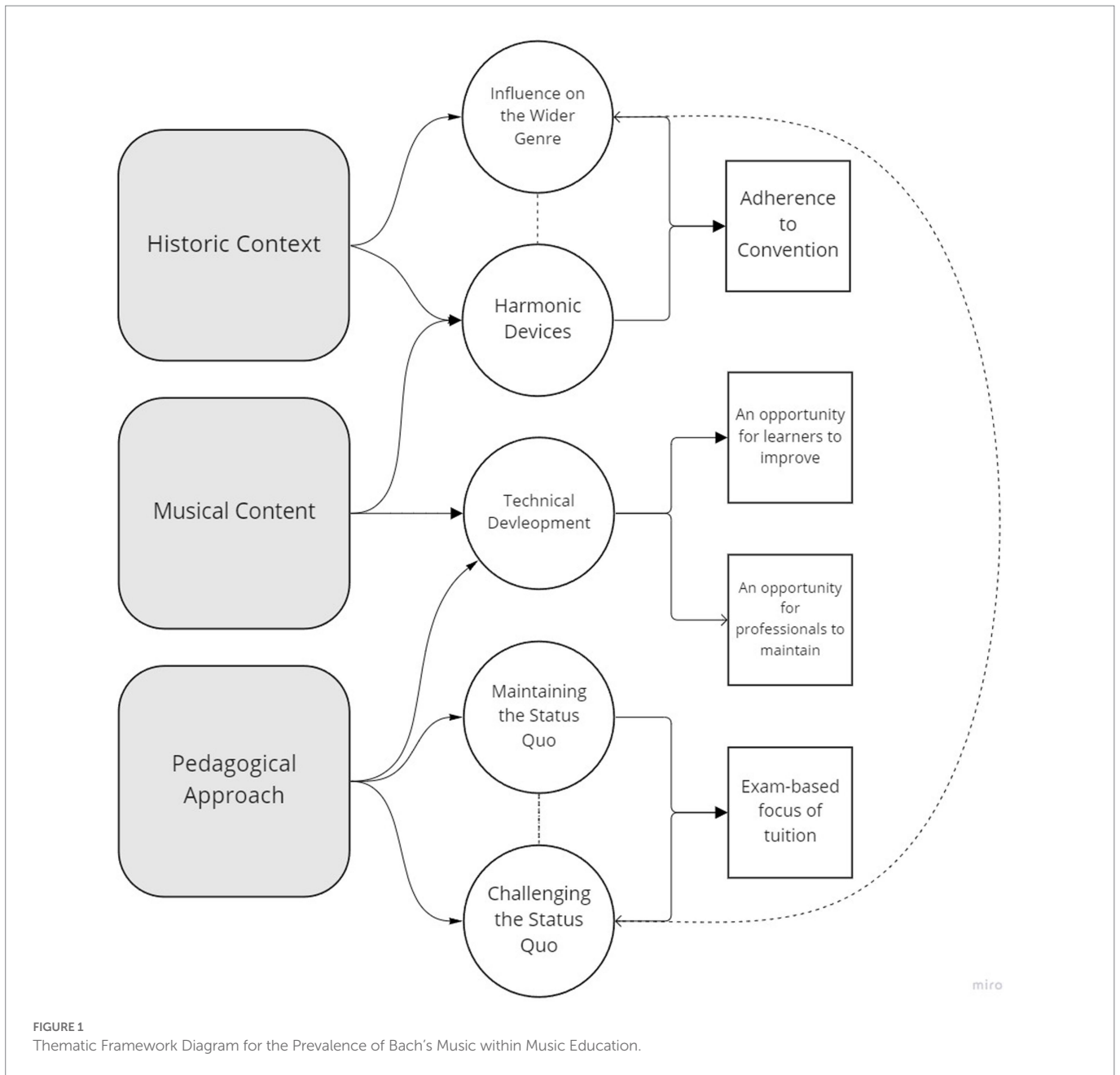
3.2. Interviews

Participants spoke at length regarding a range of subjects and topics. Although the questions were largely adhered to (see Appendix A), there were some occasional follow-up questions asked in an attempt to add clarity or context to certain responses. Three main themes were discovered in relation to the prevalence of Bach's music in mainstream music education, all of which could be further differentiated into two sub-themes. Figure 1 shows a thematic framework drawn from the analysis, from which it can be seen that there are also some convergences in the sub-themes, as well as the way in which each sub-theme births some distinct key concepts. Additionally, each sub-theme is shown to relate to a justification for the prevalence of each theme.

TABLE 3 Number of pieces by each composer within required repertoire lists, by Instrument and Examination Board.

Instrument	Composer	ABRSM	Trinity
Piano	Bach	8*	7*
	Mozart	5	2
	Beethoven	6	3
Violin	Bach	6*	11*
	Mozart	5	2
	Beethoven	6*	6
Guitar	Bach	7*	6*
	Mozart	0	0
	Beethoven	1	0

The three instruments used to gather this data are the three most widely taught tuned instruments in the United Kingdom, according to data from multiple sources. ABRSM and Trinity are the two most well-known exam boards.*The composer whose music features most frequently in a syllabus is indicated by an asterisk (Bach and Beethoven are used equally often in the violin syllabus).



3.2.1. Historic context

Multiple mentions were made of the importance of understanding the ways in which music has developed over the years. As has been shown, Western Art Music is a centuries-old tradition which has evolved along several strands, and, whilst it would be disingenuous to suggest that J. S. Bach was the only influential or important composer of the late 17th Century, it does seem that he is widely regarded as being of particular importance:

“He was one of the most important composers in the Baroque period... He influenced many other great German composers as well... If you study classical music, I would say you cannot avoid Bach.” [P3].

There is the implicit suggestion that it is not only best practice to study Bach's work, but that it is simply necessary. He is thought

to represent a textbook example of the Baroque style, while simultaneously moving it in new directions due to the musical parameters he employed. His work left a lasting impression on the Baroque tradition, and indeed on Western Art Music as a whole (Wu et al., 2015), and this makes it deserving of attention in educational circles. Moreover, whilst most participants were enthusiastic about the value of studying other composers, this was usually in relation to specific works and there was a lack of consensus surrounding an alternative to the study of Bach's music in this context.

Taken together, this theme and its related sub-themes point to the importance of understanding musical conventions regarding form and structure, and how these can be used as a starting point for learners' own musical explorations. Given his pervasive influence on Western Art Music, this could go some way to justifying the continued study of Bach's work within the setting of music education.

3.2.2. Musical content

The musical content utilised throughout the Bach canon appeared to be of particular importance to participants. Most cited his contribution to the ways in which harmony is understood, the ways in which certain harmonic devices occur regularly within his works, and the influence this has had on the wider genre. This represents an area of crossover between the theme of musical content and the previous theme of historic context (see [Figure 1](#)). However, of almost equal importance was the technical challenges presented by Bach's music:

“The Bach... that's a technical exercise for so many different techniques... It's just a minefield for technical development, depending on which angle you look at it from a teacher's perspective.” [P2].

This participant describes the multifaceted way in which Bach's music can be used to develop a musician's technique. Again, it is fair to say that repertoire from other composers doubtless affords similar opportunities but, as with the previous theme, there was a general consensus that this was a prominent compositional feature of Bach's work. Participants frequently made reference to the fact that his music is difficult to play, providing an opportunity for learners to refine and develop their technical facility on their chosen instrument, but equally for experienced players to challenge themselves in fresh ways and to ensure that their technique remains of a high enough standard.

This suggests that studying Bach repertoire provides those learners working at an intermediate level with the challenges they may need in order to transition into more advanced territory as instrumentalists. At such a crucial stage in the learning journey, it can be helpful to have reliable source material with a proven track record. The technical challenges of Bach's music, coupled with such influential harmonic content as outlined above, create an invaluable foundation on which to build.

3.2.3. Pedagogical approach

The broadest theme uncovered during the analysis of interview data was that of participants' pedagogical approach. More specifically, although there were several ways in which they differed—sometimes quite fundamentally—there were also several similarities. This theme reflects that paradox.

An observed trend was for instrumental teachers and practitioners who teach at the tertiary level to 're-teach'; that is, to teach students *via* the same methods and repertoire with which they were taught. This could be as a result of positive learning experiences which they are keen to pass on, but it also might point to a lack of awareness on the part of the teacher in relation to what resources are available. This can create a cyclical approach to teaching, which may be contributing to a predilection for Bach's music. As people continue to study it in their lessons, they assimilate into the culture of attributing importance to it. Subsequently, they go on to teach the same music in a similar way, causing another generation of learners to infer the same importance. In addition, the enduring emphasis on the importance of passing examinations causes similarly cyclical teaching practices:

“Well, I was raised on the ABRSM diet of exam book Grade 1, then Grade 2, then Grade 3... Whatever the ABRSM syllabus had inside it, that's what I learned.” [P2].

Given that examination requirements appear to ascribe high importance to the three composers being investigated in this research,

and Bach in particular, it is hardly surprising that this music continues to be taught so widely.

Meanwhile, practitioners who teach at the secondary level seem keen to challenge the status quo. For example, there were questions raised regarding a perceived hierarchy of music:

“If you look at the National Curriculum for music, they talk about ‘The Great Composers’, and I hate that phrase. What makes them necessarily greater than others?” [P6].

This quote directly challenges the idea put forward by [Young \(2016\)](#) that Western Art Music is somehow inherently better than other genres. It is evidently important to teach young learners about the music they enjoy because they are more likely to engage more readily with it ([Green, 2006](#)), and other participants emphasised the importance of allowing learners to explore their own individual tastes and interests.

The practice of “re-teaching” may not be as cynical as it first appears, however, as there was also a degree of unanimity regarding the objective quality and pedagogic value of Bach's music in particular among interview participants. This is indicative of the way the two approaches, which initially appear diametrically opposed, can intersect.

In this way, based on the data gathered as part of this research, two distinct pedagogical approaches become apparent. The first is concerned with maintaining the status quo, respectfully honouring the great works of the past and drawing from the deep wells of musical instruction that they represent, whereas the second challenges the status quo and does away with any sense of hierarchy within musical genres. Developing the core minimal skill set of every learner remains important for all teachers, as indicated by the links to the sub-theme of technical development in the thematic framework diagram ([Figure 1](#)), as it is this which enables students to pass exams. This represents tangible, measurable progress in many cases. Crucially, though, these two pedagogical approaches have the potential to complement and support each other when applied in their fullness.

A final observation is the relationship between the pedagogical approach of challenging the status quo and the concept of wider influence. Without the former approach to teaching, music as a whole runs the risk of stagnating in the absence of any new ideas ([De Smet, 2016](#)). [Figure 1](#) shows this relationship, which, in turn, demonstrates how all the prominent themes and sub-themes are interconnected. Whilst this is by no means offered as a justification for the continued honorific teaching of Bach above all other composers, it is hoped that it provides ample justification for his continued inclusion in mainstream music education.

3.3. Listening study

To investigate the effect of music by specific composers on the emotional responses of participants, a series of one-factorial multivariate analyses of variance (MANOVA) were conducted. The first of these investigated the relationship between music by specific composers and the responses given by participants in relation to the intensity with which emotions were experienced (Box's $M=71.82$, $p=0.265$). The internal reliability of the GEMIAAC measure was shown to be very good ($\alpha=0.861$), and a statistically significant relationship was shown, Pillai's Trace = 0.365, $F(14, 144)=2.29$, $p=0.007$, indicating that music by specific composers had a significant effect on the intensity of listeners' perceived emotions. A second MANOVA was conducted to discern the

TABLE 4 Tests of inter-category effects of music by specific composers and the repeated GEMIAC measure.

	GEMIAC category	df	Mean square	F	Sig. (<i>p</i>)
Intensity of affect					
Composer	Category 4	2	6.72	4.99	<i>0.009</i>
	Category 5	2	16.47	8.98	<i><0.001</i>
	Category 7	2	14.44	10.05	<i><0.001</i>
Frequency of affect					
Composer	Category 4	2	9.30	7.65	<i><0.001</i>
	Category 5	2	17.85	10.84	<i><0.001</i>
	Category 7	2	18.11	13.59	<i><0.001</i>
	Category 9	2	12.43	8.32	<i><0.001</i>
	Category 14	2	3.80	3.00	0.056

Significant results are shown in italic font. Results are significant at the .05 threshold ($p \leq 0.05$).

TABLE 5 Tukey's HSD *Post-hoc* analysis of the relationship between composers and mean scores for intensity of three GEMIAC categories.

Composer	Comparison	Mean difference	SE	Sig. (<i>p</i>)
Category 4				
Bach	Mozart	-0.90	0.308	<i>0.013</i>
	Beethoven	-0.06	0.319	0.980
Mozart	Beethoven	0.84	0.332	<i>0.036</i>
Category 5				
Bach	Mozart	-1.44	0.360	<i><0.001</i>
	Beethoven	-0.19	0.373	0.869
Mozart	Beethoven	1.25	0.388	<i>0.005</i>
Category 7				
Bach	Mozart	-1.43	0.319	<i><0.001</i>
	Beethoven	-0.60	0.330	0.170
Mozart	Beethoven	0.83	0.343	<i>0.047</i>

Category 4 is the "inspired, enthusiastic" emotion category. Category 5 relates to "energetic, lively" emotions and Category 7 refers to the "powerful, strong" category of emotions. Significant results are shown in italic font. Results are significant at the .05 threshold ($p \leq 0.05$).

relationship between music by specific composers and the frequency with which listeners experienced the emotion categories (Box's $M = 309.99$, $p = 0.252$). Another statistically significant effect was shown, Pillai's Trace = 0.686, $F(28, 126) = 2.35$, $p \leq 0.001$. Therefore, both the intensity and the frequency with which listeners experience certain emotion categories were affected to a statistically significant extent by Bach, Mozart and Beethoven's music.

Table 4 shows the results of the tests of inter-category effects. A statistically significant effect can be seen on the intensity with which participants experienced the fourth, fifth and seventh emotion categories of the GEMIAC scale. These relate to feeling "inspired, enthusiastic," "energetic, lively," and "powerful, strong," respectively. Statistical significance was also shown in relation to the frequency with which participants experienced the fourth, fifth, seventh, eighth ("full of tenderness, warm-hearted") and ninth ("relaxed, peaceful") GEMIAC categories. There was no statistical significance in relation to any of the other categories in terms of intensity or frequency. However, a non-significant trend was shown in relation to the frequency with which

participants experienced the fourteenth category. This category relates to feeling "agitated, aggressive." These results indicate that the music of Bach, Mozart and Beethoven had a statistically significant effect on the intensity and frequency of felt emotions within the fourth, fifth, and seventh categories of the GEMIAC scale, and on the frequency of felt emotions within the eighth and ninth category of the GEMIAC scale.

3.3.1. Intensity of affect

Post-hoc analysis was conducted using Tukey's honestly significant difference (HSD) test for multiple comparisons (see Table 5). The intensity with which participants experienced feeling inspired or enthusiastic was significantly lower when listening to Bach's music ($M = 2.84$, $SD = 1.14$, $p = 0.013$) compared to that of Mozart ($M = 3.58$, $SE = 0.99$) and this intensity was also significantly higher when listening to Mozart compared to music by Beethoven ($M = 2.74$, $SD = 1.36$, $p = 0.036$).

Energetic and lively feelings were also experienced with significantly less intensity when listening to Bach ($M = 2.29$, $SE = 1.45$, $p = <0.001$) compared to Mozart ($M = 3.73$, $SD = 1.04$), and likewise when listening to Beethoven ($M = 2.48$, $SE = 1.56$, $p = 0.005$) compared to Mozart.

Participants experienced powerful and strong emotions with significantly less intensity whilst listening to Bach's music ($M = 2.23$, $SE = 1.15$, $p = <0.001$) when compared to music by Mozart ($M = 3.65$, $SE = 1.06$). This intensity was also significantly lower when listening to Beethoven ($M = 2.83$, $SE = 1.40$, $p = 0.047$) compared to Mozart. There was no statistically significant difference between the intensity of felt emotions in any of these categories between music by Bach and music by Beethoven.

3.3.2. Frequency of affect

Tukey's HSD test was again used to examine the relationship between composers and the frequency with each emotion category was experienced by participants. Table 6 shows that the frequency with which they reported feeling inspired or enthusiastic was statistically significantly higher when listening to music by Mozart ($M = 3.76$, $SE = 0.78$, $p = 0.001$) compared to Bach ($M = 2.68$, $SE = 2.68$), and also when compared to Beethoven ($M = 2.77$, $SE = 1.27$, $p = 0.008$).

There was a statistically significant increase in the frequency of energetic and lively emotions felt by participants when listening to Mozart ($M = 3.88$, $SE = 0.88$, $p \leq 0.001$) compared to Bach ($M = 2.39$, $SE = 1.38$). This frequency was also statistically significantly higher when listening to Mozart compared to Beethoven ($M = 2.50$, $SE = 1.50$, $p \leq 0.001$).

Powerful and strong emotions were experienced at a statistically significantly lower frequency when listening to music by Bach ($M = 2.06$, $SE = 1.21$, $p = 0.047$) compared to that of Mozart ($M = 3.68$, $SE = 0.988$). There was a further statistically significant increase in the frequency of these emotions when listening to Mozart compared to Beethoven ($M = 2.86$, $SE = 1.25$, $p = 0.047$), and also a statistically significant difference in the frequency of such emotions when listening to Bach compared to Beethoven ($p = 0.040$).

Participants reported a statistically significant increase in the frequency with which they felt full of tenderness or warm-hearted when listening to Bach ($M = 3.10$, $SE = 1.14$, $p = 0.016$) compared to Mozart ($M = 2.24$, $SE = 0.88$). A non-significant trend was also shown in this regard between music by Beethoven ($M = 3.00$, $SE = 1.35$, $p = 0.061$) and music by Mozart.

A statistically significant difference was also found in the frequency with which participants reported feeling relaxed or peaceful. This

TABLE 6 Tukey's HSD *Post-hoc* analysis of the relationship between composers and mean scores for frequency of six GEMIA categories.

Composer	Comparison	Mean difference	SE	Sig. (p)
Category 4				
Bach	Mozart	-1.08	0.296	<i>0.001</i>
	Beethoven	-0.10	0.307	0.948
Mozart	Beethoven	0.99	0.322	<i>0.008</i>
Category 5				
Bach	Mozart	-1.49	0.345	<i><0.001</i>
	Beethoven	-0.11	0.358	0.947
Mozart	Beethoven	1.38	0.375	<i><0.001</i>
Category 7				
Bach	Mozart	-1.62	0.310	<i><0.001</i>
	Beethoven	-0.80	0.322	<i>0.040</i>
Mozart	Beethoven	0.82	0.337	<i>0.047</i>
Category 8				
Bach	Mozart	0.86	0.303	<i>0.016</i>
	Beethoven	0.10	0.314	0.949
Mozart	Beethoven	-0.76	0.329	0.061
Category 9				
Bach	Mozart	1.34	0.328	<i><0.001</i>
	Beethoven	0.56	0.341	0.239
Mozart	Beethoven	-0.78	0.357	0.079
Category 14				
Bach	Mozart	-0.72	0.303	0.052
	Beethoven	-0.50	0.314	0.261
Mozart	Beethoven	0.22	0.329	0.779

Category 8 is concerned with feeling "full of tenderness, warm-hearted." Category 9 refers to the "relaxed, peaceful" emotion category. Category 14 is the "agitated, aggressive" category. Refer to [Table 5](#) for other category definitions. Significant results are shown in italic font. Results are significant at the 0.05 threshold ($p \leq 0.05$).

frequency was statistically significantly higher when listening to Bach ($M = 3.42$, $SE = 1.26$, $p = <0.001$) compared to when listening to Mozart ($M = 2.08$, $SE = 1.16$). There was no further statistically significant difference shown between music by Bach and music by Beethoven ($M = 2.86$, $SE = 1.39$), or between music by Mozart and Beethoven.

Finally, a non-significant trend was shown in the frequency with which participants reported feeling agitated or aggressive. The largest difference was between music by Bach ($M = 1.32$, $SE = 0.87$, $p = 0.052$) and music by Mozart ($M = 2.04$, $SE = 1.31$), with Beethoven in between ($M = 1.82$, $SE = 1.22$).

There was no statistically significant difference in the frequency of felt emotions during music by Bach or music by Beethoven, with the exception of the seventh emotion category, as detailed above. This relates to participants feeling powerful or strong.

3.3.3. Valence and arousal

An analysis of variance (ANOVA) was carried out to examine the relationship between music by specific composers and the overall valence scores awarded to their music by participants. Bach's music scored the highest on average ($M = 8.19$), followed by Mozart ($M = 7.92$),

and Beethoven ($M = 7.30$), although none of these means were statistically significantly different.

A further ANOVA, however, revealed that music by specific composers did have a statistically significant effect on the overall arousal scores awarded to the music by participants, $F(2, 77) = 6.48$, $p = 0.003$. *Post hoc* analysis was again carried out using Tukey's HSD test, which showed that mean arousal scores were statistically significantly higher for music by Mozart ($M = 8.08$, $SE = 2.40$, $p = 0.002$) compared to Bach ($M = 5.52$, $SE = 2.93$). There was also a non-significant trend, with overall arousal scores awarded to music by Beethoven being higher than those for Bach ($M = 7.30$, $SE = 2.91$, $p = 0.055$). There was no statistically significant difference between mean arousal scores for music by Mozart and music by Beethoven.

3.3.4. Familiarity and Enjoyment

Two final analyses of variance (ANOVA) were performed to investigate the relationship between music by specific composers and overall scores for both familiarity and enjoyment. No statistically significant difference was shown in either instance.

3.3.5. Confounding variables

Multi-factorial analysis of variance was carried out to determine whether participants' gender, musical training or nationality had any significant effect on their enjoyment of the music. No statistically significant effect was found from any of these variables, although a significantly positive correlation was shown between participants' age and their overall enjoyment of the music used in this research ($r = 0.24$, $p = 0.039$). A moderation model was subsequently conducted to determine whether this relationship pertains to either Bach, Mozart or Beethoven in particular. No significant effect was found, indicating that a person's enjoyment of Western Art Music in general may increase with age.

4. Discussion

A cursory appraisal of the current examination syllabi for three popular musical instruments was carried out, revealing a higher number of required works by J. S. Bach than the other two composers being investigated herein. This could be indicative of an implicit preference for his music among educators, although a similar appraisal of the required repertoire within the syllabus for all other instruments would be required before any definitive conclusions can be reached. Clearly, it is improbable that Bach's music would feature very often in the syllabus for instruments such as the clarinet or trombone, since he does not appear to have composed very much music at all for those instruments. Moreover, some of the instruments that are synonymous with Western Art Music today had not yet been invented during Bach's lifetime, and so Baroque repertoire in general does not exist for them (Wainwright, 2017). That said, several of his most popular works, including the lute suites and "cello suites, have been rearranged and adapted for performance on other instruments, and this too could point to a fascination with Bach's music in pedagogical circles.

Interviews with music educators were conducted. The main findings of the reflexive thematic analysis are discussed in greater detail above, according to convention (Braun and Clarke, 2021). There was an overall tendency to acknowledge the inherent objective qualities of Bach's music, and the themes of historic context, musical content and its malleability to a range of pedagogical approaches were postulated in

support of its prevalence within the field. However, given that Western Art Music in general is not considered mainstream, there is a need to temper this with source material that is more accessible in an effort to dispel the perceived hierarchy of musics within mainstream education.

Listeners' responses to selected works by Bach, Mozart and Beethoven were analysed. In almost all cases where a significant effect was shown, Mozart's music elicited higher mean scores for both intensity and frequency of felt emotions. This is noteworthy when one considers the intention of musical study: If music is capable of provoking a range of powerful emotional responses, as shown by Juslin et al. (2013), one may question the rationale behind placing so much pedagogic value on a composer whose music appears less able to do so than others; clearly there is more to musical endeavour than the acquisition of technical skill and harmonic knowledge. In line with the findings of Hayes et al. (2021), the objective quality of Bach's music does not correlate with people's enjoyment of it. One finding that may be of particular interest is that, in the majority of cases, no statistically significant difference was found in listeners' responses to music by Bach and music by Beethoven. The reasons for this require further investigation, but it is possible that Mozart's music makes more regular use of some musical parameters that are known to elicit certain emotions in listeners (Sloboda, 1991; Kellaris and Kent, 1994) when compared to the music of Bach and Beethoven. Interdisciplinary research encompassing musicological analysis and emotion measures may offer some insight into this phenomenon.

4.1. Possible interpretations of the findings

The primary measure used during the listening study was the GEMAC scale (Coutinho and Scherer, 2017), which measures both the intensity and frequency with which participants experienced each emotional category. Results indicate that Mozart's music causes listeners to feel inspired and enthusiastic with greater intensity and greater frequency when compared to the other composers being investigated. The same is also true for energetic and lively feelings, along with emotions relating to participants feeling powerful and strong. The predominantly positive valence of these emotion categories lends support to the YouGov survey (Anon, 2022a), which found that Mozart is the most popular composer of Western Art Music in the United Kingdom, since it stands to reason that listeners enjoy these feelings. However, it is peculiar that Bach's music was awarded the highest mean score for overall valence in spite of this, although the differences here were admittedly not statistically significant.

The music of Bach was shown to cause a statistically significantly higher frequency of tender and warm-hearted emotions, as well as relaxing and peaceful emotions. This could be due in part to the ostensibly more accessible sound of traditional Baroque instrumentation (Dannenberg, 2010), but his unique compositional style is undoubtedly an important contributing factor. It could be argued that the musical parameters employed in the three pieces were the true predictors, since all three utilised a major tonality and a moderate-to-fast tempo (Kellaris and Kent, 1994). However, if that were the case then one might also expect to see a statistically significant decrease in these emotion categories when listening to Beethoven, since the three works of his used in this research are all in a minor key. Yet such a difference was not found.

The non-significant trend towards Mozart's music causing feelings of agitation or aggression more regularly than other composers is also surprising when considered in the light of Kellaris and Kent's (1994)

research into the effects of tempo, tonality and texture. Their findings suggest that Beethoven's combination of minor harmony, dissonance and staccato rhythms ought to have provoked a higher frequency of this emotion category among listeners. The fact that Bach's music scored lowest in this category is consistent with their findings, but the combination of these results does seem to imply that a composer's individual style is another genuine predictor of emotional response in a complex melange of variables.

The mean scores for overall valence were highest for Bach, as has been outlined above, although it is important to emphasise again that the difference here was not statistically significant. This is perhaps surprising when his popularity in the United Kingdom is the lowest of the three composers (Anon, 2022a), but the fact that the frequency with which listeners experienced the eighth and ninth emotion categories—“full of tenderness, warm-hearted” and “relaxed, peaceful,” respectively—was statistically significantly higher for his music may go some way to explaining this. It may also be reflective of the major tonality and mainly legato phrasing employed by Bach in the three compositions used in this study (Kellaris and Kent, 1994).

Mean overall scores for arousal were statistically significantly higher for Mozart's music, with Bach receiving the lowest mean scores in this area. On the one hand, this is consistent with other findings of this research, which suggest Bach's music is more relaxing and peaceful for listeners. However, much of it is written for the express purposes of dance: he wrote numerous minuets, gavottes, gigues, sarabandes and the like, and some musicologists claim that many of the stylised rhythms of these dance forms have pervaded his other work as a result (Little and Jenne, 2001). It might therefore be reasonable to expect the overall arousal scores of his music to be at least similar to that of the other composers investigated herein.

The positive correlation between participants' age and their overall enjoyment of Western Art Music is consistent with the findings of previous research (Bonneville-Roussy et al., 2013). The absence of any moderating effect on this correlation by specific composers provides further support for the hypothesis that some composers are more able to bring out specific emotional responses than others, since the increased enjoyment appears to be universal in this case. If people's enjoyment of one particular composer increased with age, then it would be inaccurate to attribute causation to the music itself; rather, the statistically significant effects found throughout this research appear to be regardless of age. The same could be said of gender, nationality, familiarity and musical training, since no significant effect was found from any of these variables. As a result, it can be asserted with some confidence that the unique characteristics of each composer's work can be a reliable predictor of the intensity and frequency with which listeners may experience some emotion categories, and that this is independent of the listeners' age, gender or nationality.

4.2. Limitations and suggestions for future research

The limitations of qualitative data have already been alluded to above (see sections 2 and 6), but the use of interviews is nothing new and the findings of this element of the research cannot simply be dismissed because of their qualitative nature. Conducting more interviews would have potentially allowed different themes and patterns to emerge, especially if such interviews focused on a broader range of instrumentalists, such as those not often associated with the Western

classical tradition. However, it is hoped that the mixed-method approach employed in this research offers a broad and comprehensive array of insights, and that it is precisely this breadth that enables reliable conclusions to be drawn.

A fundamental limitation of the listening-based portion of this research is that of music selection. Were the study to be repeated with three different pieces of music to represent each composer, it is perfectly possible that the results may differ. In fact, even the same pieces of music distributed differently across the same participants may lead to some disparity. Further research might consider utilising a test–retest method to strengthen the validity of any findings.

In a similar vein, some of the works used in this study are very long—particularly those by Beethoven. This caused the survey to be rather longwinded for participants, which may have resulted in a loss of interest as time went on. Some responses may be rushed and subsequently inaccurate. Additionally, the relatively small sample size investigated here means that the test power is not as high as it might otherwise have been. Several participants reported technical issues with the online survey platform, whereby they could not play the audio examples, or certain questions failed to load, and they unfortunately either gave up after partial completion, or else their responses were rendered altogether invalid anyway (there were 127 attempts at participation, including the 31 analysed in the results section of this report). Nevertheless, statistical significance was still found in several instances, so it would be unreasonable to discount these results in the absence of a larger sample size.

There was a large majority of British participants in the listening element of this study (74.2%). No statistically significant relationship was found to exist between nationality and overall enjoyment scores, but it is worth noting that most participants were also musicians (67.7%). Viewed through the lens of other findings presented, this may mean that their enjoyment of the music is at least partly caused by musical training. No statistically significant effect was found in this case either, but the uneven distribution between musician and non-musician groups may have skewed the data. Some further investigation is therefore recommended into the role played by musical training, if any, in a person's response to music by specific composers. For example, the higher scores for mean overall enjoyment awarded to Bach's music could perhaps be explained by the number of musicians in the sample—it may be possible that they are more able to discern some of the less explicit musical qualities referred to by interview participants as a result of their training, and that this contributes to their overall enjoyment of the music. Similarly, had there been fewer participants with musical training, then it is possible that a relationship between nationality and overall enjoyment might have been present.

Statistically significant results notwithstanding, the relatively small sample size in both elements of this study could cast into doubt the generalisability of the findings. This is perhaps especially true in terms of nationality, owing to the overrepresentation of British participants. A larger sample size would almost certainly have yielded a wider variance of data which, in turn, may have affected the results of the final analysis.

Finally, although justification has been provided for the decision to focus on Bach, Mozart and Beethoven specifically, future research may choose to investigate other composers as this could be of interest to individuals across a range of disciplines, and could serve to provide a holistic view of the ways in which listeners respond to music by certain composers. Similar studies may also wish to consider investigating other genres.

5. Conclusion

It has been shown that a specific composer's compositional style can have a significant effect on the emotional response of its listeners. Whilst only three composers were investigated as part of this research, this finding nevertheless extends the current understanding of the potency of musical parameters. Whilst they are known to be effective predictors of emotional response in isolation, the fact that this is not representative of how the majority of people listen to music means that the findings presented here may enable listeners to make informed decisions relating to the use of music as a means of emotion regulation.

Further, an apparent preference for the study of Bach's music has been shown to exist within mainstream music education. There is an overall consensus that his work constitutes a transition point between intermediate and advanced musicianship, from the dual perspective of technical ability and musical understanding. However, this does not seem to translate into more evocative music. Mozart's music appears to be more effective in this regard, but if the findings of [Wu et al. \(2015\)](#) are correct, it would be fair to say that his work would not exist as it does without the pervasive influence of J. S. Bach.

6. Reflexivity

A large portion of this research is concerned with the collection and analysis of qualitative data. Although data of this type might arguably have lower ecological validity than its quantitative equivalent ([Jones and Donmoyer, 2021](#)), it is hoped that the source of such data is sufficient to counterbalance the lack of objectivity. The value of specific insights gained from direct contact with genuine experts is difficult to overstate and, when interpreted alongside quantitative data, can serve to provide context and further support to the findings of a mixed-method study such as this.

It is from this perspective that my own position within this study design ought to be made clear. An important step in conducting research is acknowledging one's own potential biases ([Šimundić, 2013](#)), as they could cause issues ranging from flawed study design to inappropriate manipulations of the data. Although my principle role in the present study is that of researcher, it is impossible to truly separate that from my other work as an instrumental music teacher and performer of over 20 years. Indeed, many of the ideas and observations that birthed this study are a direct result of such work. References to exam syllabi and prevailing attitudes are based chiefly on first-hand experience, and interviews were secured largely as a result of my reputation within the field—this is discussed in more detail in the methodology section of this report. Additionally, as a guitarist, Bach's music has played a crucial part in my personal learning journey and occupies an important place in my own teaching practices. In light of this, it was perhaps impossible to completely avoid some assumptions throughout the undertaking of this research. However, care has been taken to mitigate against potential researcher bias by designing interview questions that did not lead the participants to respond in a certain way. In any case, the combined experience of participants in that element of the study carries with it an inherent trustworthiness, which is often viewed as analogous to the notions of validity and reliability that are so crucial to quantitative research ([Lincoln and](#)

Guba, 1986; Jones and Donmoyer, 2021). Moreover, the listening study element gathers wholly quantitative data through the use of standardised measures, and it is the findings of the combination of these two elements from which conclusions have been drawn, further strengthening the reliability of the research as a whole.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving human participants were reviewed and approved by University of York Arts and Humanities Ethics Committee. The patients/participants provided their written informed consent to participate in this study.

Author contributions

NM was responsible for the initial concept and study design, as well as all data manipulation and analysis. KO'N offered valuable contributions towards the refinement of the study in order to strengthen its reliability and validity. This report was written by NM with guidance and editorial support from KO'N. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/feduc.2022.1086623/full#supplementary-material>

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