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Characteristics of Self-reported Favorite Musical Experiences

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Abstract

Research supports the folk wisdom that individual preferences are tied to our experiences: we like what we know and as a result, we know what we like. Yet our understanding of the elements contained in lived examples of musical experiences that facilitate enjoyment and investment in music is little described. The current study recruited Australian residents ($N = 135$) to complete an online survey, which asked them to describe their favorite musical experience with regard to its context and impact. The majority of favorite musical experiences involved listening to live music and performing. The descriptions provided indicated that these experiences resulted in layered emotional experiences, much more subtle than folk psychology would suggest. Further, thematic analysis results revealed that Gabrielsson's Strong Experiences with Music Descriptive System adequately categorizes the elements of people's favored experiences, with particular reference to general characteristics, bodily reactions, perceptual phenomena, cognitive aspects, emotional aspects, existential and transcendental aspects, and personal and social aspects. A wide variety of musical genres were involved, though pop, classical, rock, and hip-hop music featured predominately. By detailing key components which lead to favored musical experiences, the findings have implications regarding how musical engagement opportunities can be better designed to support continued musical investment, which has particular relevance for educational and community uses of music for fostering positive individual and community benefits.

Keywords

Autobiographical memory, favorite experiences, musical engagement, music participation, strong experiences related to music (SEM)

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Introduction

Globally, people regularly engage with music. In 2016, 97% of Australians aged 15 years and over listened to recorded music, 54% attended a live music event, 27% attended music festivals, and 15% created or played music (Australia Council for the Arts, 2017). More recent Australian Bureau of Statistics (2019) data indicates that in 2017–2018, 31.4% of Australians aged 15 years and over partook in at least one cultural activity such as playing music, singing, dancing, writing, sculpting, painting, or photography. Similar music participation levels exist elsewhere: in the US, 52% of adults attended live music events in 2018 (The Nielsen Company (US), 2018) and 43.4% created, practiced, performed, or edited/remixed art (National Endowment for the Arts, 2015). Moreover, 42.5% of adults in England engaged in music, 37.6% attended a music event, and 12.9% participated in a musical activity in 2015/2016 (Arts Council England, 2016). To better understand why people regularly engage in musical activities, it is important to explore factors contribute to people's enjoyment by considering people's favorite musical experiences.

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Types of Musical Engagement

Musical engagement is a broad, umbrella term which includes music making and listening and also extends to learning and dancing (Vanstone et al., 2016). In other words, there are a variety of musical activities that people can engage with (Kuntz, 2011). For instance, music making activities can involve playing a musical instrument, singing, performing, competing, composing, editing, mixing, and learning. Music listening can also involve dancing to music. With any type of musical engagement, people can partake in a participant or facilitator role. Participation refers to taking part in a musical experience, such as listening to music, playing in a band, or receiving a music lesson (Kuntz, 2011). Facilitation refers to leading or organizing a musical experience, such as leading a choir, directing a band, or teaching a music lesson (Kuntz, 2011). Participation in musical activities can be formal (e.g., private music tuition or a professional public performance) or informal (e.g., self-taught or singing with friends in a car) (Green et al., 2017), and encompasses both amateur and professional performance (Kuntz, 2011).

Technological developments have changed where, when, how, and with whom people listen to music (Purcell & Randall, 2016) such that there are more avenues for listening to recorded music. Listening to recorded music allows an immediate, personally-curated, and private or shared music listening experience (Krause & North, 2016; Pontara & Volgsten, 2017). However, live music events are still well-attended and provide stronger physical reactions to the music, social bonding, and connection to the artist (Brown & Knox, 2017; Swarbrick et al., 2019). Physical reactions to music listening, whether live or recorded, also extend to dancing to music, whether in a formal dance class or performance, or in an informal social setting, such as dancing with friends at a party. In the present research, participants' responses were not distinguished from each other with regard to the aforementioned musical engagement dichotomies; rather, the data reflect the participants' own perceptions of their favorite musical experiences as they have described them.

Benefits of Musical Engagement. Positive musical experiences at school (both formal and informal) influence later participation in community music activities (Kuntz, 2011); though continued musical engagement among adults depends on both internal and external factors of motivation (Krause et al., 2019). External motivations for continued engagement include engaging music facilitators (Corenblum & Marshall, 1998; Evans et al., 2013), joining like-minded people (Pitts & Robinson, 2016), and social connectedness (Evans et al., 2013). Internal motivations for music participation include reported benefits to health, social, emotional, and cognitive aspects of well-being for individuals and groups (Hallam et al., 2012; Krause et al., 2018).

For individuals, reported cognitive benefits include cognitive improvements (Barbeau & Mantie, 2019; however, see also Sala & Gobet, 2020), and cognitive regulation (Chin & Rickard, 2014). In addition to promoting emotion regulation (Chin & Rickard, 2014; Juslin et al., 2008; Randall et al., 2014; Rentfrow & Levitin, 2019), music participation also aids stress management and promotes relaxation (Cavitt, 2005; Helsing et al., 2016; Jutras, 2006; Särkämö et al., 2016), though motivations for music listening differ across age groups—younger adults report affect regulation while older adults report transcendence and personal growth (Groarke & Hogan, 2016). Associated benefits also include a sense of fulfillment (Higgins & Bartleet, 2012) and increased life activity engagement in older adults (Kaufmann et al., 2018).

Music also has the power to assist social connections between individuals as well as groups and communities (Kokotsaki & Hallam, 2011; Rentfrow & Levitin, 2019). Young people often use it as a conversation topic when getting to know each other (Rentfrow & Gosling, 2006), and adults also discuss and participate in music to shape friendships (Groarke & Hogan, 2016). Reported group benefits, from singing in community choirs for example, include avoiding isolation, increasing social interaction, feeling of belonging, and feeling of contributing to the community (Joseph & Southcott, 2014; Lee et al., 2016; Shakespeare & Whieldon, 2018; Teater & Baldwin, 2014); group benefits have also been reported through the PERMA model, for example relationship-centered school music programs improve the psychosocial well-being of students and the community (Lee et al., 2017).

Participation also helps to preserve cultural heritage, native language (Joseph & Southcott, 2018), and the cultural expression of migrant or refugee populations (Henderson et al., 2017; Sunderland et al., 2015). Regardless of activity type, music has the power to engage and support the well-being of people throughout their lifetime (Krause et al., 2018; Lamont, 2011; Rickard & McFerran, 2012). Indeed, these benefits have been observed across all ages (David et al., 2018).

Musical Memories

Whether listening, playing, learning, composing, or dancing to music, engaging with music has the power to create meaningful and lifelong memories (Krause et al., 2018; Lippman & Greenwood, 2012). Psychologist Abraham Maslow found that music also holds the power to emphasize one defining moment of an individual's life, or, as he labeled it, a "peak experience"—defined as a moment that gave a sense of wonder and awe (Maslow, 1971). Asking participants to describe the single most joyous, blissful, ecstatic moment of their life, Maslow (1971) found that music listening (particularly to classical music) and dancing to music were common triggers for peak experiences. However, Maslow's peak experiences, by definition, were only positive and did not include scope for significant and memorable musical experiences which may have included negative feelings or emotions.

Gabrielsson and Lindström Wik expanded on Maslow's research to analyze "strong experiences with music" (SEM), described as "the strongest, most intense experience of music that you have ever had" (Gabrielsson & Lindström Wik, 2003, p. 163), capturing descriptions of musical experiences which elicit both strong positive and negative emotions (Gabrielsson et al., 2016). The purpose of the research was to detail the physical, behavioral, perceptual, cognitive, emotional, and social components of SEM, and to understand the contexts which led to such strong experiences (Gabrielsson, 2010). Some of the common reactions reported with regard to SEM included: intense/powerful feelings, positive feelings (the largest group reported in SEM research), negative feelings (and within these, an even smaller percentage were actually caused by the music itself), mood regulation/affect, existential aspects, transcendental aspects, religious aspects, self-confidence, community, and mixed, conflicting, or changed emotions (Gabrielsson, 2010).

The thematic analysis of the SEM reports led to the creation of a Description System (Gabrielsson, 2010)—a seven-category organization of common attributes developed from over 1300 free descriptions associated with strong experiences of and with music. This Description System can be used to systematically characterize musical experiences, and consists of seven categories: general characteristic (its unique and unforgettable nature); physical reactions (including physiological responses), perception (auditory, visual, tactile, kinesthetic, and synesthetic elements); cognition (change in attitude and connection to old associations); feeling/emotional (both positive, negative, and mixed emotions); existential/transcendental (reflective, cosmic, religious, other-worldly, and divine experiences); and personal/social (improved sense of being and a desire to continue listening to or performing music). However, it is important to note that the descriptions given by participants frequently included more than one category (i.e. they listed multiple different characteristics as part of a single experience), which highlights the multifaceted and complex nature of SEM.

While SEM might not be exact accounts of an event, their reconstruction in relation to oneself "can be seen as examples of autobiographical memory" (Gabrielsson & Lindström Wik, 2003, p. 203). Of the SEM descriptions, 12% included various associations and memories linked to the music which "were highly idiosyncratic and concerned specific people, events, situations, or other music" (Gabrielsson, 2010, p. 558), indicating a possible connection between some SEM and autobiographical memory. Other research (e.g., Janata et al., 2007) highlights that memories of songs can be linked to strong emotions as well as certain times and people in listener's personal lives. As found in research on autobiographical memory, SEM are frequently described in great detail, well remembered after time has passed (e.g., older adults predominantly recall events from their childhood or adolescence), and are emotionally and personally significant (Gabrielsson & Lindström Wik, 2003). Further, research indicates that "familiar music evokes personal autobiographical memories for healthy younger and older adults as well and for those with mild to moderate Alzheimer's disease" (Cuddy et al., 2015, p. 223; see also Laukka, 2007).

Both Maslow's (1971) and Gabrielsson's (2010) research has demonstrated that classical music dominates highly memorable and enjoyable experiences of musical engagement. For instance, Gabrielsson et al. (2016, p. 751) reported that classical music accounted for roughly half of their responses—with folk, jazz, pop, rock, and other popular music contributing to 40%, and the remaining 10% belonging to "music from other cultures, improvised music, music performed on specific instruments." Lamont's (2011) research on university students' SEM showed a preference for pop music, although other research suggests this could be due to younger participants preferring popular music (Gabrielsson et al., 2016).

Although the research on SEM does not explicitly outline differences between live and recorded music, Swarbrick et al. (2019) found that attending a live music event is more memorable and enjoyable than listening to the same music on a recording. The two main influencing factors of this outcome were the social elements and "live" aspects—seeing the artists "in the flesh" and the spontaneous nature of live music performance (Swarbrick et al., 2019). Therefore, it is necessary to consider differences in experiences between intimate and controlled listening of recorded music versus shared and one-of-a-kind live music events.

The process of self-selecting a specific piece of music—rather than its particular genre—seems to give additional meaning (e.g., Lippman & Greenwood, 2012; Garrido & Davidson, 2019) and greater emotional influence (Sloboda et al., 2001) to a listener, and thus is more likely to evoke an autobiographical memory. Due to music's ability to induce associated and strong emotions, it is a useful resource for cognitive stimulation (Cuddy et al., 2015) and reminiscence (see also Dassa, 2018; Istvandity, 2017). This further suggests that these musical memories are long-lasting—firmly embedded in people's memories. Previous research shows that self-chosen music has particularly strong ties to autobiographical memory (Baumgartner, 1992). Baumgartner (1992) found that hearing a self-chosen piece evoked memories of the original autobiographical episode of with which it was associated. Further, more participants described the music and memory as positive rather than negative (Baumgartner, 1992). This aligns with a study of extreme relistening by Conrad et al. (2019, p. 160) which reported that more participants described the one recorded song they were "listening to most these days" as happy. In light of this work on autobiographical memories, it is vital to understand in depth people's favorite musical experiences. It is possible they include preferred (or familiar) music and that they might have induced strong positive emotions in line with the SEM research.

Present Study

The present study examined lived examples of musical engagement in order to gain a better understanding of the elements present in real-life experiences with music that facilitate enjoyment and investment in music.

One broad research question guided the present research: How do people describe their favorite musical experience? More specifically, (RQ1) what elements or factors contribute to someone's favorite musical experience? Given the types of details reported in SEM experiences, we anticipated that key elements of people's favored musical experiences would be defined by (a) the music, (b) the activity itself, and (c) the people involved (including both fellow participants and/or the facilitator). Since prior research has highlighted the importance and involvement of musical facilitators in successful musical activities (e.g., Higgins & Bartleet, 2012; Hallam et al., 2016), we anticipated respondents might mention music teachers, conductors, or leaders in describing their memorable musical experience. We expected responses to pertain to different kinds of musical engagement, such that both music making and music listening activities might be reported. Further, given that Gabrielsson et al. (2016) reported more instances of SEM with classical music but that Lamont (2011) found more instances with pop music, we anticipated that multiple musical genres might be reported, but made no hypothesis as to whether a single type of musical genre would be most prominent.

Additionally, two subsidiary research questions further explored particular elements of people's favored musical experiences:

RQ2: What feelings/emotions do people use to describe their favorite musical experience, and are these feelings different depending on the type of musical activity? Given strong emotions are critical features in SEM descriptions, it is interesting to consider the nature of the feelings, or emotions, involved in people's favorite experiences. We anticipated that more positive emotions (e.g., happiness, calmness, excitement) might be reported given the assumed positive nature of something considered to be favored; however, it is possible that negative emotions (e.g., sadness, melancholy, anxiety) could also be reported.

RQ3: Is there a relationship between the type of music activity and the music involved? Given the prominence of Western classical music in Western musical education, it is possible that music-making experiences would be likely to include classical music.

Method

Participants

All participants ($N = 135$) resided in Australia with 72.6% identifying as female and 27.4% as male. Participants' ages ranged from 17–49 years ($M = 21.13$, $Mdn = 20$, $SD = 5.217$). Note that data from an additional 14 participants were excluded from the analyses, as these individuals resided in other countries, and a further two participants were also excluded as they did not disclose their age. The sample rated music as very important in their lives ($M = 6.19$, $SD = 1.20$ on a seven-point scale). Such a high sample mean is commonly reported in research on music (e.g., Krause et al., 2015), given music is typically a very important leisure activity in people's lives (e.g., Cohen et al., 2002; North et al., 2000).

Online recruitment included use of one author's website, University student research participation programs, and social media postings. Participation was voluntary; however, some university students received course credit as compensation if they participated in the study via a University student research participation scheme. The Curtin University Human Research Ethics Committee granted ethics approval (Approval number: RDHS-05-16).

Design and Procedure

Participants accessed the participant information sheet using a direct weblink. After indicating their consent to participate, individuals accessed the online questionnaire as a series of webpages. The final page thanked and debriefed the participants. The questionnaire took less than 10 minutes to complete and consisted of the following questions and measures.

Individuals were first asked to respond to a short, open-ended prompt, "please describe your favorite musical experience." They were also asked to indicate if they were a participant (i.e., someone who participated in the musical activity) or facilitator (i.e., someone, such as a music teacher or director, who assisted the production of the musical activity) and were asked to select from a list of options as to the activity type. We had conceptualized the present research with regard to exploring music-making experiences; thus, the list included singing, playing an instrument (with options to specifically indicate wind, brass, string (including guitar), percussion, or piano/keyboard), and "other". However, 42.2% of the respondents selected "other" and so we categorized those responses into six additional options. The response frequencies concerning both the added categories and the originally presented options are displayed in Table 1. While the question's wording implied detailing only one favorite musical experience, it was not explicitly limiting; however, no one described multiple events.

Two additional open-ended questions, "what type of music was involved?" and "what adjectives would you use to describe this experience?" were included so that the participants could further characterize their experience. Prompts to assist participants included "soulful singing" and "aggressive drumming."

Before finishing the questionnaire, respondents indicated their age, gender, and country of residence.

Table 1. Respondent nominated favorite musical experience activity type ($N = 135$).

Activity type	*n*
Singing	50
Audience member at concert	47
Playing an instrument—string family (including guitar)	12
Playing an instrument—piano/keyboard	11
Playing an instrument—percussion	4
Dancing	4
Listening to recorded music	3
Playing an instrument—wind family	1
Music theory	1
Performing on stage	1
Making a song	1
Playing an instrument—brass	0

Additionally, they rated how important music is in their life on a seven-point scale (1 = *not at all*, 7 = *extremely*).

Results and Discussion

Defining Favorite Musical Experience Activities

When detailing their favorite musical experience, most respondents (92.60%) identified themselves as a participant in the activity (the remaining 7.40% identified themselves as facilitators).

While Table 1 outlines the type of activity the respondents favored (as indicated by the respondents themselves), the researchers examined the open-response data further to understand which other elements contributed to the experience. A thematic analysis was performed on the responses detailing the nature of the respondents' favorite musical experience in order to identify patterns within the data. A crucial skill in qualitative analysis is identifying "thematizing meanings" (Holloway & Todres, 2003, p. 347), and as such thematic analysis is a tool useful for identifying emergent material within many different kinds of data (Boyatzis, 1998). Following Braun and Clarke's (2006) six-step framework, initial codes were applied to the responses and then organized into higher-level themes by two researchers, first separately and then collaboratively to compare and revise analyses.

The process was undertaken as follows: Phase (1): becoming familiar with the data; Phase (2): generating initial codes; Phase (3) searching for themes; Phase (4) reviewing themes; Phase (5) defining and naming themes; and Phase (6) producing the analysis. To gain familiarity with the data relevant materials were collated into a Microsoft word file. Reading these materials repeatedly, the analysists took key phrases and sentences that appeared critical and important in answering the research question and these were highlighted. Next, the highlighted phrases or sentences were cut and pasted together where materials were similar ("the scissor-and-sort technique"; Stewart & Shamdasani, 2015). After this, the themes were reviewed following Braun and Clarke's approach (2006, p. 91), where some "candidate themes" no longer persist because there is not enough data to support them, or they are too diverse, while others collapse into a higher-level new theme.

Together, the first and second authors organized the responses into five top-level themes related to the overall type of experience (listening, making, learning, dancing, and composing), labeled as level 1 (see Table 2). Two layers of subthemes were created: level 2 further clarified the type of experience (e.g. music listening at level 1 was broken down into listening to either recorded or live music at level 2) and level 3 grouped smaller themed responses only within music listening and making. As seen in Table 2, more of the responses detailed experiences that included music listening ($n = 67$)—and listening to a live performance in particular ($n = 60$). In contrast, experiences centered around learning an instrument, dancing, and composing received far fewer mentions ($n = 16$).

Within the music listening level 1 theme, respondents described social aspects of their experiences; however, a difference appeared at level 2 between those listening to recorded music versus those attending a live performance. Respondents who listened to recorded music highlighted the intimate shared social experience with one other person. For example, "with my dad singing and listening to classic Elvis songs." In contrast, respondents who had attended live performances (mainly music festivals) emphasized the experience of singing and dancing with not just their friends, but also with the other people at the event.

One respondent described their favorite experience as listening to music alone:

> I was sat studying at home and one of my favourite songs came on so I started to sing along. I never thought I had a good voice but for some reason singing this song made me feel so happy and motivated, like I could do anything I wanted at that moment. This experience was different to others by the way that it made me feel emotionally.

The respondent defined this as a music listening experience; however, it could be argued that an element of music making (singing along) was also present. Furthermore, the respondent's use of the adjectives "happy" and "motivated" aligns with previous research which has found that music listening can be used as a successful tool for mood regulation to increase happiness, relaxation, and motivation, or overcome frustration, worry, and boredom (van Goethem & Sloboda, 2011).

Music making (Level 1 theme, $n = 47$) was the second most frequently reported favorite musical experience. At the second level within music making, many responses were categorized into formal or informal settings, in which most respondents detailed an experience that involved a formal performance ($n = 29$), including talent shows, musicals, concerts, and competitions. However, the dichotomy of informal/formal did not account for all responses at this

Table 2. Identified themes concerning participants' given descriptions of their favorite musical experiences ($N = 135$).

Level 1	Level 2	Level 3	Example responses
Listening ($n = 67$)	Recorded music ($n = 7$)	Mood regulation ($n = 3$)	"It stops me from overthinking about an issue or conflict subconsciously," "This song made me feel so happy and motivated," "I like this song much, because that makes me feel like that I am not alone"
		Social experience ($n = 2$)	"She rises wordlessly and strides over to a box of CDs, plucks out something, sticks it in the hi-fi and returns to me," "Sitting down on the lounge room floor with my dad singing and listening to classical Elvis songs"
		Identity ($n = 1$)	"It made me think and question myself about this life and where I was heading in life in a way music made me realistic and more open about life"
		Music collection ($n = 1$)	"When I first got an iPod classic. It was preloaded with songs from the previous owner"
	Live performance ($n = 60$)	Social experience ($n = 26$)	"Fleetwood Mac concert: I was with a close friend, dancing in the rain to music along with thousands of others," "When my friend was playing guitar around the campfire," "At a festival with friends"
		Personal emotional ($n = 19$)	"My favourite band…made me feel free and alive," "I had arrived quite sad and disheartened. When the music started it just all went away and I felt at ease, he was incredible," "Watching the musical made me think back to my childhood and the song really resonated with me"
		Artist/event ($n = 14$)	"The visuals on the stage and the lights added to his songs and the vibe of the festival," "Going to a concert with all my favourite artists in one show"
		Cultural identity ($n = 1$)	"When I was about 6 years old we had a very well known traditional music singer and player here in Australia coming from my country for a concert…I extremely enjoyed the music and from then onwards I have been a very keen follower of my traditional music"
Music making ($n = 47$)	Performance ($n = 29$)	Staged ($n = 24$)	"Performing in front of my school for a talent show," "I was in a school play in my final year and starred in the musical West Side Story," "Performing on-stage for the second time"
		School choir ($n = 5$)	"Singing in the school choir at my year 12 graduation," "In year 7 when I participated in a choir concert at my school," "Year 9 choir tour"
	Singing socially once-off ($n = 10$)		"Singing karaoke with my friends at a pub event," "Singing with a group of my close friends, in my car on the way to a party," "When I was playing music with my family and I was singing and playing guitar"
	On-going in a group ($n = 6$)	Church context ($n = 4$)	"Church/school choir, end of year 1992, was emotional as it was end of high school," "We used to sing hymns in church"
		Instrumental ($n = 2$)	"I played guitar at school"
	For oneself ($n = 2$)		"Playing the piano by myself…I genuinely felt all kinds of emotions," "Playing my baby grand piano for the first time…I was lost in the happiness of the music I was making"
Learning ($n = 9$)	Instrument ($n = 4$)		"First teaching myself to play guitar and finally was able to play a decent sounding song," "My very first piano lesson at age 8," "When I began the ukulele"
	Mastering a piece ($n = 3$)		"When I learn new music for my piano off by heart," "Mastering my mother's favourite musical piece," "During an ensemble practice when we all perfectly synced our *Pirates of the Caribbean* tunes"
	Music training ($n = 2$)		"During my Primary school education degree I took a music unit for a semester," "Analyzing music as a group"
Dancing ($n = 4$)	Dancing at a party ($n = 3$)		"I was dancing with a girl I really liked at a party," "My parents played the song 'Mambo No. 5' during my party…and I did the same 'happy dance' over and over again," "At a cultural celebration party…everybody was dancing"
	Dance class ($n = 1$)		"In dance classes"
Composing ($n = 3$)			"Jamming with my friends back in high school and we would compose songs from the most random of ideas," "completed my first song, January 2016," "at the house of a music producer, working on some tracks of mine"

Note. Four respondents did not answer this question, and one response was too unclear for it to be categorized.

sublevel; for example, it was not clear within on-going music making in a group whether the experiences were formal or informal. Other level 2 and level 3 themes within music making showed a high number of participants singing in a group, either once-off or in an ongoing arrangement. This result is consistent with previous research which has detailed the benefits of singing in choirs; particularly school choirs which nurture "fundamental human needs for

relatedness, competence, and autonomy" (Dabback, 2018, p. 248) within a group context. Example responses include:

> This moment involved me and three of my close friends singing to the rest of our cohort. This experience was extremely warming
>
> "It made me feel happy because I was able to perform with a great group of people. This made me feel confident and allowed me to sing my loudest without worrying too much about how I sounded."
>
> "It was a good experience, I got to show off musical talent and bond with friends."

In contrast to the social nature of the singing experiences, the two participants who made music for their own enjoyment were both instrumentalists. For example, one instrumental response stated:

> Playing my baby grand piano for the first time, once it was installed in my living room and freshly tuned. It was just me sitting there, but even if there was anyone else I would've felt alone—lost in the happiness of the music I was making.

Characteristics of Favorite Musical Experiences. The first thematic analysis defined and categorized the musical experiences and resulted in the three levels of themes (Table 2). Since we were conducting a thematic analysis to seek out emergent themes, we noted further patterns characterizing the experiences. In particular, six key characteristics were highlighted: socialization, personal emotions, sense of self, physiological responses, physicality of the experience, and autobiographical memory. All six characteristics were evident across the five top-level themes (Table 2); however, several prevalent connections between characteristics and themes were observed.

With regard to those who were listening to music, the most prominent characteristic was the social/community aspects of the experience (mentioned in 83.82% of listening responses). Responses concerning attending live performances described the joy of singing with the other concert-goers, the overall "positive vibe" of the experience, and forming stronger bonds with the friends or family with whom they attended. Second, personal feelings or emotions were also commonly reported (48.53% of listening responses), particularly by respondents who listened to recorded music for mood regulation; for example, "this song made me feel so happy and motivated, like I could do anything I wanted at that moment." The third characteristic frequently described related to music listening concerned bodily responses (30.88%). For instance, the physicality of live musical experiences (e.g., mosh pits), was described frequently. Differing from the physicality were physiological responses to the music, such as "it just sent goosebumps up my spine," "some notes made me shiver," and "it brought me to tears." In contrast, very few respondents who had attended live music performances mentioned sense of self (2.94%), although one response mentioned an increased sense of LGBTIQ+ identity at a live music setting. Another less common response was in relation to long-lasting memory; for example, "it's something I will remember for the rest of my life."

Prominent responses within music making described a sense of self, particularly a sense of achievement (38.30%); for example, "it's one of my biggest and proudest achievements in my life." This was often linked with personal feelings or emotions. For example, many respondents mentioned feeling nervous before going on stage to perform but felt proud of themselves afterwards for having overcome their anxiety. Numerous responses also included social or community aspects (61.70%); particularly respondents who played or sang in a group. In contrast, very few music making experiences included a physical component (8.51%).

Participants in the categories of learning and composing also described a strong sense of achievement (44.44% and 100%, respectively); for example, "it made me appreciate what I can accomplish if I put my mind to it," "it felt amazing to have someone encourage and set challenges for me," and "making music on my own felt fulfilling." For those respondents who described their learning experience, personal feelings and social aspects were also commonly reported (88.88%).

While there were few responses within the dancing to music category, all of them described the physicality of the experience, and included further comments related to the social aspect and their personal feelings (75.00%).

Similarities Between Favorite and Strong Musical Experiences. After completing the thematic analysis noting the patterns in describing the favored experiences, it became apparent that the resulting categories demonstrated congruency with Gabrielsson et al.'s (2016) Strong Experiences with Music Descriptive System (SEM-DS)—a seven-category organization of common attributes associated with strong experiences of, and with, music (namely, general characteristics, physical reactions, perceptual phenomena, cognitive category, emotional elements, existential and transcendental aspects, and personal and social aspects). Although it was not the initial intention of the research to use or apply the SEM-DS, we decided to explore whether responses from the current data analysis could be (re)categorized applying Gabrielsson's seven groupings.

The authors used Gabrielsson and Wik's (2003) SEM-DS descriptions as a guide to categorize the participants' favorite musical experience descriptions, and this application is shown in Table 3. Note that two of the seven SEM-DS categories were split into two sub-categories each in order to better reflect the nature of the collected responses (see Table 3). First, the SEM-DS "Physical reactions" was substituted with "Bodily reactions" and sub-divided into "Physical and physiological reactions" (e.g., chills, crying) and "Movement-based responses" (e.g., dancing, foot-

Table 3. Frequencies and examples of participant responses ($N = 121$) demonstrating the application of Gabrielsson et al.'s (2016) SEM-DS categories.

Category	Details	Frequency[a]	Example responses
1. General characteristics	Unique and unforgettable nature of the experience	31	"Will never forget"; "I will remember for the rest of my life"
2. Bodily reactions[b]	2A. Physical and physiological reactions (i.e., chills, crying, heart-racing)	10	"I remember getting goosebumps from hearing someone sing for the first time in my life"; "The words gave me chills"; "It brought me to tears"
	2B. Movement-based responses (i.e., dancing, foot-tapping)		"I also have the habit of rocking back and forth whenever I'm comfortably listening to my favourite music"; "I joined the mosh pit where an empty circle was formed, then everyone runs towards the center and knocks into each other"
3. Perceptual phenomena	Intensified or strong auditory, visual, tactile, kinesthetic, synesthetic elements. Feeling "embedded in the sound."	23	"I lost myself in the music"; "it almost made the physical world disappear but at the same time make it more vivid"; "I felt totally immersed in the moment"
4. Cognitive aspects	Changed or new attitude or understanding toward the music. Connections to old memories or associations.	32	"The music brought back so many memories"; "A compulsory choir event that initially made me uncomfortable and self-conscious, but ended up being an enjoyable experience"; "Now whenever I hear the song I am reminded of the experience."
5. Emotional aspects	Strong or intense emotions, both positive, negative, and mixed.	61	"It made me feel happy and sad at the same time"; "I felt an array of emotions; happiness, joy sadness, triumph"; "I had arrived quite sad and disheartened. When the music started it just all went away and I felt at ease"
6. Existential and transcendental aspects	Reflections on life and existence, cosmic/religious/divine/other-worldly experiences	15	"Bass line feels like we're coming up to the face of God"; "It feels as if you are transported through space and time"; "It gave me a great sense of escaping from everything else going on in the world"
7. Personal and social aspects[c]	7A. Sense of self-achievement: Improved sense of self-worth or achievement from the experience	28	"It really improved my confidence in singing"; "It made me feel very important as I felt I was accomplishing something"; "I felt very fulfilled and satisfied with a sense of pride in what I had accomplished"; "It's one of my biggest and proudest achievements in my life"
	7B. Social/community aspect: Connections to friends, family, other participants, the facilitator, or artist involved in the experience	95	"Jamming with my friends back in high school"; "With my dad listening to classical Elvis songs"; "Katy Perry winked at me"; "Everyone was there because they loved music just like me"; "This concert helped me to become close with them (not-so-close friends)"

[a]Note that from 135 participants, 121 responses were considered (10 responses did not include enough information to permit consideration [e.g., "in the theatre"] and four responses were blank). Because a response could be assigned to more than one category, a total of 320 category allocations were made.

[b]Gabrielsson et al.'s (2016) Physical Reactions category included both internal (e.g. chills) and external (e.g. dancing) bodily reactions and responses to the musical experience; however, the current research split these into two subcategories.

[c]Gabrielsson et al.'s (2016, p. 749) definition of personal and social aspects included "elements such as feeling liberated, uplifted or cleansed, getting new insights, hope, power, and increased self-esteem, various therapeutic effects, and strong motivation to continue listening to or performing music." The authors added the subcategory of group interactions within socialization.

tapping). This modification highlights the prominence of dancing in people's favorite experiences (7.19% involved movement), which is evidently a different manifestation of music's impact than the other kinds of reactions (3.13% involved physiological responses). Second, in line with the present analysis defining people's experiences which noted distinctions between personal and social aspects of an experience, the SEM-DS "Personal and social aspects" category was divided into "Sense of self-achievement" and "Social/community aspects." This serves to particularly highlight the dichotomy between responses related to improved self-confidence versus enjoyment of being with friends, family, concert-goers, and/or performers.

The SEM-DS categories adequately characterized people's favorite experiences. There were no instances where someone's experience was not explained by one (or more) of the categories. The frequencies displayed in Table 3 indicate that the social/community (29.69% of the assignments made) and emotional aspects (19.06%) were most commonly included in people's descriptions. It is important to consider, however, how the present study's task wording might affect these category frequencies. In particular, one

Table 4. Identified themes concerning the type of music involved ($N = 135$).

Genre theme	Sub theme	Example responses
Pop ($n = 33$)	Pop ($n = 19$)	"Pop"
	Pop, more specific ($n = 14$)	"Indie pop," "K-pop," "Pop punk"
Classical ($n = 27$)	Classical ($n = 18$)	"Classical," "classical piano"
	Classical and pop ($n = 5$)	"Classical and pop"
	Classical contemporary ($n = 2$)	"Classical/contemporary"
	Classical 20th century ($n = 1$)	"20th Century experimental music"
	Classical traditional ($n = 1$)	"Classical and traditional"
Rock ($n = 25$)	Rock ($n = 10$)	"Rock," "Rock and roll"
	Alternative rock ($n = 6$)	"Alternative rock"
	Rock/alternative/grunge ($n = 4$)	"Grunge, rock alternative," "alternative rock, rock, indie, new wave," "soul/grunge"
	Indie rock ($n = 3$)	"Indie rock"
	Metal rock ($n = 2$)	"Hard rock/metal," "Metal and rock"
Hip Hop/Rap/R&B/Punk ($n = 18$)		"Hip hop instrumental," "R&B, pop, rap," "pop/rock/punk"
Musical theatre ($n = 8$)		"Musical theatre," "Opera"
Dance ($n = 7$)	Dance music ($n = 4$)	"Electronica," "Dance music"
	Dance genre ($n = 2$)	"Jazz," "ballet," "mambo," "jive"
	Grime ($n = 1$)	"Grime"
Acoustic ($n = 6$)		"Acoustic," "Acoustic, pop," "Acoustic, folk music"
Folk ($n = 5$)		"Cultural music"; "music of great highland pipes and drums"; "Irish folk"
Religious ($n = 5$)		"Christian songs"; "religious music"; "Church hymns"
Not genre-based ($n = 1$)		"Music with a simple beat or rhythm that could be easily replicated"

could argue that all 121 responses that could receive assignments should include assignment to the general characteristics category given that a "favorite" experience is, by assumed nature, unique/unforgettable.

While Gabrielsson and Wik (2003, p. 204) did not focus on the frequencies of the SEM-DS categories, they suggested it could be interesting to consider them in conjunction with different situations. Therefore, a multivariate analysis of variance (MANOVA) examined the frequency of SEM-DS category relative to whether the experience involved listening to ($n = 65$) or making music ($n = 40$). The MANOVA was statistically significant, $F\ (9, 95) = 4.745$, $p < .001$, $\eta_p^2 = .310$—although only one of the categories, sense of self-achievement, demonstrated a significant difference at the Bonferroni adjusted alpha level of .006, $F\ (1, 103) = 37.865$, $p < .001$, $\eta_p^2 = .269$. Experiences involving music-making were significantly more likely to include description of a sense of achievement ($M = .450$) compared to those experiences detailing music listening ($M = .031$).

Consideration of the allocation of category assignments per response further reflects the multi-layered nature of descriptions of musical experiences (320 total category assignments for 121 responses). Within individual reports, 73.3% of descriptions were assigned two or more of the SEM-DS categories. The mean number of categories assigned was 2.64 (ranging between 1 and 7; $Mdn = 2$, $SD = 1.237$). For example, many responses concerning attending a live music festival described both movement-based responses and social aspects, as outlined in this response: "I was with a close friend, dancing in the rain to music along with thousands of others." Another example pertaining to music making, "Singing with a group of my close friends . . . It made me feel so happy and completely alive," describes both emotional elements and social aspects. As Gabrielsson and Wik (2003) noted, the categories are not mutually exclusive and that single experiences can be assigned multiple categories. We do not interpret the combination of category assignments as new categories, instead that people's favorite musical experiences are complex and involves multiple attributes related to interpersonal, community, emotional, bodily, and cognitive aspects.

Classifying the Music Involved

The participants' responses to the open-ended question concerning the type of music involved were subjected to a separate thematic analysis. As seen in Table 4, the four most common genres of music involved in the respondents' favorite musical experiences were pop, classical, rock, and hip hop/rap/R&B/punk. Hip hop, rap, R&B, and punk are listed as a single cluster as many respondents reported varying combinations of these particular genres (e.g., "R&B, hip hop, rap, pop," "R&B, pop, rap," and "pop, R&B, hip hop"), suggesting a single cluster rather than separated genres. Only one participant did not provide a genre-based response, instead stating "music with a simple beat or rhythm that could be easily replicated." The single "opera" response was grouped in the musical theatre genre rather than classical due to its element of singing on a stage.

Table 5. Resulting themes concerning the adjective descriptions of favorite musical experiences ($N = 134$).

Adjective theme	Example responses
Soulful singing ($n = 20$)	"Soulful singing"
Soulful singing—emotional ($n = 12$)	"Soulful, emotional, spirit lead," "soulful, gentle, relaxed," "uplifting, freeing, soulful singing"
Soulful singing—energetic ($n = 9$)	"Soulful singing, very vibrant, screaming crowds," "soulful singing, energy-filled performing," "soulful singing, vocals, high beat music"
Beat/rhythm ($n = 11$)	"Upbeat tempo, upbeat singing," "heart pumping beats," "rhythm, drumming, beat"
Fun, exciting, entertaining ($n = 10$)	"Exciting, unique fun," "exciting, fun, entertaining," "entertaining performance"
Musical genre ($n = 8$)	"Singing in A Cappella," "alternative rock vocals, acoustic guitar chords," "modern rock"
Spiritual ($n = 8$)	"Surreal," "harmonious, angelic," "spiritual feelings, deep singing, gentle tones"
Aggressive ($n = 8$)	"Aggressive, powerful, energetic," "harmonious aggression," "aggressive drumming"
Happy, joyful ($n = 7$)	"Happy singing," "joyful singing," "rocky, happy, catchy"
Energetic ($n = 6$)	"Energetic," "energizing, exciting, emotional," "energetic, exciting, joyful"
Passionate ($n = 5$)	"Passionate piano playing," "heartfelt and passionate singing," "passionate, joyful and aggressive drumming and dancing"
Peaceful, soothing ($n = 5$)	"Peaceful, emotional playing," "peaceful, happy, relaxing," "soothing""
Calming and exciting ($n = 3$)	"Calming, exciting," "calming, fulfilling, enjoyable, exciting, challenging"
Gentle, soft ($n = 3$)	"Gentle piano playing," "gentle piano," "soft"
Movement-based ($n = 3$)	"Powerful movement, harmonious singing, beautiful, warm," "loud singing, vigorous arm movements," "hastily playing the guitar (I use haste because the nerves made me rush a little bit)"
Emotional ($n = 3$)	"Emotional, intimate," "emotional, spine tingling," "emotional vocals"
Dissonance, angst ($n = 3$)	"Dissonance, repetitive motives, inversion," "angst, disobedience, care-free, freedom," "merky"
Expressive ($n = 2$)	"Expressive, free," "Expressive, passionate, powerful"
Sophisticated, elegant ($n = 2$)	"Sophisticated, classical piano," "elegant, complex, powerful"
Mentioned costumes ($n = 2$)	"Skilful singing, pleasant music, interesting costumes and sets, powerful guitars," "bright, colourful costumes, sixties costumes, flowery music, dark music story-telling songs"
Collaborative ($n = 1$)	"Collaborative, singing, arranging, problem solving, expressive"
Flirtatious ($n = 1$)	"Flirtatious, uplifting"
Mellow ($n = 1$)	"Mellow tones, rusty fingers"
Sorrowful ($n = 1$)	"Sorrowful, remembrance, moving"

Maslow's research highlighted classical music as the most common genre leading to peak experiences (Maslow, 1971); however, Gabrielsson (2010) stated that any musical genre can lead to SEM—an outcome that is also in the current research. The high inclusion of popular music genres could reflect the number of "informal" experiences over "formal" ones—which might involve more classical music as is common in Western music learning contexts. This also aligns with Australian statistical data which shows that of the people aged 15 years and over who had attended a live music event in 2013, 8% was new classical, electronic, improvised music, or sound art, 8% was opera, 14% was classical music, 22% was musical theatre or cabaret, and 39% was classified as "other live music" consisting of rock, pop, country, dance, etc. (Australia Council for the Arts, n.d.). This Australian data reports that 68% of pop music event attendees were between 15 and 24 years old (Australia Council for the Arts, n.d.), and could explain the prominence of popular music genres in the current research, where the average age of respondents was 21.13.

Adjectives Used to Describe the Musical Experience

An additional thematic analysis was performed in order to consider the adjectives chosen by respondents to describe the musical experience (RQ2). In total, 23 categories of adjectives were identified (see Table 5).

The most frequently used adjective provided by respondents was "soulful singing." The high frequency of this particular phrase as a response may have been influenced by the fact that it was listed as an example provided alongside the survey question. However, the other adjective example provided to the participants, "aggressive drumming," was only directly mentioned by three participants. Perhaps the greater usage of "soulful singing" as a mimicked response is due to more reported musical experiences involving singing ($n = 50$) than drumming ($n = 4$). Further, while some responses stated just "soulful singing" ($n = 20$), other people elaborated by including additional adjectives that related to the energy of the performance (e.g., "soulful singing, very vibrant, screaming crowd," "soulful singing, energy-filled performing," "uplifting, freeing, soulful singing," "soulful singing, peaceful, relaxing").

The category labeled "spiritual" included responses related to both earthly and other-worldly experiences such as "euphoric, ethereal living singing," "spiritual feelings, deep singing, gentle tones," and "mystical, earthy, and natural."

Five categories (namely, beat/rhythm, musical genre, movement-based, mentioned costumes, and collaborative) included responses with additional or alternative information to adjectives to describe their favorite musical experience. Those who gave responses in relation to the beat and rhythm of the music might have described what they

heard in the music rather than the whole experience. Those who described the physical movements on stage, or mentioned costumes, might have found the visual aspects of the experience most memorable. One participant described their singing experience as "collaborative," highlighting the importance of social interaction. Regarding musical genre, respondents listed musical genres or instrumentation; for example, "singing," "rock," and "pop."

Overall, many reported adjectives reflected emotional responses in that they expressed strong feelings. Some respondents literally used the word "emotional," others stressed the strength of emotions (e.g. "very soulful"), six respondents listed more than five adjectives (which suggests that some experiences were complex, multi-faceted, and recalled in great detail), and three respondents described the music's emotional complexity as both "calming and exciting."

The survey asked for people's favorite musical experiences, and thus the researchers had anticipated responses would include descriptions of positive feelings and emotions (RQ2); however, 13 participants included descriptions relating to negative feelings and emotions: "aggressive" ($n = 8$), "dissonance, angst" ($n = 3$), "mellow" ($n = 3$), and "sorrowful" ($n = 1$). As we asked people to use adjectives to describe the experience, respondents' use of these terms could be making reference to expressing, perceiving, and/or experiencing such emotions. This aligns with Gabrielsson's (2010) SEM research, which also collected some negative descriptions. This does not necessarily imply that the music itself was negative, but that the *experience* was described as aggressive, angst, mellow, or sorrowful. Furthermore, in some descriptions, feelings were mixed and even changed throughout the experience. For example, many people who were performers, spoke of feeling nervous or anxious before going on stage (a negatively-valenced feeling), but after having done the performance, they felt happy and their self-confidence greatly improved—for example:

> Regarding singing in a school choir: "A compulsory event that initially made me uncomfortable and self-conscious, but ended up being an enjoyable experience in which I felt glad I was involved in."

> Regarding attending a live music event: "At the time, my best friend had decided not to go with me and go with her boyfriend instead, so I had arrived quite sad and disheartened. When the music started, it just all went away and I felt at ease."

There was no distinct difference in the emotion-based adjectives used to describe different musical activities; both music listeners and makers frequently described their emotions and feelings in relation to, or as part of, the experience. An interesting distinction, however, was that many music listeners reported their emotions and social connectedness with others, while music makers (and learners, by extension), described their emotions in relation to themselves. This finding highlights the positive social nature of listening to music with others, and the sense of self confidence that music making can provide. Music is inherently a social activity (Lamont, 2017) and 64% of Australians agreed in 2016 that the arts allowed them to connect with others (Australia Council for the Arts, 2017).

Activity and Music Type

A Pearson Chi-Square test was carried out to determine whether there was a relationship between the activity type and music type involved in the favorite musical experiences (RQ3). This analysis used the qualitative coding of the reported activity type and music type; however, because of sample size, activity type was restricted to listening or music making, and music type was restricted to the classical, hip hop, pop, and rock genres. The Chi-Square test was statistically significant, χ^2 (3, $N = 86$) = 14.222, $p = .003$, $\phi' = .407$ (Table 6). A higher percentage of respondents reported that their favorite musical experience featured classical music when music making compared to when listening. Conversely, more respondents reported that rock and hip hop music featured in a favorite listening experience compared to making music involving those genres. As previously mentioned, this result could reflect the Western classical music tradition of learning, and, thus, making or performing classical music. Additionally, the generally young age of the participants could reflect their preference for listening to popular music, in line with Lamont's (2011) research, where 81% of university students' SEM experiences involved pop music.

General Discussion

People's favorite musical experiences most commonly involved listening to music (and in particular to live music) or performing music. These types of musical engagement were reported more than recorded-music listening, learning, composing, or dancing types of musical engagement. In exploring the components of people's favorite experiences, the findings indicate a higher frequency of pop, classical, rock, and hip hop music—although a wide variety of genres contribute to favorite musical experiences. The association between activity type and music genre might reflect the accessibility of certain types of musical engagement activities relative to one's preferences; for example, the communal nature of pop music festivals contrasts with the often one-to-one, formal musical instrument learning environment.

Importantly, the findings reveal the role of the context in shaping people's experiences and revealed the role of other people. These factors included social connection, a sense of community, and personal emotion. Whereas recorded-music listening was favored as an intimate interaction between a few people, attending a live music festival was particularly memorable—akin to a "once in a lifetime" opportunity—due to the thousands of other concertgoers and close

Table 6. Activity type and music type chi-square test frequencies.

Activity type		Music type				
		Classical	Hip-hop	Pop	Rock	Total
Listening	Count	5	13	18	18	54
	% within activity type	9.3	24.1	33.3	33.3	100
	% within music type	27.8	76.5	62.1	81.8	62.8
	% of Total	5.8	15.1	20.9	20.9	62.8
Music-making	Count	13	4	11	4	32
	% within activity type	40.6	12.5	34.4	12.5	100
	% within music type	72.2	23.5	37.9	18.2	37.2
	% of Total	15.1	4.7	12.8	4.7	37.2
Total	Count	18	17	29	22	86
	% within activity type	20.9	19.8	33.7	25.6	100
	% within music type	100	100	100	100	100
	% of Total	20.9	19.8	33.7	25.6	100

proximity to the artist on stage (elements which are not readily accessible in everyday music consumption).

Descriptions of people's favorite experiences indicated that they involved predominantly positive emotions. For the few respondents who did not initially experience positive emotions (e.g., due to performance anxiety or feeling upset), overcoming the negative feelings apparently led to stronger subsequent positive emotions, producing a memorable musical experience. This is evident also where learning is also linked to feelings of self-fulfilment "one of my most proudest moments," which also contributes to autobiographical memories.

The current findings are consistent with prior research on peak experiences, SEM, and autobiographical memory in that music has the power to create highly enjoyable experiences (Maslow, 1971), with strong emotional responses (Gabrielsson, 2010; Lamont, 2011) which can be recalled many years after the event (Janata et al., 2007). Indeed, the SEM Descriptive System's (Gabrielsson, 2010) categories represent the varied musical, personal, emotional, social, and situational factors which contribute to a favorite experience. Akin to results from Gabrielsson (2010) and Janata et al. (2007), many strong emotion-based responses were recounted in which the presence of the music made the event meaningful.

Moreover, the elements of people's favorite musical experiences also align with Seligman's (2011) PERMA model, which outlines the role of five factors (positive emotions, engagement, relationships, meaning, and accomplishment) in contributing to positive well-being. While the study did not use the PERMA model as a framework for data collection or analysis, the findings can be interpreted with regard to the model's five elements. First, as previously discussed, the majority of respondents' descriptions of their favorite musical experience included positive emotions. Second, the nature of the study was musical engagement; thus, respondents were immersed in their musical activities. Third, social connectedness—or relationships—underpinned many settings for favorite musical experiences. Fourth, the respondents who made, performed, composed, or learned music frequently mentioned a sense of accomplishment having created or mastered their musical experience (Barbeau & Mantie, 2019; Dabback, 2018; Hallam et al., 2012).

The present findings have implications for music facilitators concerning how to build engaging musical experiences. Indeed, the clear overlap between the data and the PERMA model's elements suggests that the PERMA model offers a useful framework for designing musical experiences. It would appear that promoting positive emotions and relationships and affording opportunities for meaning and accomplishment in engaging experiences will lead to positive outcomes (i.e., positive personal memories) as the present study suggests as well as positive well-being as research using the PERMA model suggests (see, e.g. Lee et al., 2016; Seligman, 2011; Croom, 2015).

In addition, music facilitators should note that most favorite experiences centered on listening to live pop, rock, and hip hop music. In contrast to the Western music education tradition, which is focused on elite performance and centered around classical music, our results indicate musical educators should also consider other musical genres, contexts, and engagement opportunities. Given musical experiences play a role in continued (and lifelong) engagement (Rickard & McFerran, 2012), music facilitators wanting to create engaging experiences should consider including a wide range genres in music education settings for positive, favorable, memorable, and ongoing engagement. Relatedly, it is interesting to consider the role of music facilitators themselves. While we anticipated that people's favorite experiences would involve mention of music facilitators (at least for those experiences involving music making), it is interesting to consider *who* a facilitator is in the context of music listening. While participants at live music events did

not explicitly describe the performer as a facilitator, they stressed the performer's musical ability, stage presence, and connection with the audience. Therefore, perhaps in the context of listening to live music, the role of the performer was similar to that of a facilitator and the performer's expert "facilitation" enhanced the experience for the participant.

Limitations and Future Directions

One limitation of the present research is the lack of information about the age at which respondents had their reported experience. While the sample was young ($M_{age} = 21.13$), so the experience was at or before 21 years of age, the question was not explicitly asked in the survey. Therefore, it was not possible—on a sample level—to investigate how old participants were at the time of their favorite experience, or the length of time that had passed. However, 49 (or 36.30%) of respondents did reference their age indirectly (e.g., stating year in school when the experience occurred). Allowing for slight imperfections in age calculation (e.g., subtracting two years from someone's present age when they stated the experience happened two years prior, or substituting the age of 17 for "year 12 in school"), the mean age for the experience was 16.25 years ($Mdn = 17$, $SD = 3.949$, range = 3–25). While this is in line with previous research (e.g., Krumhansl & Zupnick, 2013; Zimprich & Wolf, 2016) suggesting that adolescence and early adult years are the peak time of life for which autobiographical memories occur, we acknowledge that the present study's young sample did not explicitly provide reporting on musical experiences which occurred at later ages. It falls on future research to explicitly address age to explore contextual connections between favorite musical experiences and autobiographical memory in greater detail.

Additionally, the current findings do not address the potential influence of other individual differences, such as people's gender, personality, music preferences, or level of music education/frequency of musical participation. Previous research on musical involvement has considered demographic characteristics, such as gender (e.g., Ashley, 2002; Clift & Hancox, 2010; Vaag et al., 2014), age and education level (e.g., Cavitt, 2005; Elpus & Abril, 2011), socioeconomic status (e.g., Kinney, 2010), and personality e.g. Cutietta & McAllister, 1997; Torrance & Bugos, 2017). Thus, it is possible they play a role in forming a favorable experience alongside the depth of one's music education and experiences (Bowles et al., 2014; Delano & Royse, 1987; Mantie & Tucker, 2008). Thus, these constructs could be considered in future research. The present study focused on participants' experiences, but an interesting avenue for future research would be to specifically survey facilitators about their perspective on favorite musical experiences to compare the similarities and differences based on people's roles and perspectives.

A second limitation of the survey design concerns the question (and its prompts) asking for adjectives to describe the experience. Although emotion-based responses were given in response, the question was not explicitly worded to elicit people's emotions. For instance, for some responses, it is not possible to disentangle whether the adjective provided denotes the expression, perception, or experience of that adjective during the experience (e.g., "calming," "exciting"). Therefore, future research could consider how to address and measure the *emotions* involved to better understand what emotions people *feel* during their favorite musical experience. Relatedly, two prompts were provided as aids to the participants. However, as noted previously, one of these prompts ("soulful singing") was used by participants when responding. While people were asked to describe their experience using adjectives *after* they stated what their favorite experience was, it is possible that these cues may have influenced participants. Such potential demand characteristics and experimenter expectancies should be considered when designing future research on this topic.

Moreover, the survey design did not permit participants to describe more than one memory or state the potential difficulty of choosing a *single* favorite memory. This limitation could be addressed in future research by allowing participants to explain their process of choosing a memory by way of comparison to other musical and/or preferred leisure activities. Indeed, an interesting comparative study could consider how people describe their *most negative* experiences with music as well as how both types of experiences influenced motivations around engagement and continued involvement. Given the applicability of Gabrielsson's (2010) SEM Descriptive System in classifying the features of people's favorite musical experiences, it would be fruitful to make use of the model when designing future research to capture more specific and detailed information about people's musical experiences and memories.

In conclusion, in this sample, the present findings indicate that people's favorite musical experiences are most likely to be participating in—rather than facilitating—the activity, and slightly more likely to be listening to music rather than making (and much more likely than learning, dancing to, or composing). Both listening and making music of any genre involved positive emotional responses; however, the former involved a connection to others (friends, family), while the latter involved a connection to oneself. Moreover, there is no single defining factor that determines someone's favorite musical experience; rather, it is a combination of factors that overlap, thus making the experience complex, significant, and longer-lasting compared to other experiences.

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Data Statement

The Ethics approval for this project stated that the data would be destroyed after 7 years. Further, it did not permit the sharing or re-use of the collected data.

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