CHAPTER 43

CHOOSING TO HEAR MUSIC

Motivation, Process, and Effect

ALEXANDRA LAMONT,
ALINKA GREASLEY, AND JOHN SLOBODA

Introduction

In recent years, the psychology of music has expanded its research horizons to include large-scale studies of fine-grained patterns of music listening in everyday settings. In particular, experience sampling methodology, first introduced to the field by Sloboda, O'Neill, and Ivaldi (2001), has become a popular measure to map the listening habits of large numbers of adults (Greasley and Lamont, 2011; Juslin, Liljeström, Västfjäll, Barradas and Silva, 2008; Krause, North and Hewitt, 2013; North, Hargreaves and Hargreaves, 2004;) and young children (Lamont, 2008). These studies typically capture slices of everyday life in relation to music, and key findings are that adults typically listen to music for a substantial amount of their waking hours, in a range of different situations and for a range of different purposes. While being exposed to many kinds of nonchosen music, many adults are highly conscious of their own deliberate music choices and how these work in the music–listener–context dynamic (Hargreaves, Hargreaves and North, 2012). Music is typically chosen for its emotional impact (Juslin et al., 2008) and to fulfil a number of other physical, psychological, emotional, and social needs (Greasley and Lamont, 2011). Music listening tends to accompany or be accompanied by other nonmusical activities, whether or not the music is the primary focus of attention. Across all this research it is clear that self-chosen music has the potential for greater emotional and functional impact in many different ways than music which is heard through others' choices.

Advances in technology have played a major part in enabling listeners to curate and manipulate the soundtrack to their everyday lives. MP3 is now the second most popular format to access music after the radio (Krause et al., 2013). Whether accessed through dedicated music players or increasingly via other multipurpose devices such as smartphones, MP3 has facilitated almost instant access to vast playlists and music libraries, which need not even be purchased or downloaded (services such as Last.fm and Spotify provide subscriptions to extremely large online libraries). These technological advancements seem likely to lead

to substantial changes to the way people interact with music (Baym, 2010; Liebowitz, 2004). Research is still lagging behind technology, with little emphasis having been placed on exactly how the rapid pace of technological change is affecting listeners' patterns of engagement and creations of meaning around their own music. However, more is becoming known about how choice affects the listening situation and the functions music listening serves, and this chapter provides an overview of the latest research in this area.

As in our previous overview (Sloboda, Lamont and Greasley, 2009), we organize the research reviewed here by the functional niche that the music is chosen to be part of, and we have identified five main areas. These are (a) travel (driving a car, walking, using public transport); (b) brain work (private study, reading, writing, and other forms of thinking); (c) body work (everyday routines like washing, cleaning, cooking, and other forms of manual labor, exercise, yoga, relaxation, pain management); (d) emotional work (mood management, reminiscence, presentation of identity); and (e) attendance at live music performance events as an audience member.

Within these niches, we also identify four recurring functions of self-chosen music use. *Distraction* is a way of engaging unallocated attention and reducing boredom. *Energizing* is a means of maintaining arousal and task attention. In *entrainment*, the task movements are timed to coincide with the rhythmic pulses of the music, giving the task or activity elements of a dance. Finally, *meaning enhancement* is where the music draws out and adds to the significance of the task or activity in some way.

Travel

Music is chosen to accompany travel more consistently than in almost any other setting, made possible through mobile sound delivery systems that can accompany the traveler. Around 90% of travel episodes are accompanied by self-chosen music (North, Hargreaves and Hargreaves, 2004; Sloboda et al., 2001).

Driving a Car

Driving is a highly skilled task, requiring constant vigilance. Whilst there is some evidence that music enhances performance by helping achieve or maintain appropriate levels of arousal and concentration (Cummings, Koepsell, Moffat and Rivara, 2001), in-car music can decrease driving performance as it is more difficult to attend to the key visual and auditory signals (e.g., engine noise, external warning signals) that must be constantly monitored to avoid accidents. An additional distractor is adjusting controls on in-car audio-systems, thus taking attention off the road (Lee, Roberts, Hoffman and Angell, 2012; Stutts et al., 2003).

In a survey of 2473 UK drivers, Dibben and Williamson (2007) found that most drivers (87%) chose to listen to the same music while driving as at home, and when asked about the effects of music, many (62%) cited music's capacity to soothe them, making them calmer and more relaxed. However, rather fewer (around 25%) claimed that music helped them concentrate whilst driving, and drivers who had fewer accidents were most likely to prefer silence

while driving. Use of music has been found to reduce accidents in long and boring drives (Cummings et al., 2001), although the drowsiness-reducing effect is most marked in the first 30 minutes of driving, and drivers believe that music reduces their drowsiness more than it actually does as measured by electroencephalography (Reyner and Horne, 1998).

The benefits on reaction times and avoidance of hazards depend on the nature, speed, and intensity of the music. Ünal, Steg, and Epstude (2012) found that listening to self-chosen music increased the self-reported mental effort required while driving in a simulator, regardless of the demand complexity of the situation; however, drivers with music performed as well on the task as those without. Brodsky and Slor (2013) found younger and less experienced drivers were more likely to enjoy driving with their own preferred music, but make more errors and drive more aggressively in this condition compared with listening to experimenter-chosen music designed to minimize distraction (unfamiliar music without lyrics or clear melodic lines, developed by Brodsky and Kizner (2012)).

On Public Transport

Around 60% of journeys on UK public transport involve listening to chosen music via portable sound systems (North et al., 2004), and respondents noted that 85% of music listening episodes "helped to pass the time," while 73% "enjoyed it." Similarly, in a study of travel onto and around a university campus, Heye and Lamont (2010) found university students and staff chose to listen to music to pass the time more rapidly, as well as to get them in certain moods for the activities they were traveling to (e.g., listening to classical music en route to a study session in the library). This confirms that, in general, music listening on public transport is used to enhance (or distract from) a routine, even boring, low-demand experience. One obvious consequence of private music listening via headphones is that the music isolates the listener from other people (e.g., Bull, 2007). Garner (2014) showed that iPod users are perceived as less likely to engage in social interaction, make eye contact, say hello, or acknowledge a passer-by. Having one's own music available in stressful travel situations can serve to reduce anxiety (Skånland, 2011). In less demanding situations, music seems to serve more as an enhancement to the physical setting, and listeners are more willing to interrupt their listening experiences to interact with others (Heye and Lamont, 2010).

Brain Work

There is a large body of evidence exploring the effects of background music on cognition, with contradictory results. Some studies show music having a positive effect, others negative, and there are many mediating factors such as levels of extraversion, creativity, and musical training amongst participants and types of task given (see Kämpfe, Sedlmeier and Renkewitz, 2011; North, Hargreaves and Krause, Chapter 48, this volume). Most of the research is experimental with limited or no choice over the music being heard. There are fewer studies focusing on individuals' use of self-chosen music, although some recent work focusing on the use of music in offices and in private study provides some parallels to the effects found for nonchosen music.

Desk Work in Occupational Settings

Technological advances mean that individual workers can increasingly make self-directed decisions about whether and how to listen to music (Dibben and Haake, 2013; Haake, 2011). Lesiuk (2005) found that when provided with a selection of CDs in an office environment using headphones, those participants who listened more showed improved mood. Haake (2011) surveyed employees' personal use of music in a variety of office settings. She found a high proportion of music listening at work (80% of respondents, for an average of 36% of total working time). Respondents tended to listen to music while doing routine solitary tasks, word processing, web-surfing, and emailing, and not to listen during tasks involving interaction with colleagues. They cited task-related functions (improving concentration and focus, or blocking out unwanted noise) and more general positive effects (reducing stress, contributing to well-being, and improving the perceived quality of the working environment), stimulating social interaction and relieving boredom. In some workplaces, music is not permitted and this can be a source of frustration for people, particularly those who are highly engaged with music in everyday life (Greasley, 2008).

Private Study

Music is frequently used by children (Pool, Koolstra and van der Voort, 2003) and adults (Greasley, 2008; Kotsopoulou and Hallam, 2010) as an accompaniment to private study at home. Pool et al. (2003) found that background music from TV or radio had no significant effect on children's homework performance or duration, while university students reported frequent use of music to help with study (Greasley and Lamont, 2011), although with many individual differences: some found it beneficial, others detrimental. Responses to (and retrospective accounts of) music episodes in which these students were engaged in self-directed work suggest that music is an essential tool in facilitating mental concentration and focus. Through the mechanism of distraction, and in many cases, avoidance of silence, participants claimed that listening to music disposed of unwanted thoughts and helped them to maintain focus. These examples also highlighted participants' use of specific styles of music to accompany different tasks (e.g., dance music for typing up notes), and in particular, the avoidance of music with lyrical content, providing support for previous experimental studies (e.g., Avila et al., 2012).

Body Work

Music can alter bodily processes, such as physiological states and behavioral movements, coordination, and motivational levels (Hodges, Chapter 12, this volume; Karageorghis and Terry, 2009; Laukka and Quick, 2013), and is used to accompany physical activities such as exercise, relaxation, and pain management (Bateman and Bale, 2009; Gold and Clare, 2013; Karageorghis and Priest, 2012). Again, most of the research in this area has used experimenter-chosen music, but studies have begun to explore the nature of self-chosen music, reinforcing the need to acknowledge agency in music choices.

Physical Work

Music is a very frequent accompaniment to domestic chores (such as washing, cooking, cleaning, and gardening) which exhibit low interest and attentional demands (DeNora, 2000; Greasley, 2008; Greasley and Lamont, 2011; Sloboda, 1999). North et al. (2004) found that self-chosen music accompanied housework on 90% of occasions. Evidence suggests that all four functions of music use—distracting, energizing, entrainment, and meaning enhancement—arise in relation to this activity (DeNora, 2000; Sloboda et al., 2001). For instance, music has been described as energizing, entraining, and adding meaning in relation to household cleaning (Greasley, 2008). This is unsurprising given that the use of music to accompany physical work has been shown to have a positive impact on productivity in industrial workplaces for decades (Dibben and Haake, 2013; Korczynski, 2003) and has been a core activity in cultures over time and space, for example, "singing while you work" (Gioia, 2006).

Exercise, Yoga, and Relaxation

The key issue in the choice of music to accompany physical activities such as exercise or relaxation is the appropriateness of the music for the activity, and the functions of energizing and entrainment are central. Arousal is a key aspect of the appropriateness of and liking for music in exercise situations: people prefer listening to high-arousal music when exercising and low-arousal music while relaxing (North and Hargreaves, 2000), and prefer faster music for higher-intensity exercise (Karageorghis and Priest, 2012).

Much of the exercise literature focuses on elite athletes. For such participants, music is used more frequently in training and warm-ups rather than during or after competition (due to its potential for distraction). Laukka and Quick (2013) found the main reasons for choosing music were to control arousal, emotional regulation, motivation, performance, and the experience of flow. Tools such as the Brunel Music Rating Inventory have been developed to help sportspeople choose appropriate music (Karageorghis et al., 2006), focusing on rather general musical characteristics such as rhythm, style, melody, tempo, instruments, and beat to define the motivational level of the music. Qualitative research on exercisers' completely free choice of music (Hallett and Lamont, 2015) highlights that such choices vary considerably depending on the age and nature of the exerciser, with some distinction between those looking for distraction and those looking for focus. "Socializers" can be easily distracted by music or by social interaction, while "workers" aim to gain the maximum from their workouts and may choose a more focused approach through music.

Pain Management

Music has been explored as a tool for pain management (Cole and LoBiondo-Wood, 2014; Mainka, Spintge and Thaut, Chapter 52, this volume; Mitchell and MacDonald, 2012). Experimental studies show that choosing from a range of experimenter-selected music is more beneficial than having no choice, but listening to one's own preferred music has the most significant positive effect on pain (Mitchell and MacDonald, 2012). Repeated listening

over a week in chronic pain sufferers has been shown to lead to higher levels of perceived control over the pain and lower levels of reported pain, depression, and disability (Siedliecki and Good, 2006). Chronic pain sufferers report regularly listening to music (75% of the sample in Mitchell, MacDonald, Knussen and Serpell (2007)) and are aware of music's potential for attention diversion, relaxation, and perceived control. Gold and Clare's (2013) qualitative study of the experiences of people living with complex multisited pain also showed that preferred music listening had uplifting, energizing, relaxing, and cathartic effects. However, some negative effects were also found, such as frustration because participants lacked the energy or concentration to listen to music in ways they used to, or the ability to sit for prolonged periods (e.g., at a concert), and irritation at the arousing properties of music, which in some cases had led to abandoning engagement with music. Several participants reported that reflecting on their experiences in the study had encouraged them to revisit music listening as a pain management strategy. Research has begun to explore the effects of practicing using music for purposes of reducing pain in experimental settings (Finlay and Rogers, 2015) which has the potential to be useful in affecting independent choices made in real-life settings.

Emotional Work

Having evaluated the use of music in relation to nonmusical tasks and goals, we next consider some more intrinsic outcomes of music listening by focusing on the use of music to manage mood, self, and emotions.

Mood Management

Mood management is one of the most common functions of self-chosen music listening (Hays and Minichiello, 2005; Laukka, 2007; Saarikallio, 2011; Schäfer, Sedlmeier, Städtler and Huron 2013). Unsurprisingly, given that people choose to listen to music that they like and that makes them feel good, they predominantly experience positive emotions as a consequence of listening (Juslin and Laukka, 2004). This includes happy mood maintenance, revival, strong sensations, diversion, discharge, mental work, solace, and "psyching up" (Saarikallio, 2011).

Many listeners use music for a range of mood regulation strategies, but there are differences in awareness of how this happens. For instance, despite using music to fulfil a broad range of mood regulation functions and listening to similar quantities of music in everyday life (Greasley and Lamont, 2011), less musically engaged listeners often expressed frustration while trying to articulate why music "worked" for them (Greasley et al., 2013). More engaged listeners are acutely aware of how music can change as well as fit their moods: one male respondent in Greasley and Lamont's study (2011) noted:

> there's a different mood attached to all of them, there's a different feeling attached to all of them, um, I know every single one of them inside out, so I know what I want and where it'll be and I always have a choice.

Batt-Rawden and DeNora (2005) have described this practical knowledge as "lay" therapeutic practice. Research itself can also stimulate the process of self-reflection, making listeners more aware of the emotional potential of music listening in everyday settings (as noted earlier). Batt-Rawden and DeNora (2005) found participants reported the process of listening, choosing, and responding to different CDs over an extended time period to be therapeutic in its own right, sometimes heightening awareness of how and what to listen to for purposes of self-care. Similarly, van Goethem and Sloboda (2011) found the act of completing a diary study heightened participants' awareness of mood regulation strategies and tactics and the role of music within these. Age and gender differences have also been found in the use of music for mood regulation. Saarikallio (2011) found older people were more aware of how music fits particular moods and situations, and women are more likely to use music to regulate emotions and moods than men (Greasley, 2008; Sloboda, 1999).

Listening to Sad Music

Some recent attention has focused on the phenomenon of deliberately choosing to listen to sad music, which is reported as being popular despite the logical conclusion that it should lower listeners' mood (Garrido and Schubert, 2011; Tahlier, Miron and Rauscher, 2013; Van den Tol and Edwards, 2014). Huron (2011) has proposed that sad music provides the opportunity to feel more positive afterwards due to it engendering crying, which leads to the secretion of prolactin. This "feel-good" hormone leaves a listener who was not in a negative emotional state prior to listening in a more positive mood afterwards. Garrido and Schubert (2011) found individual differences in the enjoyment gained from listening to sad music: listeners higher in absorption and also those high in music empathy tend to find such musical experiences more rewarding.

Autobiographical Work

In relation to aspects of autobiography, music provides a structure for reminiscence and for positioning oneself in a social world. Reminiscence is a specific yet frequent function of self-chosen music listening which is particularly prevalent in older adults (Juslin and Laukka, 2004). Sloboda (1999) found that adults asked to recall early memories involving music were able to report detailed and highly emotional memories despite the considerable time which had elapsed. Nostalgia, a mix of positive and negative emotions, is one of the most common music-evoked emotions (Janata, Tomic and Rakowski, 2007) and music-evoked nostalgia is highly idiosyncratic from listener to listener (Barrett et al., 2010).

Self-chosen music plays a key role in the presentation and maintenance of identity (Greasley, 2008), particularly for adolescents (Tarrant, North and Hargreaves, 2001). Studies show that people believe their musical choices reveal key information about their personal qualities (Greasley and Lamont, Chapter 17, this volume; Rentfrow and Gosling, 2006), and in subscribing to a music taste culture, they are often associating with a particular lifestyle and wider set of values (Russell, 1997). Many adults use their musical autobiographies to reconstruct their life story (DeNora, 2000; Greasley, 2008) illustrating the extent to which music is intertwined in the construction of autobiographical narrative. People's favorite

music (referring to both styles and pieces), whether it be associated with key moments in life or key significant others, is often highlighted in narratives around music and autobiography (Greasley and Lamont, 2011; Lamont, 2011; see Greasley and Lamont, Chapter 17, this volume). For a more detailed account of musical identity, see Hargreaves, MacDonald, and Miell (Chapter 46, this volume).

Attending Live Events

All of the research reviewed so far has focused on experiences with recorded music, and this forms the vast majority of most people's listening experiences. However, self-reported strong experiences of music overwhelmingly happen in live settings—75% in Gabrielsson (2011) and over 80% in Lamont (2011). The Arts Council of England (2011) reports that 73% of the UK population is engaged in the arts more generally, and 30% of the population attend at least one live music event per annum (Department for Culture, Media and Sport, 2012). In our final section we consider live events as a less common but potentially highly influential aspect of choosing to listen to music.

Motivations for Attending

The main reasons that people choose to attend live events are musical, such as hearing a particular artist or style, learning about new music, affirming or challenging existing musical tastes; and personal and social, such as social interaction and being part of a community (Pitts and Burland, 2013; Pitts and Spencer, 2008). From a review of research findings across a range of genres, Pitts (2014) suggests motivations come from interest, based on people's past experiences, attitudes, and openness to new experiences, and from inclination, referring to overcoming practical, social, and financial barriers to convert interest into attendance. A lack of experience with a particular style of music can lead to nonattendance (Burland and Pitts, 2014; Dobson, 2010), and practical factors such as the physical environment (e.g., seating) also contribute to the enjoyment of attending a live event (Thompson, 2007).

The reasons for attending live events are complex and extend beyond the content of the program or the star performer. Few people attend live musical events on their own, and attendance is therefore affected by one's family and social networks and the motivations and interests of others within that network. Concert-going can be a means to express or develop such networks. So, for many people, the question "Who else is going to be in the audience?" can be as influential as the nature of the music or the identity of the artists (Pitts and Burland, 2013).

Experiences at Live Events

Audiences enjoy performances more if the performers show their own enjoyment and interact with the audience (Brand, Sloboda, Saul and Hathaway, 2012; Pitts and Burland, 2013; Pitts and Spencer, 2008; Radbourne, Glow and Johanson, 2013). Physical proximity between

performers and audience also seems to enhance the experience in jazz, enabling the audience to witness the subtle interplay between performers, and providing an opportunity to interact with them both verbally and nonverbally (Brand, Sloboda, Saul and Hathaway, 2012). Experiences at live events are also shaped by other fans. Bennett (2012) explored texting and tweeting at live music concerts and found that members of fan communities upload setlists and photos to online forums and Twitter during the concert so that nonattending fans can feel like part of the event. Some concertgoers reported a tension between feeling that they ought to do this (because others had done it for them when they could not be present) and feeling that it was not possible to be fully immersed in the experience when engaging with mobile technology. Assessing experiences at live events is somewhat problematic but Stevens, Dean, Vincs, and Schubert (2014) have developed a portable Audience Response Facility, an application that can be used on a PDA or smartphone to capture audiences' responses to live events in real time, which may prove promising.

In summary, more data are becoming available on the nature of the live performance situation and the audience's response to it. What appears to be important is the interactions that are possible in a live setting, both between fellow attendees and between attendees and performers, which seem to have considerable value in transforming the experience from a passive to an active one (Dobson and Sloboda, 2014). Biographical retrospective data highlight that the live performance situation can have a substantial impact on individuals' lives, and research undertaken closer to the time of experiencing the event or during the event emphasizes the importance of emotional engagement with the experience.

Conclusion

There is an idealized view of music listening implicit in much of the traditional music appreciation literature (e.g., Cook, 1998) that music is an object for the reverent attention of the idealized listener who gives it their full attention. This also resonates with Csikszentmihalyi's (2002) notion of how flow can be achieved through music listening. While this kind of musical experience clearly has importance for a small number of listeners on a small number of occasions, the psychological research presented here highlights that the surrounding contexts of music not only intrude on the act of hearing, but in many cases shape and control the very purpose, nature, and effect of that hearing. Far from requiring reverent attention, much everyday self-chosen music experience could be described as background—like the soundtrack of a film, perhaps not the primary focus of attention, yet, as the research illustrates, psychologically powerful nonetheless. It is essential not to conflate these types of listening experience, and research must carefully define its own central focus.

Cook proposed a distinction between musicological and musical listening (1998), and there may be differences in levels of focused attention due to the listener's own levels of formal musical training, a potentially fruitful avenue for further research. Evidence also points toward another kind of musical expertise relating to conscious awareness of music choices: the musically engaged (Greasley and Lamont, 2011), the "musics" (Lonie, 2009), or the "squirrel" listeners identified by Lamont and Webb (2010) need not have any performance or technical musical experience but seem able to access more easily the repertoire of mood regulation strategies and adapt their music listening habits accordingly. These listeners

seem more able to choose music to fit any given situation and their own physical, psychological, and social needs efficiently and more consciously. To conflate different listener types within research with large samples can thus also cloud results, so a more fine-grained exploration of listener types may be an important next step.

Finally, we still need to know more about how music is attended to when being accompanied by other activities, particularly those demanding high levels of attention (e.g., driving). Herbert's (2012) findings suggest that music may capture a great deal of mental attention when accompanying repetitive tasks, leading to greater incidences of absorption. Future research might begin to consider whether there are features of the music that might make it more or less suitable for different settings and activities, beyond the very general features of arousal (loudness, tempo, complexity) and valence (positive and negative), following the lead set by Knox, Mitchell, Beveridge, and MacDonald (2011). Placing the study of self-chosen music listening within a theoretical framework that acknowledges the high degree of agency involved in the listener's choices at every level may well be an important next step in advancing understanding a phenomenon which, despite its ubiquity and the growth of research, still proves elusive to characterize.

References

Arts Council England. (2011). *Arts audiences: Insight.* London: Arts Council England. Retrieved from http://www.artscouncil.org.uk/media/uploads/pdf/arts_audience_insight_2011.pdf.

Avila, C., Furnham, A. and McClelland, A. (2012). The influence of distracting familiar vocal music on cognitive performance of introverts and extraverts. *Psychology of Music*, *40*(1), 84–93.

Barrett, F.S., Grimm, K.J., Robins, R.W., Wildschut, T., Sedikides, C. and Janata, P. (2010). Music-evoked nostalgia: affect, memory, and personality. *Emotion*, *10*(3), 390–403.

Bateman, A. and Bale, J. (2009). *Sporting sounds: Relationships between sport and music*. London: Routledge.

Batt-Rawden, K. and DeNora, T. (2005). Music and informal learning in everyday life. *Music Education Research*, *7*, 289–304.

Baym, N. (2010). *Personal connections in the digital age*. Cambridge: Polity Press.

Bennett, L. (2012). Patterns of listening through social media: online fan engagement with the live music experience. *Social Semiotics*, *22*(5), 545–557.

Brand, G., Sloboda, J.A., Saul, B. and Hathaway, M. (2012). The reciprocal relationship between jazz musicians and audiences in live performances: a pilot qualitative study. *Psychology of Music*, *40*(5), 635–651.

Brodsky, W. and Kizner, M. (2012). Exploring an alternative in-car music background designed for driver safety. *Transportation Research Part F: Traffic Psychology and Behaviour*, *15*(2), 162–173.

Brodsky, W. and Slor, Z. (2013). Background music as a risk factor for distraction among young-novice drivers. *Accident Analysis & Prevention*, *59*, 382–393.

Bull, M. (2007). *Sound moves: iPod culture and urban experience.* New York: Routledge.

Burland, K. and Pitts, S. (Eds.). (2014). *Coughing and clapping: Investigating audience experience.* Farnham: Ashgate Publishing.

Cook, N. (1998). *Music: A very short introduction.* Oxford: Oxford University Press.

Cole, L.C. and LoBiondo-Wood, G. (2014). Music as an adjuvant therapy in control of pain and symptoms in hospitalized adults: a systematic review. *Pain Management Nursing*, *15*(1), 406–425.

Csikszentmihalyi, M. (2002). *Flow: The psychology of happiness*. London: Rider.

Cummings, R., Kopesell, T.D., Moffat, J.M. and Rivara, F.P. (2001). Drowsiness, counter-measures to drowsiness, and the risk of a motor vehicle crash. *Injury Prevention*, *7*, 194–199.

DeNora, T. (2000). *Music in everyday life.* Cambridge: Cambridge University Press.

Department for Culture, Media and Sport (2012). *Taking part: Adult and child report: Statistical release*. London: Department for Culture, Media and Sport. Retrieved from https://www.gov.uk/government/publications/.

Dibben, N. and Haake, A.B. (2013). The experiences of music in office-based workplace settings. In G. Born (Ed.), *Music, sound, and space: MP3, recordings and tuning in to the contemporary world* (pp. 151–168). Cambridge: Cambridge University Press.

Dibben, N. and Williamson, V. (2007). An exploratory survey of in-vehicle music listening. *Psychology of Music*, *35*(4), 571–590.

Dobson, M.C. (2010). New audiences for classical music: the experiences of non-attenders at live orchestral concerts. *Journal of New Music Research*, *39*(2), 111–124.

Dobson, M. and Sloboda, J.A. (2014). Staying behind: explorations in post-performance musician-audience dialogue. In K. Burland and S. Pitts (Eds.), *Coughing and clapping: Investigating audience experience* (pp. 159–174). Aldershot: Ashgate.

Finlay, K.A. and Rogers, J. (2015). Maximising self-care through familiarity: the role of practice effects in enhancing music listening and progressive muscle relaxation for pain management. *Psychology of Music*, *43*(4), 511–529.

Gabrielsson, A. (2011). *Strong experiences with music: Music is much more than just music*. Oxford: Oxford University Press.

Garner, B.R. (2014). iPod use and the perception of social introversion. *Leisure Studies*, *33*(1), 22–31.

Garrido, S. and Schubert, E. (2011). Individual differences in the enjoyment of negative emotion in music: a literature review and experiment. *Music Perception*, *28*(3), 279–296.

Gioia, T. (2006). *Work songs*. Durham, NC: Duke University Press.

Gold, A. and Clare, A. (2013). An exploration of music listening in chronic pain. *Psychology of Music*, *41*(5), 545–564.

Greasley, A.E. (2008). *Engagement with music in everyday life: An in-depth study of adults' musical preferences and listening behaviour* (Unpublished doctoral thesis). University of Keele, UK.

Greasley, A.E. and Lamont, A. (2011). Exploring engagement with music in everyday life using experience sampling methodology. *Musicae Scientiae*, *15*(1), 45–71.

Greasley, A.E., Lamont, A. and Sloboda, J.A. (2013). Exploring musical preferences: an in-depth qualitative study of adults' liking for music in their personal collections. *Qualitative Research in Psychology*, *10*(4), 402–427.

Haake, A.B. (2011). Individual music listening in workplace settings: an exploratory survey of offices in the UK. *Musicae Scientiae*, *15*(1), 107–129.

Hallett, R. and Lamont, A. (2015). How do gym members engage with music during exercise? *Qualitative Research in Sport, Exercise and Health*, *7*(3), 411–427.

Hargreaves, D.J., Hargreaves, J.J. and North, A.C. (2012). Imagination and creativity in music listening. In D. Hargreaves, D. Miell and R.A.R. MacDonald (Eds.), *Musical*

imaginations: Multidisciplinary perspectives on creativity, performance, and perception (pp. 156–172). Oxford: Oxford University Press.
Hays, T. and Minichiello, V. (2005). The meaning of music in the lives of older people: a qualitative study. *Psychology of Music*, *33*, 437–451.
Herbert, R. (2012). Musical and non-musical involvement in daily life: the case of absorption. *Musicae Scientiae*, *16*, 41–66.
Heye, A. and Lamont, A. (2010). Mobile listening situations in everyday life: the use of MP3 players while travelling. *Musicae Scientiae*, *14*(1), 95–120.
Huron, D. (2011). Why is sad music pleasurable? A possible role for prolactin. *Musicae Scientiae*, *15*(2), 146–158.
Janata, P.J., Tomic, S.T. and Rakowski, S.K. (2007). Characterization of music-evoked autobiographical memories. *Memory*, *15*, 845–860.
Juslin, P.N. and Laukka, P. (2004). Expression, perception and induction of musical emotions: a review and a questionnaire study of everyday listening. *Journal of New Music Research*, *33*, 217–238.
Juslin, P.N., Liljeström, S., Västfjäll, D., Barradas, G. and Silva, A. (2008). An experience sampling study of emotional reactions to music: listener, music, and situation. *Emotion*, *8*(5), 668–683.
Kämpfe, J., Sedlmeier, P. and Renkewitz, F. (2011). The impact of background music on adult listeners: a meta-analysis. *Psychology of Music*, *39*(4), 424–448.
Karageorghis, C.I. and Priest, D.L (2012). Music in the exercise domain: a review and synthesis (parts I and II). *International Review of Sport and Exercise Psychology*, *5*, 44–84.
Karageorghis, C.I., Priest, D.L., Terry, P.C., Chatzisarantis, N.L.D. and Lane, A.M. (2006). Redesign and initial validation of an instrument to assess the motivational qualities of music in exercise: the Brunel Music Rating Inventory-2. *Journal of Sports Sciences*, *24*(8), 899–909.
Karageorghis, C.I. and Terry, P.C. (2009). The psychological, psychophysical and ergogenic effects of music in sport: a review and synthesis. In A. Bateman and J. Bale (Eds.), *Sporting sounds: Relationships between sport and music* (pp. 13–36). Abingdon: Routledge.
Korczynski, M. (2003). Music at work: towards a historical overview. *Folk Music Journal*, *8*(3), 314–334.
Kotsopoulou, A. and Hallam, S. (2010). The perceived impact of playing music while studying: age and cultural differences, *Educational Studies*, *36*(4), 431–440.
Knox, D., Mitchell, L., Beveridge, S. and MacDonald, R.A.R. (2011). Acoustic analysis and mood classification of pain-relieving music. *Journal of the Acoustical Society of America*, *130*(3), 1673–1682.
Krause, A.E., North, A.C. and Hewitt, L.Y. (2013). Music-listening in everyday life: devices and choice. *Psychology of Music*, *41*(5), 531–544.
Lamont, A. (2008). Young children's musical worlds: musical engagement in 3.5-year-olds. *Journal of Early Childhood Research*, *6*(3), 247–261.
Lamont, A. (2011). University students' strong experiences of music: pleasure, engagement and meaning. *Musicae Scientiae*, *15*(2), 229–249.
Lamont, A. and Webb, R. (2010). Short- and long-term musical preferences: what makes a favourite piece of music? *Psychology of Music*, *38*(2), 222–241.
Laukka, P. (2007). Uses of music and psychological well-being among the elderly. *Journal of Happiness Studies*, *8*, 215–241.
Laukka, P. and Quick, L. (2013). Emotional and motivational uses of music in sports and exercise: a questionnaire study among athletes. *Psychology of Music*, *41*, 198–215.

Lee, J.D., Roberts, S.C., Hoffman, J.D. and Angell, L.S. (2012). Scrolling and driving: how an MP3 player and its aftermarket controller affect driving performance and visual behavior. *Human Factors*, *54*, 250–263.

Lesiuk, T. (2005). The effect of music listening on work performance. *Psychology of Music*, *33*(2), 173–191.

Liebowitz, S. (2004). Will MP3 downloads annihilate the record industry? The evidence so far. *Advances in the Study of Entrepreneurship*, *Innovation*, *and Economic Growth*, *V*(15), 229–260.

Lonie, D.I. (2009). *Musical identities and health over the youth-adult transition* (Unpublished doctoral thesis). University of Glasgow, Glasgow, UK.

Mitchell, L.A. and MacDonald, R.A.R. (2012). Music and pain: evidence from experimental perspectives. In R. MacDonald, G. Kreutz and L. Mitchell (Eds.), *Music, health and wellbeing* (pp. 230–238). Oxford: Oxford University Press.

Mitchell, L.A., MacDonald, R.A.R., Knussen, C. and Serpell, M.G. (2007). A survey investigation of the effects of music listening on chronic pain. *Psychology of Music*, *35*(1), 39–59.

North, A.C. and Hargreaves, D.J. (2000). Musical preferences during and after relaxation and exercise. *American Journal of Psychology*, *113*, 43–67.

North, A.C., Hargreaves, D.J. and Hargreaves, J.J. (2004). Uses of music in everyday life. *Music Perception*, *22*, 41–77.

Pitts, S.E. (2014). Musical, social and moral dilemmas: investigating motivations to attend concerts. In K. Burland and S. Pitts (Eds.), *Coughing and clapping: Investigating audience experience* (pp. 21–34). Farnham: Ashgate Publishing.

Pitts, S.E. and Burland, K. (2013). Listening to live jazz: an individual or social act? *Arts Marketing: An International Journal*, *3*(1), 7–20.

Pitts, S.E. and Spencer, C.P. (2008). Loyalty and longevity in audience listening: Investigating experiences of attendance at a chamber music festival. *Music and Letters*, *89*(2), 227–238.

Pool, M.M., Koolstra, C.M. and van der Voort, T.H.A. (2003). The impact of background radio and television on high school students' homework performance, *Journal of Communication*, *53*(1), 74.

Radbourne, J., Glow, H. and Johanson, K. (2013). *The audience experience*. Chicago, IL: University of Chicago Press.

Rentfrow, P.J. and Gosling, S.D. (2006). Message in a ballad: the role of musical preferences in interpersonal perception. *Psychological Science*, *17*(3), 236–242.

Reyner, L.A. and Horne, J.A. (1998). Evaluation of "in-car" countermeasures to sleepiness: cold air and radio. *Sleep*, *21*(1), 46–50.

Russell, P.A. (1997). Musical tastes and society. In D.J. Hargreaves and A.C. North (Eds.), *The social psychology of music* (pp. 161–187). Oxford: Oxford University Press.

Saarikallio, S. (2011). Music as emotional self-regulation throughout adulthood. *Psychology of Music*, *39*(3), 307–327.

Schäfer, T., Sedlmeier, P., Städtler, C. and Huron, D. (2013). The psychological functions of music listening. *Frontiers in Psychology*, *4*, 1–33.

Siedliecki, S.L. and Good, M. (2006). Effect of music on power, pain, depression and disability. *Journal of Advanced Nursing*, *54*(5), 553–562.

Skånland, M.S. (2011). Use of MP3 players as a coping resource. *Music and Arts in Action*, *3*(2), 15–33.

Sloboda, J.A. (1999). Everyday uses of music listening: a preliminary study. In S.W. Yi (Ed.), *Music, mind and science* (pp. 354–369). Seoul: Western Music Institute.

Sloboda, J.A., Lamont, A. and Greasley, A.E. (2009). Choosing to hear music: motivation, process and effect. In S. Hallam, I. Cross and M. Thaut (Eds.), *The Oxford handbook of music psychology* (pp. 431–440). Oxford: Oxford University Press.

Sloboda, J.A., O'Neill, S.A. and Ivaldi, A. (2001). Functions of music in everyday life: an exploratory study using the Experience Sampling Method. *Musicae Scientiae*, *V*, 9–32.

Stevens, C.J., Dean, R.T., Vincs, K. and Schubert, E. (2014). In the heat of the moment: audience real time response to music and dance performance. In K. Burland and S. Pitts (Eds.), *Coughing and clapping: Investigating audience experience* (pp. 69–88). Farnham: Ashgate Publishing.

Stutts, J., Feaganes, J., Rodgman, E., Hamlett, C., Meadows, T., Reinfurt, D., … Staplin, L. (2003). *Distractions in everyday driving*. Washington, DC: AAA Foundation for Traffic Safety. Retrieved from http://www.aaafoundation.org/pdf.DistractionsInEverydayDriving.pdf.

Tahlier, M., Miron, A.M. and Rauscher, F.H. (2013). Music choice as sadness regulation strategy in resolved versus unresolved sad events. *Psychology of Music*, *41*, 729–748.

Tarrant, M., North, A.C. and Hargreaves, D.J. (2001). Social categorisation, self-esteem, and the musical preferences of male adolescents. *Journal of Social Psychology*, *141*(5), 565–581.

Thompson, S. (2007). Determinants of listeners' enjoyment of a performance. *Psychology of Music*, *35*(1), 20–36.

Ünal, A.B., Steg, L. and Epstude, K. (2012). The influence of music on mental effort and driving performance. *Accident Analysis and Prevention*, *48*, 271–278.

Van den Tol, J.M. and Edwards, J. (2014). Listening to sad music in adverse situations: how music selection strategies relate to self-regulatory goals, listening effects and mood enhancement. *Psychology of Music*, *43*(4), 473–494.

van Goethem, A. and Sloboda, J.A. (2011). The functions of music for affect regulation. *Musicae Scientiae*, *15*, 208–228.