

Strong Experiences of Music in University Students

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ABSTRACT

Research in Sweden has recently defined and explored the concept of strong experiences of music, which had been hitherto ignored by much research in the psychology of music and emotion. From a large-scale study of over 900 adults, Gabrielsson and Lindström Wik (2003) found that strong experiences of music included positive and negative responses to music, and could occur with any genre of music. The current research explores the generalisability of the strong experiences of music studied by Gabrielsson and Lindström Wik with a university student population in England, and compares the efficacy of the methods of analyzing accounts. 64 undergraduate students who had elected to take a music psychology module completed a free written self-report of their strongest most intense experience of music, and then answered a series of structured questions about the experience. The findings support Gabrielsson & Lindström Wik's main response categories, with many more strong experiences occurring in listening than in performing (despite the high proportion of performers amongst the sample). Responses included fewer instances of perceptual descriptions and a large proportion of transcendental responses. Responses are analysed in terms of listening or performing. For listeners, most strong experiences were found to occur at music festivals or live events, and with popular music. Two types of respondent were uncovered: those for whom strong experiences were relatively frequent and could be repeated almost at will, and those for whom they were extremely rare. For performers, strong experiences were characterized as either relating to performance anxiety or to the sensory pleasure gained by performing in large groups. The current study supports earlier research in highlighting the importance of music in the narrative of people's lives, and indicates high levels of recall about experiences which may have taken place several years previously. A consideration of the efficacy of content analysis and thematic analysis sheds light on the best ways of analysing free written descriptions of musical experiences.

INTRODUCTION

Music has the power to make those who experience it feel differently, and is reportedly one of the most likely means of generating a moment of 'peak experience' (Whaley, Sloboda & Gabrielsson, 2009). However, while there has been a flurry of research on the emotional effects of music both in the laboratory (e.g. Blood & Zatorre, 2001; Menon & Levitin, 2005) and in everyday life (e.g. Juslin, Liljeström, Västfjäll, Barradas & Silva, 2008), little research has addressed the issue of these important meaningful experiences with music that can be had by listeners or performers and which may provide long-lasting motivation for engaging with music.

Many researchers in positive psychology have debated over how to define happiness and the extent to which it is related to psychological and subjective wellbeing and other related

concepts such as life satisfaction (e.g. Deci & Ryan, 2008; Diener, Sun, Lucas & Smith, 1999; Proctor, Linley & Maltby, in press). Subjective wellbeing has typically been defined as high levels of positive affect, low levels of negative affect, and a high degree of satisfaction with one's life (Diener, 1984). This combines two different concepts of happiness. Firstly, the hedonic argument proposes that the pursuit of pleasure is what leads to happiness. A presence of positive affect and an absence of negative affect defines the hedonic state (Kahneman, Diener & Schwarz, 1999). Seligman (2002) labelled this the pursuit of *pleasure* or the search for the 'pleasant life', arguing that happiness can be achieved by increasing positive emotion. Experiencing positive emotions such as joy and contentment has been shown to have many benefits, including health and cognitive outcomes (e.g. Fredrickson & Levenson, 1998; Fredrickson, 2001), and the hedonic route has received a great deal of emphasis in happiness studies (e.g. Kahneman et al., 1999).

However, eudaimonia or living life in a satisfying way may also be necessary to achieve a state of happiness (Waterman, 1993), although this has thus far been underrepresented within positive psychology (Deci & Ryan, 2008). Seligman (2002) identified two different concepts broadly falling within the eudaimonic approach. Firstly, *engagement* or the search for the 'good life' (cf. Deci & Ryan, 2008) refers to the pursuit of gratification through absorption in a given task or activity. Csikszentmihalyi & Csikszentmihalyi (1988) developed the concept of flow to explain how engaging difficult tasks could be: a suitable balance of challenge and skill leads to a state of flow where the individual loses self-awareness through complete absorption. People experiencing high levels of flow are also more motivated and creative in both work and leisure (Csikszentmihalyi & Lefevre, 1989). Secondly, *meaning* or the search for the 'meaningful life' refers to using one's strengths towards something larger than oneself, such as voluntary work or religion. Studies of perceived 'joy' from a range of leisure activities often show these activities to be amongst the most highly valued forms of leisure (Argyle, 1996), and spirituality, for example, has been shown to contribute significantly to personal wellbeing (Wills, 2009). However, this second concept has received far less research attention to date.

The pursuit of engagement and meaning have been found to contribute more to life satisfaction than the pursuit of pleasure (Seligman, Parks & Steen, 2005), which highlights the importance of agency. Autonomy also seems to be an essential ingredient of the pursuit of eudaimonia (Ryan, Huta & Deci, 2008). This corresponds to evidence from other areas of social psychology that leisure must be 'active' to be effective (Argyle, 1996). It is also mirrored in the sociological notions of

engaging with leisure as a way of actively critiquing everyday life (Lefebvre, 1958/1991) and of *productive* consumption (de Certeau, 1984), where consumers appropriate and manipulate consumer goods in an inherently creative manner. However, there is also evidence that all three components of happiness are required in order to achieve a state of subjective wellbeing and authentic happiness (Peterson, Park & Seligman, 2005).

How can music make us happy? The next section considers evidence from the field of music psychology and relates it to the above trends in positive psychology.

A. The hedonic route: the pleasant life

Firstly, music has considerable potential to fulfil the pursuit of pleasure. Brain imaging studies show that music listening stimulates those brain regions involved in reward/motivation, emotion and arousal, including the ventral striatum, midbrain, amygdala, orbitofrontal cortex and ventral medial prefrontal cortex (Blood & Zatorre, 2001; Menon & Levitin, 2005; Panksepp & Bernatzky, 2002), which are also stimulated by other “euphoria”-inducing stimuli like food, sex, and drugs of abuse. This seemingly involuntary response to music provides one powerful motivator to repeat music experiences. Listeners and concert attendees give ‘enjoyment’ as the dominant response for why they choose to listen to music (e.g. Greasley, 2008; Lamont & Webb, 2010). Music can also have pleasurable effects without requiring conscious attention. Background listening is one of the main functions of music listening for young adults (Tekman & Hortaçsu, 2002), and many adults use music to accompany other activities such as housework, desk work, travelling and eating (Sloboda, 1999; Sloboda, O’Neill & Ivaldi, 2001). Background music also helps listeners feel more positive (Sloboda et al., 2001; Juslin et al., 2008), even without requiring attention to the music (North, Hargreaves & Hargreaves, 2004). Performing music can also provide a direct route towards happiness in that it also involves auditory feedback, although performance has the potential to create a great deal of negative affect through performance anxiety (Kenny, 2004; Wilson, 2002).

B. The engagement route: the good life

Music also has potential for the pursuit of engagement. Csikszentmihalyi (2002) defined both music performance and highly focused music listening in live or recorded situations as having the potential to induce flow in participants. He argued that to do so, listeners must have a high degree of attention and focus, setting aside time and space to fully engage, balancing high levels of skill and challenge.

With the aim of exploring meaningful experiences in music, Gabrielsson and Lindström Wik initiated an extensive programme of research in Sweden into Strong Experiences of Music (SEM) (Gabrielsson, 2001; Gabrielsson & Lindström, 1995; Gabrielsson & Lindström Wik, 2003). Participants were invited to write in as much detail as they could about their strongest and most intense experience of music, with over a thousand free descriptions have been analysed to date. Using content analysis, seven categories of strong experience were identified across the reports within a SEM Descriptive System (Gabrielsson & Lindström Wik, 2003): general characteristics,

physical reactions, perception, cognition, feeling/emotion, existential/transcendental elements, and personal/social elements. Most experiences were of listening rather than performing, and in live listening settings. While the reports shared similarities with peak experiences found by Maslow (1968) and Panzarella (1980), there were differences. For example, previous studies had only found peak experiences with classical music and yet the SEM project highlighted a range of musical styles (Gabrielsson, 2006). Furthermore, these kinds of engaged listening experiences were mainly, but not always, positive, while peak experiences with music are always positive (cf. Whaley, Sloboda & Gabrielsson, 2009). Strong negative experiences can still engender engagement (as is the case for other engaged activities, such as marathon training; Seligman et al., 2005).

Playing and performing music also has the potential to induce a flow-like state, even in infants and young children (Custodero, 2005). Gabrielsson & Lindström Wik (2003) uncovered musical performances that reflected engagement with loss of self-awareness, indicative of flow: for example, “sometimes it is as if it isn’t me who is playing. The fingers move by themselves” (p. 176). Flow may also predict long-term motivation and achievement in music performing. For instance, amongst a sample of adolescent musicians, O’Neill (1999) found that higher achievers reported significantly more flow experiences with music than lower achievers. Similarly, Sloboda (1991a) found that adults who described having had peak experiences with music before the age of about 10 were more likely to pursue involvement with music later in life. High levels of engagement and flow in music may thus provide one reason for performers to continue to re-engage with the activity.

C. The meaning route: the meaningful life

Corresponding to the general lack of research on the component of meaning (Seligman et al., 2005), little research has explored how music can help develop meaning (in terms of relations with family, community, justice, or spirituality). However, music accompanies other activities which can be more clearly labelled as meaningful, such as religion (Becker, 2001; Sloboda, 2002). Two different kinds of ‘meaning’ can be identified as achievable through music: one that relates to personal identity and the other to group identities.

The first element of ‘meaning’ that music can facilitate is a sense of personal identity, engendered for the listener by belonging to particular musical taste cultures (Tarrant, North & Hargreaves, 2002; Karlsen, 2007) and for the performer by discovering their identity as a musician (Hargreaves, Miell & MacDonald, 2002). Many researchers have emphasised this pursuit of identity as an important function of engagement with music (Tekman & Hortaçsu, 2002; Tarrant et al., 2002), and this fulfils the notion of personal growth at the centre of the search for meaning. For the performer, becoming a musician is an important achievement in terms of developing an identity in music (Hargreaves, Miell & MacDonald, 2002; Lamont, 2002; O’Neill, 2002), and becoming a performer is a somewhat separate achievement (Davidson, 2002), with a fundamental goal of communication to an audience (cf. Hargreaves,

MacDonald & Miell, 2005). This positive identity is important as a motivator: a lack of musical self-concept or musical identity leads many people to disengage from musical activities (e.g. Ruddock & Leong, 2005; Wise & Sloboda, 2008).

The second element relates to the social and collective meanings of music. By early adulthood many experiences of music listening are shared with others (Juslin et al., 2008; North et al., 2004), and music provides an important channel of communication in new social settings (Greasley & Lamont, 2006; Rentfrow & Gosling, 2006). For the performer, developing a sense of group cohesion is also important. Persson (2001) found social motives and the importance of belonging to be the second most influential in pianists, and Faulkner & Davidson (2004) showed how membership of a choir played an influential role in connecting to and communicating with others (cf. Davidson, 2002). Even in small ensembles, the influence of others is an important motivator (Ford & Davidson, 2003), and Gabrielsson & Lindström Wik (2003) highlighted a sense of community amongst performers and between performers and listeners in their strong experiences of performing.

D. An integrated approach to happiness

Adopting the above interpretation, the elements identified in Gabrielsson & Lindström Wik's (2003) SEM project can incorporate all of Seligman's three routes to happiness. Firstly, direct physical and physiological responses to the music such as chills are experienced alongside high arousal feelings of rapture and euphoria, ecstasy and intoxication (Gabrielsson, 2001). These are accompanied by a considerable number of different characteristics of engagement, such as focused attention and complete absorption, changes in attitude, feeling embedded in the music, and coming to hear things in a new way. Finally the more spiritual elements of transcendence such as offering a glimpse of God or heaven, out-of-body experiences, and feelings of pure being are reflected in the accounts, as well as meaning-making in terms of personal and social identity. This combination of factors may account for the power of such experiences in a range of therapeutic outcomes (Gabrielsson & Lindström, 1995), although most of the analysis presented to date has focused on identifying the different elements of SEMs rather than exploring their co-occurrence within particular accounts.

The SEM project has begun to provide insights into listeners' memorable and lasting experiences of music. The central focus has been on the effect on the *active agent* (listener or performer), both during and after the experience. However it is only possible to fully understand the nature of a musical "response" by considering the listener, the music, and the situation in a process of reciprocal feedback (cf. Hargreaves, MacDonald & Miell, 2005). Thus far information presented on the music and situation has been purely descriptive and correlational (e.g. Gabrielsson, 2001, 2006). However, evidence shows that emotional responses to music in everyday life differ according to context (Juslin et al., 2008), and certain contexts have more potential for meaningful and engaged listening experiences that are likely to lead to greater happiness. For instance, live music events may be more likely to engender

a greater sense of community than solitary listening, complementing rather than duplicating the experience of listening to pre-recorded music (Pitts, 2005a). Music festivals also seem to have the potential to evoke stronger emotional experiences with music (Karlsen, 2007; Pitts, 2005b).

In summary, from a theoretical perspective, music listening can potentially affect happiness through the pursuit of all three of Seligman's (2002) routes: firstly pleasure, in terms of boosting positive emotions; secondly engagement, in terms of highly intense focused music listening which changes the way listeners think and feel; and finally, meaning, broadly conceived of as spirituality, aesthetics, and developing connections with others. Much research has explored music's power to affect emotions in broadly positive ways. Much less is known about engagement, although that this is a dimension that people vary on (Greasley, 2008), and very little research has explicitly explored meaning. Strong experiences may blur the boundaries between neatly defined categories. For example, Gabrielsson & Lindström Wik (2003) found factor analysis of quantitative rating scale data produced factors combining elements from different categories in their descriptive system, such as transcendent state, perfection, peace and happiness and healing experience (see also Whaley et al., 2009). This suggests that a different analytic strategy might be necessary.

E. Current research aims

The current research thus addresses the holistic nature of strong experiences of music listening amongst a population of young adults, adopting a more open-ended methodological approach to explore what kinds of experiences they choose to report and to explore any commonalities in their experiences from the point of view of music, listener, and situation. It adopts a similar self-report methodology to the SEM project, drawing on this and other findings that most participants possess an adequate vocabulary to describe music and their emotions (e.g. Greasley, 2008). It focuses on participants who are in a stable and balanced stage of musical development. While adolescents have strong but narrow musical allegiances which seem to serve many non-musical goals such as identity formation (Tarrant et al., 2002), young adults are in a phase with the potential for more communication through music, attendance at live events, and a broadening of musical taste (Greasley, 2008). At this stage in development listeners are thus likely to have exposure to a wider range of music. Based on earlier findings (Gabrielsson, 2006), they are also more likely to have had a strong experience in the relatively recent past, strengthening the dependability of the self-report technique.

METHOD

A. Participants

64 undergraduate students completed free descriptions of their strongest experiences of music. The sample consisted of psychology students from a medium-sized university in the North-West of England. There were 22 male and 42 female participants, with a median age of 21 years (ranging from 20 to

26, $SD=1.33$). 87.5% of participants were White Caucasian, and the sample also included a small proportion of Chinese, Indian, Other Asian and Other participants. Most participants (80%) listened to three or more hours of music per day, and just over half (58%) had had more than six years of musical training.

B. Materials

Identical instructions was given to participants as in the earlier SEM project (Gabrielsson & Lindström Wik, 2003). At the top of one side of A4 paper was printed: "Describe in your own words the strongest, most intense experience of music that you have ever had. Please describe your experience and reactions in as much detail as you can. If you need to use more paper, feel free". The rest of the page was left blank. On the opposite side was set out a series of follow-up questions, following Gabrielsson (2006). Participants were instructed to complete these in as much detail if they had not referred to the answers in their free descriptions. These asked where and when the experience took place, whether it was the first time of experiencing the music and whether this strong experience recurred during later experience with the same music, feelings before and after the experience, what the cause of the experience was, and finally, whether such strong experiences were experienced often.

C. Procedure

Participants were recruited over three years (October 2006 to October 2008) as part of an optional module on Music Psychology, for which they gave informed consent to take part in a range of studies. They were given response forms and asked to take these away and complete them alone, returning them to the researcher the following week. Participants were given pre-assigned randomised participant numbers (used here to track respondents across accounts) to protect their anonymity, and this enabled their responses to be matched to other data on their age, gender and ethnicity.

RESULTS

A comparison of the global results from all 64 participants was first undertaken using the SEM Descriptive System (Gabrielsson & Lindström Wik, 2003). This indicated a high level of external validity overall for this measure of strong experiences between the Swedish general adult population and English university students, although there were some small differences. For example, there were fewer instances of perceptual descriptions than the original findings, and a larger proportion of transcendental responses.

It is important to note that the earlier Swedish data had been analysed thus far using a broadly nomothetic approach, summarizing features of accounts across individuals. This provides one way of characterizing strong experiences of music which gives a good general sense of the features that arise in these accounts. However, as Gabrielsson & Lindström Wik, note themselves (2003), the power of the accounts tends to lie in considering each account as a totality. The current paper explores the accounts both quantitatively and qualitatively adopting an idiographic approach, taking the individual as the

unit of analysis (Pelham, 1993). I first consider data relating to the listeners and then data relating to the performers.

A. Listeners

The majority of strong experiences of music (SEMs) for listening were experienced in live listening situations (36 out of 46 or 78.3%; 16 festivals, 13 pop concerts, and one wedding, two funerals, and one each of classical concert, musical, ballet, and conference). These were analysed initially in terms of festivals ($N=16$) and other live events ($N=20$). A further eight were experienced in situations listening to recorded music (17.4%), and two were imagined experiences of listening to music that had been previously heard via recordings (4.3%). These were grouped together into the category of "non-live" ($N=10$). The length of time since the SEM varied from 1 month to 13 years, with a mean of 2.3 years ($SD=2.502$). A one-way ANOVA found no difference in the mean length of time since the SEM between the three groups (non-live $M=2.287$, $SD=2.72$; live concerts $M=2.12$, $SD=2.81$; live festivals $M=2.55$, $SD=2.08$) ($F(2,44)=.127$, $p=.881$). However, the SEMs happening 13 years ago were all in the live concerts category, with a maximum of 7 years having elapsed for the listening and live festival categories.

Most of the experiences (39 of the 46 or 84.6%) took place with other people. Exploring differences between live and non-live listening situations, seven out of the 10 non-live SEMs (70%) occurred for participants who explicitly stated that they were alone. However, while all the attendees at events were presumed to be with other people, closer inspection of the data revealed that four participants reported being on their own at a concert or festival, i.e. not with friends. This was either a consequence of having attended the event itself alone (because friends were not able or interested to accompany them, in three instances) or having lost their friends at a particular moment (one instance). In ten of the live event situations (but none of the non-live situations) no information was given to indicate whether the participant was alone or with friends (no use of 'we' statements or mentions of other people).

In terms of the music, most SEMs occurred with pop music (36 of the 44 episodes where the music was described, or 81.8%), with a further 5 (11.4%) occurring with classical music and 3 (6.8%) with other styles (one musical, one jazz and one folk). Only two participants mentioned the same band, Radiohead, heard at different events: one participant at a live concert mentioned two specific songs, "Idioteque" and "There There", while the other at a festival referred to the entire set, which later investigation revealed did include both these songs amongst 14 other Radiohead tracks. The music evoking SEMs ranged from Pachelbel and Wagner through Cat Stevens, the Beatles and the Who to Rage Against the Machine, Ash, Keane, and Damien Rice. This highlights a considerable diversity in music capable of evoking SEMs even amongst a young adult sample drawn from a relatively homogenous population over a limited timespan, ranging from music written centuries and decades ago through to contemporary pop music. There were also no clear indicators as to any style of music more suitable for evoking SEMs. While some represent powerful music

styles such as heavy metal (Metallica, Guns & Roses, Type O Negative), others are much softer (e.g. Keane, Damien Rice).

Considering familiarity, most listening SEMs occurred with familiar music (35 out of 45 that gave responses, or 77.8%). SEMs with unfamiliar music were proportionally more common in non-live (3 out of the 9, 33.3%) than live events (7 out of the 36, 19.4%). However, it is striking that listeners who had chosen to attend a live event could sometimes be taken by surprise by unfamiliar music. Of the 43 participants who responded about recurrences of the SEM on listening to the same music subsequently, 12 were coded as categorically no (28%), 16 as 'yes but not with the same intensity' (37%) and 15 as giving a strong 'yes' response (35%). Thus more listeners (72%) were likely to have similar or as strong experiences on subsequent hearings of the music, and participants often explained that hearing the music in different situations would remind them of the original SEM.

In terms of the emotions evoked, responses were mainly positive. Descriptions were full of positive emotion phrases such as "intense pleasure", "exciting and thrilling", "awesome", "fantastic", "the most beautiful moment of your life, the most peaceful". Most of the mixed or negative emotions evoked arose in situations where individuals were listening to recorded music. For instance, one participant mentioned "Mixed emotions ran through my body and soul, some joyful, while most however sad. I was thus overtaken by tears which were, on the one hand very painful, but on the other just as relieving" (P624). Another referred to a particular listening experience on a train during a painful time in his relationship with his girlfriend which had helped make up his mind to end the relationship, referring to "raw" and "emotive" lyrics leading to "tears in my eyes"; however, he later explained that the feelings of confusion were somehow resolved by the listening experience: "It was OK to feel like that. It romanticized it in a way" (P372). On hearing back a song he had written with his band about difficult times in a relationship, a third participant referred to how "everything I was feeling deep inside had been lifted, and I was so moved by the song. It helped me so much emotionally to move on" (P539). In addition to these personal situations, as would be expected the two instances of music heard at funerals also evoked a mixture of emotions including "reassurance" as well as sadness. Thus the SEMs not exclusively related to positive emotions or happy situations were not necessarily overwhelmingly negative, but rather seemed to help people come to terms with their condition.

B. Performers

In the 19 performing experiences, there was a variety in terms of activity and context. Firstly, two instances of specific music had been experienced through performing but participants referred to a listening experience as being their strongest (one referred more clearly to listening in the details and has already been considered within the listening results). Two participants described intense experiences of playing music alone. One further participant described an experience of playing with friends but not for an audience. There were four descriptions of playing for a critical audience (one music lesson with an expert, one graded examination, one university recital

and one competitive music festival). Finally, ten participants described a situation where they were performing in front of an audience as part of an ensemble or group.

Most of these strong experiences (12 out of 19 or 63%) occurred in relation to classical music (either specified or unspecified). There were two instances of music from musicals (one of a school performance of the musical and one of a performer learning the music alone at home), two instances of pop bands performing original music, one pop "cover", one example of playing a single note on a keyboard (see P329 below), and one description of unspecified music (performed not at a specific time point but over a year). Most of the accounts described the entire performance of the given work, although a few identified particular sections of the music which evoked particularly strong responses.

In the next sections I consider the evidence from both performers and listeners in relation to the three routes to happiness outlined above.

C. The hedonic route

Some of the responses, overwhelmingly in the listening group, could be characterised overwhelmingly by hedonism. The most extreme example of this is given in its entirety.

"A few years ago, I got on stage with a ska band called Lightyear. I was quite drunk and so were my friends who were with me. I was dancing with the singer and everyone was going crazy. I just remember thinking to myself no matter what life throws at you you will always have music and it will always make you feel good" (P481).

The explicit acknowledgement of being drunk, the active response to the music in terms of dancing, and the lack of detail about the musical experience all combine to point towards a hedonic state. However, despite the emphasis on hedonism, a sense of meaning is also implied in this brief description, achieved through a personal recognition ("thinking to myself") of the role music can play in responding to life's challenges ("it will always make you feel good"), as well as the permanence of this role (a double emphasis on "always"). Thus it seems that even the most hedonic state is accompanied by some deeper insight. For some of the performers, an emphasis on a hedonic state was accompanied by a strong sense of flow. In these cases, performers reported their experience in terms of a kind of synergy achieved between themselves, other performers and the audience, and these accounts also emphasised the sound quality, the beauty of the music, and a sense of euphoria. For example, one oboist reported in detail about an instance of playing the St Matthew Passion in front of a large audience, describing how "the four musicians became one. We played as if we were 'in trance', as if we were not physically there. The voice of the soprano was so pure". While there is some mention of technical challenges posed by the music ("you need a lot of breath to play it to the end"), overall it emphasises the sound quality produced by the oboist and the other performers and the effect this had on herself, the other performers and the audience. All six accounts of this type included an element of singing, and many seemed to have come from nowhere rather than being carefully built up to

with high levels of pre-performance anxiety and anticipation (see below).

For the listener, accounts characterised by hedonism also included considerable detail about the musical features responsible for evoking this state. References abound to particular instruments or sound qualities as evoking strong responses. For instance, a description of an experience of *Les Misérables* highlights the sound quality: “The chorus was so loud, it was rumbling through my chest ... it was the way the voices reverberated around the room ... I could not just hear it but feel it” (P328).

D. The engagement route

Another set of listening and performing responses are dominated by flow-type states characterised by loss of attention to surroundings and loss of self-awareness. Listeners typically refer to “being lost in the music” (P374); “I can’t really remember much of the music, but assume they played stuff off their as yet unreleased album” (P573). The focus on the musical experience to the exclusion of everything else is another common theme: “It felt like nothing was happening outside the building, everything was in here, nothing else mattered for that 45 min set” (P361); “I believe I lost all my friends at one point but it didn’t matter because I was so involved with the music” (P251). The sense of ritual in Csikszentmihalyi’s original definition of flow is also found in accounts of live listening experiences, which include phrases such as “trance”. As one participant explained about a Belle and Sebastian concert, “for some reason you feel like you’re in some kind of a ritual and sharing a holy moment” (P247).

For the performers, flow experiences were relatively common. One performer reported an inwardly-directed example of flow resulting from a “note-perfect and accurately timed rendition of a piece of Lord of the Rings music on my flute. I had been very frustrated with myself at being unable to get the piece’s timing accurate. When I achieved it, I was very happy and pleased with myself” (P542). Most of the other accounts containing high levels of flow included other people as audience or co-performers, and also included some negative elements of performance anxiety and the development of personal identity through music.

These included all four accounts of performers in front of a critical audience and four of the ten concert performances. Participants indicated high levels of stress prior to the performance, reporting being “nervous”, “worried” and “anxious” before they played, with anxiety being expressed around the challenges of the music – “it was a difficult piece which had taken me approximately a year to learn” (P659) and around the performer’s own state - “I felt very nervous, felt like I was not well-prepared for it, even my fingers froze up” (P239). As the performance began, these nerves subsided and performers reported feelings of “relaxation”, “enjoyment”, and “adrenaline” and lack of self-awareness. All these accounts also ended with feelings of relaxation, “happiness and satisfaction”, and one participant even “wanted to do it again” (P635, after a university music recital). The challenges also

seemed to have led to an increased engagement with music performing subsequently.

E. The meaning route

From the listening perspective, one participant described his experience of seeing a band in a way that characterizes the sense of a search for identity through music taste. He is linking his own sense of identity as an authentic music fan to a premeditated experience which evoked a state of euphoria, comparing himself with others who are not “true” fans.

“being the only person (out of my friends) who knew who the Arctic Monkeys were. None of my friends had heard of them, at the time, so I had to go see them by myself ... When they finally did become well known I felt like I was much more of a legitimate fan than people who got on the bandwagon when they got famous” (P573).

Many accounts at concerts and other live events also refer to the shared experience of music as important in contributing to the intensity of the experience. These shared experiences also featured in the performers’ accounts, although these were typically integrated with engagement (see above).

F. An integrated approach

As illustrated above, the evidence from the current data for both listeners and performers suggests that no single route to happiness can fully account for the free descriptions of strong experiences of music found here. Even the most apparently hedonistic experience of music listening is found to contain elements of social interaction and group meaning.

Considering predictability, a great deal of listeners referred to strong experiences happening with their favourite bands and albums, indicating that familiarity played a role in evoking a strong experience; evidently all the performers had strong experiences with music that they knew and had practiced beforehand. For some, the intensity of the experience is controllable: “Sometimes the feeling is so intense, type of melancholic sadness and I fully embrace the feeling. Other times I suppress it or it is less intense” (P582). However, other participants reported partly premeditated strong experiences, where the situation in general predisposes them to an SEM but something unexpected happens which heightens the experience. Some listeners referred to songs being played “out of nowhere” or unexpected songs or performers being part of an expected and familiar set; some performers, as discussed above, referred to the sound of a massed performance as carrying them away in an unexpected manner. The live nature of the situations which predispose participants to have strong experiences evidently contributes to this unpredictability and changes the environment for both listeners and performers from safe and known to unsafe and unpredictable, largely due to the input of others:

“Listening to them [Radiohead] on CD is one thing, but when thousands of people surround you, singing to every word like you, the atmosphere electric, there’s no other feeling as strong, or intense, as that” (P467).

Finally a few participants (all listeners) reported entirely unexpected events where the situation itself had no inherent

potential for engendering a strong experience, such as walking around a university campus. However, even these experiences went on to take their place in participants' musical biographies. For example, one participant reported a random hearing of a particular pop track while walking to the bus stop. Being affected by the sounds and the lyrics "made me smile and put a spring in my step" (P672). She went on to state that this song had become one which could make her feel happy and she had even listened to it while writing her account.

DISCUSSION

The present paper has presented novel data on strong experiences of music amongst university students describing a range of different settings of listening and performing music that have been important in their lives. More experiences of listening were presented than of performing, despite the sample having a high level of formal musical skill and having had many opportunities to perform music alone and with others. This supports similar findings from Gabrielsson & Lindström Wik (2003), and suggests that listening is potentially a more conducive state to be in to have a strong experience of music that involves pleasure, emotions, engagement and meaning. Performers are required to have more sense of self-control (see also van Zijl, 2008) which may prevent these highly meaningful experiences occurring as often as might be expected.

Music has considerable power to affect happiness, and the current results show that young adults are more likely to have strong positive experiences of music listening that they recall in detail and consider to have had a significant impact on their lives if they are in a live listening situation such as a gig or festival, if they are with other people as well as a large audience, and if they are listening to familiar pop music. Beyond these generalisations, the experiences are highly individual: they vary in length from a few seconds to several hours, occur in response to a wide variety of styles of music from exciting through to very calming (Gabrielsson, 2006), and are characterised by a range of different physical and psychological elements (Gabrielsson & Lindström Wik, 2003). Some listeners refer to the emotional ebbs and flows of a piece or a set, providing evidence for the music itself mimicking the structure of human emotions (Langer 1942), but others focus their attention on specific moments within a piece such as the opening chords of a song or a particular instrumental entry or lyrics, suggesting that both musical and non-musical expectations, either realised or thwarted, might have play a greater role in generating strong emotions (Meyer, 1956). Listening to the same music on later occasions tends to evoke the same or similar emotions, indicating that these strong experiences have future potential for generating happiness through reminiscence, following an associationist interpretation (Juslin, 2009).

The descriptions of pleasure evoked by music listening (from both listeners and performers) correspond clearly to earlier findings about the ways in which music can affect both the body and the brain within the hedonic route to happiness. Participants reported thrills, shivers down the spine, piloerection, tears, and other physical responses that have been found in previous research (Gabrielsson & Lindström Wik,

2003; Sloboda, 1991b). In some cases they also reported being "moved" emotionally by the music even without paying attention, confirming findings from brain imaging that music can have unmediated effects on areas of the brain responsible for emotions (Menon & Levitin, 2005) and findings from everyday life that music can be influential even as background (North et al., 2004; Sloboda et al., 2001). The positive experiences of performers also support the importance of the hedonic route, confirming earlier findings that performers choose to engage and re-engage through some kind of intrinsic enjoyment of performing (Persson, 2001).

However, pursuing the pleasant life has been viewed as a selfish and potentially unfulfilling route to happiness (Ryan et al., 2008). Considering each account individually within the idiographic framework adopted here, there are no examples of pure hedonism. Even the least detailed accounts from listeners refer to some kind of cognitive change as well as simply a pleasurable experience. For instance, Participant 481, who referred to being drunk and dancing with his friends, also described a realisation of the importance of music in life, suggesting a contribution of meaning-related happiness as well as hedonism. This goes beyond earlier findings that everyday music listening is undertaken for enjoyment (e.g. Lamont & Webb, 2010), indicating that meaningful musical experiences are characterised by more than simple pleasure.

Engagement is a prominent feature of the accounts from both listeners and performers, with flow-like states resulting often from focused listening and performing situations (Csikszentmihalyi, 2002). In general, participants report high levels of engagement in their listening experiences. Accounts describe the anticipation and expectation surrounding live events in particular, supporting the notion that strong experiences arise in part because listeners prime themselves to have them (DeNora, 2001). The search for meaning through personal identity also emerges clearly in some of the descriptions of strong experiences, with listeners talking about being "authentic" fans and defining themselves through having strong allegiances to particular artists. For performers, flow and peak experience are found to be important in generating and sustaining motivation for future engagement with music (O'Neill, 1999; Sloboda, 1991a), and the accounts emphasizing challenge indicate the importance of having mechanisms to cope with negative experiences as well as plenty of positive experiences (Davidson & Burland, 2006).

Within both these eudaimonic endeavours, however, there is no single account of listening that is exclusively characterised by either flow or meaning. Similarly, for performers, accounts either tended to emphasise flow and meaning achieved through personal identity, or pleasure and meaning achieved through group identity. The former cases, which were more frequent in the current data, reflected many features of preparation and pre-performance anxiety found in earlier research (Kenny, 2004; Steptoe, 2001) resulting from the need to meet the high levels of challenge with appropriately high levels of skill. The discourse around preparation and anxiety indicates that for some, performing is not inherently pleasurable. However, this is a broad typology; accounts of pleasure and meaning through group identity often included some mention of flow or anxiety,

while those emphasising flow and meaning through personal identity sometimes referred to euphoric feelings.

Thus the current results support Seligman et al.'s (2005) contention that the route to authentic happiness should contain a balance of the three elements of pleasure, engagement and meaning in order to be truly effective. This combination of factors was implied in Gabrielsson & Lindström Wik's (2003; Gabrielsson, 2001) earlier results, but has been brought to the surface here by the idiographic analytic strategy. Viewed from this perspective, strong experiences of music are characterised by more than just pleasure, engagement or meaning. This supports the argument that engagement in particular has not received sufficient attention when considering overall life satisfaction (Vittersø, Oelmann & Wang, 2009).

Expectation and prediction have emerged as key themes in the current results. As well as important in their own right for understanding the nature of strong experiences with music, they also have a bearing on the issue of context. Previous research had begun to acknowledge the importance of context in influencing responses to music, either by capturing a range of contexts at random intervals (North et al., 2004; Juslin et al. 2008) or by studying specific contexts in detail (e.g. Karlsen, 2007; Pitts, 2005a, b). Random time sampling as arises in Experience Sampling may miss important events; exploring specific events in detail opens up the possibility of investigating the effects of one musical event on many listeners. However, both approaches place constraints on the data that can be gathered.

As the current findings indicate, while some listeners and performers can reliably predict the circumstances that will lead them to a strong experience (which typically includes the festival environment and live group performances), others are taken by surprise in a range of different situations, some repeatable and others more unique, some unusual and others more mundane. Nearly a quarter of the listening experiences reported here came from music that had not been heard before, which diminishes the efficacy of musical expectancy as a predictor of a strong experience. Event expectancy, on the other hand, may play a role for those participants who are attending live events or deliberately listening to music in everyday life, giving weight to the notion that listeners can prime themselves for musically meaningful experiences (DeNora, 2001).

However, even this cannot explain the diversity of strong experiences reported here, which include a range of unexpected situations. Just as it is not possible to predict the specific outcomes of a chosen musical experience it is also not possible to predict which situation, music, and listener/performer would coincide to generate such a strong experience. Listeners in particular have considerable autonomy in the ways in which they choose to engage with music at foreground or background level, and more research is required to explore how this might change from context to context (cf. Sloboda, Lamont & Greasley, 2009).

The methodology adopted here allows participants to describe as much or as little as they wish about their own choice of strong experience with music. As well as identifying

different nomothetic elements of the experience (following Gabrielsson & Lindström Wik, 2003), the idiographic analysis provides important insight into the totalities of the experiences reported. The analysis according to context also enables the current findings to go beyond those from Gabrielsson & Lindström Wik (2003; Gabrielsson, 2001, 2006) to explore features of the performing situation in more detail, since it is becoming increasingly acknowledged that every feature of musical engagement and involvement is highly context-specific (Juslin et al., 2008; Sloboda et al., 2009).

The open-ended response format also enables these meaningful experiences, which are rare (Wheeler & Reis, 1991), to be investigated in more depth. Research into everyday listening situations has tended out of necessity to employ fixed responses and limited response options to important questions such as why a listener chose to hear a piece of music at a given time (e.g. North et al., 2004), which is effective in characterizing a large number of everyday responses. The open-ended reflective approach adopted here is more fruitful in uncovering the complexity of listeners' experiences, enabling one to go beyond simple options such as "I chose to listen to this because I liked it" and understand multiple routes to happiness. It also enables comparisons to be made between listeners and performers, who cannot report on their experiences of performing while they are taking place.

Finally, the emphasis on self-report of experiences in the past is not without its limitations. Although broadly correlated, there are differences between well-being as experienced on a moment-to-moment basis and as evaluated after the fact (Kahneman & Riis, 2005). Where these two measures differ, evaluated well-being appears to have more predictive power (Wirtz, Kruger, Scollon & Diener, 2003) In the present findings, both listeners and performers show self-awareness of the fact that they can repeat a music listening experience (either by listening to a recording of the live event or by recreating the situation of the live event or performance) with predictably positive effects. This further underscores the huge potential that music has to contribute to the pursuit of authentic happiness.

CONCLUSION

In summary, strong experiences of music provide people with valuable and overwhelmingly positive memories which they can draw on to generate higher levels of happiness and motivation, both from a euphoric and a eudaimonic perspective. These strong experiences may occur in many different situations and in response to many different kinds of music, but their impact on the listener or the performer is relatively generic in boosting and sustaining levels of pleasure, engagement and meaning. Music listening offers the potential to connect to different sources of happiness, and as such to reach a balanced state of authentic happiness without any apparent negative side-effects. Music performing has more potential for negative associations, but equally provides an excellent way to achieve a state of engagement and meaning through a range of predominantly positive experiences.

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